

**REMOVAL PROGRAM  
PRELIMINARY ASSESSMENT/  
SITE INVESTIGATION REPORT  
FOR THE  
MCGOLDRICK PAPER CO. SITE  
HINSDALE, CHESHIRE COUNTY, NEW HAMPSHIRE  
17 AND 18 AUGUST 2020**

Prepared For:

U.S. Environmental Protection Agency  
Region I  
Emergency Planning and Response Branch  
5 Post Office Square, Suite 100  
Boston, Massachusetts 02109-3912

CONTRACT NO. 68HE0120D0001

TO/AD NO.: TOFP-01-20-07-0022

TASK NO.: 0022

DC NO.: R-50123

Submitted By:

Weston Solutions, Inc.  
Region I  
Superfund Technical Assessment and Response Team  
101 Billerica Avenue, Building 5, Suite 103  
North Billerica, Massachusetts 01862

November 2020

## **TABLE OF CONTENTS**

- I. Preliminary Assessment/Site Investigation Forms
- II. Narrative Chronology
- III. Appendices
  - Appendix A - Figures
  - Appendix B - Tables
  - Appendix C - Photodocumentation Log
  - Appendix D - Analytical Data (EPA LSASD) and Chain-of-Custody Records

## I. Preliminary Assessment/Site Investigation Forms



**EPA REGION I  
REMOVAL PRELIMINARY ASSESSMENT**

---

---

**Site Name and Location**

---

---

**Name:** McGoldrick Paper Co. Site      **Location:** 54-54A Canal Street  
**Town:** Hinsdale      **County:** Cheshire      **State:** New Hampshire

**Site Status:**    ☐ **NPL**      ☐ **NON-NPL**      ☐ **RCRA**      ☐ **TSCA**  
                         ☐ **ACTIVE**    ☒ **ABANDONED**    ☐ **OTHER**

☐ **Attached USGS Map of Location**      ☒ **Site I.D. No.:** 01QJ

**Latitude:** 42° 47' 11.3" North      **Longitude:** 72° 29' 4.1" West

---

---

**Referral**

---

---

☐ **Citizen**    ☐ **City/Town**    ☒ **State**    ☐ **Preremedial**    ☐ **RCRA**  
☐ **Other:**

**Name of referring party:** New Hampshire Department of Environmental Services (NHDES)  
**Address:** 29 Hazen Drive,      **Telephone:** (603) 271-3503  
Concord, NH 03301

**Contacts Identified**

1) Melinda Bubier, NHDES      **Telephone:** (603) 271-1169  
2)  
3)

---

---

**Source of Information**

---

---

☐ **Verbal:**  
☒ **Report:** Ransom Consulting, Inc. 19 September 2018. ASTM Phase I Environmental Site Assessment, Former McGoldrick Property, 54-55A Canal Street, Hinsdale, New Hampshire.  
Ransom Consulting, Inc. 10 December 2019. Phase II Environmental Site Assessment Rev. 1, Former McGoldrick Property, 54-55A Canal Street, Hinsdale, New Hampshire.

☐ **Other:**

## REMOVAL PRELIMINARY ASSESSMENT

---

### Potential Responsible Parties

---

**Owner:** Town of Hinsdale **Telephone:** (603) 336-5710  
**Address:** 11 Main Street Hinsdale, NH 03451

---

### Site Access

---

**Authorizing Person:** Town of Hinsdale  
**Date:** (X) Obtained ( ) Verbal  
**Telephone:** (603) 336-5710 ( ) Not Obtained (X) Written

---

### Historical Preservation

---

( ) Site is Historically Significant or Eligible for Historic Preservation

### Contacts Identified

**1) State Historical Preservation Officer (SHPO)**

**Name:** Mr. Benjamin Wilson **Telephone:** (603) 271-8850

**2) Tribal Historical Preservation Officer (THPO)**

**Name:** **Telephone:**

**Comments:**

---

### Physical Site Characterization

---

**Background Information:**

The McGoldrick Paper Co. Site (the Site) is located at 54-54A Canal Street, Hinsdale, Cheshire County, New Hampshire (NH). The Site is an approximately 2.52-acre property identified by the Town of Hinsdale Assessor's Office as Lot 47 on Tax Map 47. The Site is currently developed with commercial/industrial buildings, including a former Mill Building and attached Warehouse, Boiler House, Former Machine/Welding Shop, and a Storage Barn/Garage (a.k.a. the "Site Buildings"). Portions of the Boiler House and Machine/Welding Shop have collapsed or are structurally unsound. The Site is bounded to the north by Canal Street (Route 119), and residential property and a commercial property; to the east by Stockwell Brook and residential properties; to the west by residential properties; and to the south by the Ashuelot River.

The Site was utilized for the manufacture of paper products from the mid-1800s until approximately 2004, after which the Site was occupied by an auto salvage business. There are currently no active business operations at the Site, and the majority of the Site Buildings are in a state of disrepair. The Town of Hinsdale acquired the property by Tax Deed in December 2019. Based on the Cheshire County, New Hampshire National Flood Insurance Program Map (Community Panel Number 33005C0386E), the Site is located in a 100-year flood plain, in association with both the abutting Ashuelot River and Stockwell Brook.

## REMOVAL PRELIMINARY ASSESSMENT

The Mill Building is a brick structure with a concrete foundation and a wood-framed flat roofing system, observed to be single-story from the Canal Street entrance to the Site; however, a lower level is sub-grade on the northern portion of the structure, and at grade on the southern side due to the southerly downward slope of the Site toward the abutting river. The Boiler House is brick and masonry with a concrete slab foundation and attached chimney. The Warehouse is a single-story wood-framed structure abutting the northerly side of the Mill Building. The Former Machine/Welding Shop Site Building is primarily single-story, the exception being a half-story attic space over the western end of the shop. The Storage Barn/Garage is located along the easterly Site boundary, north of the Machine/Welding Shop Building, and is a one- and a half-story wood-framed structure with a pitched roof, with a one-story concrete block addition located off the southern end. A concrete pad is also located north of the Boiler House, and until its closure/removal in 2010, was the location of a 10,000-gallon aboveground storage tank (AST) that was located within a concrete secondary containment. The AST is believed to have contained No. 4 oil, but has been variously reported as containing No. 2, 4, or 6 oil.

### **Description of Substances Possibly Present, Known or Alleged:**

During the Phase I Environmental Site Assessment (ESA) site reconnaissance, completed 12 April 2018, Ransom Consulting, Inc. (Ransom) observed multiple containers of suspect oil and hazardous materials (OHM) within the Site buildings, including but not limited to motor oil, waste oil, boiler treatment fluid, waste antifreeze, lubricants, roof sealant, Gen-Floc, Midfloc, Polymix, calcium dispersant, scale inhibitor, potassium hydroxide, tamed acid cleaner, Lionfloc, Grifcote, FR 50 VOC, paints, and household sized containers of cleaning supplies, pesticides, and small gasoline containers. Ransom also identified several unlabeled potential OHM containers with unknown contents. Ransom observed a total of six 275-gallon ASTs at the Site during the reconnaissance; none were observed to contain heating oil; however, a petroleum odor was noted in the vicinity of the two 275-gallon ASTs located in the Boiler House. Ransom noted odors and staining indicative of a release of potential OHM in the Warehouse, Machine/Welding Shop, and Boiler House. At least two of these suspect OHM containers were unlabeled; the specific contents/product(s) released could not be inferred.

Sampling conducted as part of a Phase II investigation confirmed the presence of polyaromatic hydrocarbons (PAHs) and metals (arsenic and antimony) in exceedance of NH Soil Remediation Standards (SRSs); the identified contaminants were likely associated with the coal combustion residuals identified in soil boring samples. This urban fill and coal combustion residuals were likely generated on site and used to raise grades along with granular soils during the Site's historical use as a paper manufacturing facility. Per- and polyfluoroalkyl substances (PFAS) exceedances detected in groundwater samples collected at the site included primarily perfluorooctane sulfonate at 0.28 micrograms per liter (µg/L).

---

### **Existing Analytical Data**

---

#### **( ) Real-Time Monitoring Data:**

#### **(X) Sampling Data:**

Ransom Consulting, Inc. 19 September 2018. ASTM Phase I Environmental Site Assessment, Former McGoldrick Property, 54-55A Canal Street, Hinsdale, New Hampshire.

Ransom Consulting, Inc. 10 December 2019. Phase II Environmental Site Assessment Rev. 1, Former McGoldrick Property, 54-55A Canal Street, Hinsdale, New Hampshire.

## REMOVAL PRELIMINARY ASSESSMENT

---

---

### Potential Threat

---

---

Description of potential hazards to environment and/or population-identify any of the criteria for a Removal Action (from NCP) that may be met by the site under 40 CFR 300.415 [b] [2].

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.
- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

---

---

### Prior Response Activities

---

---

☐ PRP                      ☐ STATE                      ☐ FEDERAL                      ☒ OTHER

**Brief Description:** Phase I and II ESA Reports were generated for the Southwest Regional Planning Commission.

---

---

### Priority for Site Investigation

---

---

☐ High                      ☒ Medium                      ☐ Low                      ☐ None

**Comments:** The Site is surrounded by residential and commercial properties. The site is susceptible to trespassing, and some totes, drums and containers are not secure and could pose as a hazard for the public. The site is bordered to the south by the Ashuelot River.

## REMOVAL PRELIMINARY ASSESSMENT

---

---

### Report Generation

---

---

<b>Originator:</b>	Tyler Evans	<b>Date:</b>	17 August 2020
<b>Affiliation:</b>	Weston Solutions, Inc. (START)	<b>Telephone:</b>	(978) 621-1208
<b>Contract No.</b>	68HE0120D0001	<b>Contract Name:</b>	START V
<b>AD No.:</b>	TOFP-01-20-07-0022	<b>Task No.:</b>	0022





**EPA REGION I  
REMOVAL SITE INVESTIGATION**

---

---

**Inspection Information**

---

---

**Site Name:** McGoldrick Paper Co. Site    **Address:** 54-54A Canal Street  
**Town:** Hinsdale                      **County:** Cheshire                      **State:** New Hampshire  
**Date of Inspection:** 17 August 2020                      **Time of Inspection:** 1000 hours  
**Weather Conditions:** 78° Fahrenheit, Partly Cloudy  
**Date of Inspection:** 18 August 2020                      **Time of Inspection:** 0730 hours  
**Weather Conditions:** 82° Fahrenheit, Partly Cloudy, Humid  
**Site Status at Time of Inspection:**                      ( ) ACTIVE                      (X) INACTIVE  
**Comments:**

---

---

**Agencies/Personnel Performing Inspection**

---

---

	<u><b>Names</b></u>	<u><b>Program</b></u>
(X) EPA:	Wing Chau	U.S. Environmental Protection Agency (EPA) Region I, Emergency Planning and Response Branch (EPRB), On-Scene Coordinator (OSC)
(X) EPA Contractor:	Paul Callahan Bill Mahany Chris Dupree Tyler Evans	Weston Solutions, Inc. (WESTON), Superfund Technical Assessment and Response Team V (START)

**Current Owner Based on Field Interview:** Town of Hinsdale

---

---

**Physical Site Characteristics**

---

---

<u><b>Parameter</b></u>	<u><b>Quantities/Extent</b></u>
( ) Cylinders:	
(X) Drums:	Numerous drums, totes, pails, and other containers were observed throughout the Site Buildings.
( ) Lagoons:	
( ) Tanks:	( ) Above:
	( ) Below:
( ) Asbestos:	
(X) Piles:	Piles of apparent construction debris were observed to the south behind the building.
( ) Stained Soil:	

## REMOVAL SITE INVESTIGATION

- (X) Sheens: Sheens were noticed underneath multiple drums.
- ( ) Stressed Vegetation:
- ( ) Landfill:
- (X) Population in Vicinity: The Site is surrounded by commercial and residential properties to the west, north, and east.
- ( ) Wells: ( ) Drinking:
- ( ) Monitoring:
- ( ) Other:

---

### Physical Site Observations

---

#### Comments:

The McGoldrick Paper Co. site (the Site) is located at 54-54A Canal Street, Hinsdale, Cheshire County, New Hampshire (NH), and is a partially level area with small elevation changes, and two structures on Site. The eastern building is a small Storage Barn/Garage, which contained one drum of liquid that appeared to be oil. The main site building (Main Building) is constructed primarily of concrete, brick, wood, and steel. The Main Building consists of a Warehouse area in the north; Mill Building in the southwest; and Boiler House and Machine/Welding Shop to the east. Moderate vegetation was observed south of the building, between the site structures and the Ashuelot River. Building and construction debris were observed south of the buildings.

Drums, totes, and containers were observed throughout the Warehouse and Mill Building. The Boiler House and Machine/Welding Shop were not accessed due to structural hazards and existing locks. Stairways leading to the basement appeared to be rusted and potentially unsafe. Portions of the Boiler House were collapsed, and could not be accessed.

A small brook was observed flowing from under the southwest corner of the Mill Building, and a containment structure or berm was located off of the southern exterior wall of the Mill Building.

---

### Field Sampling and Analysis

---

<b>Matrix</b>	<b>Field Instrumentation Readings</b>				
	<b>CGI/O<sub>2</sub> (%)</b>	<b>RAD (μR/hr)</b>	<b>PID (ppm)</b>	<b>FID (ppm)</b>	<b>Other</b>
<b>Background:</b>	0%/20.9%	10-15μR/hr	0 ppm		
<b>Air:</b>	0%/20.9%		0 ppm		
<b>Soil:</b>					
<b>Surface Water:</b>					
<b>Tanks:</b>			T-1: 4 ppm T-2: 82 ppm T-4: 48 ppm T-5: >300 ppm T-6: 64 ppm T-7: 440 ppm		
<b>Drums:</b>			D-06: 11.2 ppm D-07: 18.8 ppm D-16: 2.9 ppm		D-01: pH = 1 D-18: pH = 14

## REMOVAL SITE INVESTIGATION

<b>Matrix</b>	<b>Field Instrumentation Readings</b>				
	<b>CGI/O<sub>2</sub> (%)</b>	<b>RAD (μR/hr)</b>	<b>PID (ppm)</b>	<b>FID (ppm)</b>	<b>Other</b>
<b>Vats:</b>					
<b>Lagoons:</b>					
<b>Spillage:</b>					
<b>Run Off:</b>					
<b>Piles:</b>					
<b>Sediments:</b>					
<b>Groundwater:</b>					
<b>Other:</b>					

CGI/O<sub>2</sub> (%) = Combustible Gas Indicator/Oxygen (percentage)      RAD (μR/hr) = Radiation (microRoentgens per hour)  
 PID = PhotoIonization Detector      FID = Flame Ionization Detector      ppm = parts per million

---

### Field Quality Control Procedures

---

**(X) SOP Followed**

**( ) Deviation from SOP**

**Comments:**

Sampling was conducted according to the site Sampling and Analysis Plan (SAP), prepared as a separate document, entitled *Sampling and Analysis Plan for the McGoldrick Paper Company Site, Hinsdale, Cheshire County, New Hampshire*, dated August 2020.

---

### Description of Sampling Conducted

---

On 17 and 18 August 2020, EPA and START personnel mobilized to the Site to conduct sampling activities. START collected samples from 24 drums and containers, and six Intermediate Bulk Containers (IBC)/totes located in the Site Buildings. Container samples were collected for volatile organic compound (VOC), semivolatile organic compound (SVOC), pH, pesticide/polychlorinated biphenyl (pest/PCB), Oil ID, and metals analyses. Container samples were submitted to a Delivery of Analytical Services (DAS) Laboratory for analysis.

In addition, START collected 20 soil samples from the southern portion of the site for SVOC, pest/PCB, metals, and mercury analyses. Soil samples were submitted to the EPA New England Regional Laboratory (NERL) for analysis.

---

### Analyses

---

<b>Analytical Parameter</b>	<b>Media</b>	<b>Laboratory</b>
<b>(X) VOC</b>	<b>( ) AIR</b>	<b>(X) NERL</b>
<b>(X) PCB</b>	<b>( ) WATER</b>	<b>( ) CLP</b>
<b>(X) PESTICIDE</b>	<b>(X) SOIL</b>	<b>( ) PRIVATE</b>
<b>(X) METALS</b>	<b>( ) SOURCE</b>	<b>(X) DAS</b>
<b>( ) CYANIDE</b>	<b>( ) SEDIMENT</b>	<b>( ) SOW</b>
<b>(X) SVOC</b>	<b>( ) SOIL GAS</b>	<b>( ) FIELD</b>
<b>( ) TOXICITY</b>	<b>(X) Other (product)</b>	
<b>( ) DIOXIN</b>		

## REMOVAL SITE INVESTIGATION

Analytical Parameter	Media	Laboratory
<input type="checkbox"/> ASBESTOS		
<input type="checkbox"/> OTHER		

---

### Receptors

---

	<u>Comments</u>
<input type="checkbox"/> Drinking Water: <input type="checkbox"/> Private: <input type="checkbox"/> Municipal:	
<input type="checkbox"/> Groundwater:	
<input checked="" type="checkbox"/> Unrestricted Access:	The Main Building is unsecured, and there is no fencing around the Site to limit access.
<input checked="" type="checkbox"/> Population in Proximity:	Residential and commercial properties are located in close proximity to the site to the east, north, and west.
<input checked="" type="checkbox"/> Sensitive Ecosystem:	The Ashuelot River runs along the southern section of the property.
<input type="checkbox"/> Other:	

---

### Additional Procedures for Site Determination

---

<input type="checkbox"/> Biological Evaluation	<input type="checkbox"/> ATSDR	<input type="checkbox"/> None
--	--------------------------------	-------------------------------

To be determined by the On-Scene Coordinator (OSC).

---

### Site Determination

---

Depending on further information, criteria that may be met by the site include 40 CFR 300.415 [b] [2], parts:

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.

## REMOVAL SITE INVESTIGATION

- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

---

---

### Report Generation

---

---

<b>Originator:</b>	Tyler Evans	<b>Date:</b>	17 August 2020
<b>Affiliation:</b>	Weston Solutions, Inc. (START)	<b>Telephone:</b>	(978) 621-1208
<b>Contract No.</b>	68HE0120D0001	<b>Contract Name:</b>	START V
<b>AD No.:</b>	TOFP-01-20-07-0022	<b>Task No.:</b>	0022

## II. Narrative Chronology

## **Narrative Chronology**

### **Introduction**

The McGoldrick Paper Co. Site (the Site) is located at 54-54A Canal Street, Hinsdale, Cheshire County, New Hampshire (NH) (see Appendix A, Figure 1) [1]. The Site is an approximately 2.52-acre property identified by the Town of Hinsdale Assessor's Office as Lot 47 on Tax Map 47. The Site is currently developed with commercial/industrial buildings, including a former Mill Building and attached Warehouse, Boiler House, Former Machine/Welding Shop, and a Storage Barn/Garage (a.k.a. the "Site Buildings"). Portions of the Boiler House and Machine/Welding Shop have collapsed or are structurally unsound. The Site is bounded to the north by Canal Street (Route 119), and residential property and a commercial property; to the east by Stockwell Brook and residential properties; to the west by residential properties; and to the south by the Ashuelot River (see Appendix A, Figure 2) [2].

### **Site Background**

The Site was utilized for the manufacture of paper products from the mid-1800s until approximately 2004, after which the Site was occupied by an auto salvage business. There are currently no active business operations at the Site, and the majority of the Site Buildings are in a state of disrepair. The Town of Hinsdale acquired the property by Tax Deed in December 2019. Based on the Cheshire County, New Hampshire National Flood Insurance Program Map (Community Panel Number 33005C0386E), the Site is located in a 100-year flood plain, in association with both the abutting Ashuelot River and Stockwell Brook.

The Mill Building is a brick structure with a concrete foundation and a wood-framed flat roofing system, observed to be single-story from the Canal Street entrance to the Site; however, a lower level is sub-grade on the northern portion of the structure, and at grade on the southern side due to the southerly downward slope of the Site toward the abutting river. The Boiler House is brick and masonry with a concrete slab foundation and attached chimney. The Warehouse is a single-story wood-framed structure abutting the northerly side of the Mill Building. The Former Machine/Welding Shop Site Building is primarily single-story, the exception being a half-story attic space over the western end of the shop. The Storage Barn/Garage is located along the easterly Site boundary, north of the Machine/Welding Shop Building, and is a one- and a half-story wood-framed structure with a pitched roof, with a one-story concrete block addition located off the southern end. A concrete pad is also located north of the Boiler House, and until its closure/removal in 2010, was the location of a 10,000-gallon aboveground storage tank (AST) that was located within a concrete secondary containment. The AST is believed to have contained No. 4 oil, but has been variously reported as containing No. 2, 4, or 6 oil.

In April 2018, Ransom Consulting, Inc. (Ransom) completed a Phase I Environmental Site Assessment (ESA) on behalf of the Southwest Regional Planning Commission. During a Site Reconnaissance, Ransom observed multiple containers of suspected oil and/or hazardous materials (OHM) within the Site Buildings. Ransom documented approximately 73 drums, including 53 55-gallon drums, 11 30-gallon drums, and nine (9) 20-gallon drums. In addition, Ransom observed seven 300-gallon Intermediate Bulk Containers (IBCs)/polyethylene totes (totes) within the Site

buildings. There were 24 drums and/or totes that were unlabeled and the contents were unknown; 12 of these appeared to contain used oil; however, that could not be definitively confirmed. Five of the drums were observed to potentially have released contents onto the concrete floors where the drums were located. The compromised drums included two 55-gallon drums, one labeled as Gen-Floc 1 and one labeled as Flocculent 168; and three unlabeled drums. Six unlabeled drums, located in the attic space of the former Machine/Welding Shop Building, appeared to contain asbestos pipe wrap debris. Eight drums were empty [3].

In December 2019, Ransom completed a Phase II ESA. Sampling conducted as part of the Phase II investigation confirmed the presence of polycyclic aromatic hydrocarbons (PAHs) and metals (arsenic and antimony) in exceedance of NH Soil Remediation Standards (SRSSs) [4].

### **Site/Sampling Activities**

On 17 August 2020, EPA On-Scene Coordinator (OSC) Wing Chau and Weston Solutions, Inc. (Weston) Superfund Technical Assessment and Response Team (START) members Paul Callahan, Christine Dupree, Tyler Evans, and Bill Mahany mobilized to the Site to conduct sampling activities as part of a Preliminary Assessment/Site Investigation (PA/SI). START Readiness Coordinator (RC) Callahan conducted a safety and operations meeting, and on-site personnel reviewed and signed the site-specific health and safety plan (HASP), which was prepared as a separate document, entitled *Weston Solutions, Inc. Region I START Site Health and Safety Plan (HASP) for the McGoldrick Paper Co. Site, 34-60 Canal Street, Hinsdale, NH*, dated August 2020. START personnel calibrated a RAE Systems, Inc. MultiRAE multi-gas meter with volatile organic compound (VOC), lower explosive limit (LEL), oxygen (O<sub>2</sub>), carbon monoxide (CO), and hydrogen sulfide (H<sub>2</sub>S) detectors; and a Ludlum Model 19A gamma radiation detector [5, 6]. Background readings were as follows: VOCs = 0.0 parts per million (ppm); LEL = 0%; O<sub>2</sub> = 20.9%; CO = 0 ppm; and H<sub>2</sub>S = 0 ppm.

START and EPA conducted a brief site walk to identify the drums, containers, and totes to be sampled. EPA and START personnel entered the building via the main entrance on the western side of the property and conducted an interior reconnaissance of the building. START noted that there were numerous drums and totes of suspected used automotive oil in the Warehouse (northern portion of the Main Building) and the Mill Building (southeast portion of the Main Building). Numerous 250-gallon totes, 55-gallon drums, and 5-gallon containers of suspected used/waste oils and products were observed.

START then gathered sampling equipment and prepared for sampling activities. Sampling activities were performed in accordance with the Site Sampling and Analysis Plan (SAP), which was prepared as a separate document, entitled *Sampling and Analysis Plan for the McGoldrick Paper Co. Site, Hinsdale, Cheshire County, New Hampshire* [7]. START personnel donned proper personal protective equipment (PPE) per the Site HASP to collect samples from the containers, drums, and totes [8]. START personnel collected samples from drums and totes in the Warehouse Building. A total of five totes (T-1 through T-6, excluding T-3) and 17 drums were sampled (see Appendix B, Table 1). Tote T-3 was empty, and was not sampled. Container samples were collected for VOC, semivolatile organic compound (SVOC), pH, pesticide/polychlorinated



biphenyl (pest/PCB), Oil ID, and metals analyses. Container samples were submitted to a Delivery of Analytical Services (DAS) Laboratory for analysis.

On 18 August 2020, EPA and START personnel mobilized to the Site to continue PA/SI activities. START RC Callahan conducted a safety and operations meeting, and air monitoring equipment was prepared.

EPA and START personnel observed and discussed the southern portion of the site, behind the Main Building, to determine surface soil sampling locations. A total of 20 surface soil samples, including one duplicate, were collected [9]. Soil samples were collected for SVOC, pest/PCB, and metals, including mercury, analyses and were submitted to the EPA New England Regional Laboratory (NERL) for analysis. START recorded soil sample locations using a Trimble Global Positioning System (GPS) (see Appendix A, Figure 3) [10].

Upon completion of surface soil sample collection, START personnel entered the Main Building to conduct additional container sampling. The additional samples were collected from the southwestern portion of the building (Mill Building) and included an additional seven drum/container samples (D-18 through D-24) and one tote sample (T-7).

START personnel photodocumented site conditions and sampling locations (see Appendix C, Photodocumentation Log). START member Mahany entered sample data into the SCRIBE sample database and prepared Chain-of-Custody Records (see Appendix D, Chain-of-Custody Records).

Personnel discussed the completion of sampling with OSC Chau before collecting all equipment and departing from site. Drum/container and tote samples (D-01 through D-24, and T-1 through T-7) were shipped to EuroFins/TestAmerica for analysis. Surface soil samples were delivered to the EPA Laboratory Services and Applied Sciences Division (LSASD) NERL in Chelmsford, Massachusetts for analysis.

### **Analytical Data Summaries**

Between 27 August and 21 September 2020, START received the soil sample analytical results from the EPA laboratory [11-18]. These data are summarized in Appendix B, Table 2. These data are also included in Appendix D, Analytical Data and Chain-of-Custody Records.

Analytical results of the container sampling were received from the DAS laboratory [19]. These data are summarized in Appendix B, Table 3. DAS analytical reports are included in the site file.

### **Soil Samples**

There were 23 SVOCs detected in the surface soil samples. The following four SVOCs were detected at concentrations greater than the NH Department of Environmental Services (NHDES) Risk Characterization and Management Policy (RCMP) Method 1 Soil Standard for S-1 Category (S-1) Soils (maximum concentration and sample location in parentheses): benzo(a)anthracene [1,600 micrograms per kilogram ( $\mu\text{g/kg}$ ) in SS-17]; benzo(b)fluoranthene (1,900  $\mu\text{g/kg}$  in SS-17); benzo(a)pyrene (1,800  $\mu\text{g/kg}$  in SS-17); and indeno(1,2,3-cd)pyrene (1,000  $\mu\text{g/kg}$  in SS-17). No

SVOCs were detected at concentrations greater than EPA Removal Management Levels (RMLs) for Residential or Industrial Soil (see Appendix B, Table 2).

One PCB (Aroclor-1254) was detected in soil samples collected on the site. Aroclor-1254 was detected in one soil sample (1,300 µg/kg in SS-07) at a concentration that exceeded the NHDES S-1 standard but did not exceed the EPA RML for Residential or Industrial Soil. No pesticides were detected in any of the soil samples (see Appendix B, Table 2).

There were 18 metals detected in soil samples collected on the Site. The following three metals were detected at concentrations that exceeded NHDES S-1 and/or EPA RMLs for Residential or Industrial Soil (maximum concentration and sample location in parentheses): arsenic [83 milligrams per Kilogram (mg/Kg) in SS-11]; lead (2,500 mg/Kg in SS-11); and antimony (670 mg/Kg in SS-11) (see Appendix B, Table 2).

### **Drum/Container/Tote Samples**

A total of 17 VOCs, 21 SVOCs, seven pesticides, and 19 metals were detected in the container samples (see Appendix B, Table 3). No PCBs were detected in any of the container samples. In addition, four containers had acidic contents (pH less than 5), and two containers had alkaline contents (pH greater than 10) (see Appendix B, Table 3).

## REFERENCES

- [1] US. Geological Survey. 1983. 7.5-minute topographic map, Woburn, Massachusetts.
- [2] Esri, i-cubed, USDA FSA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGP. April 2019. ArcGIS.com World Imagery Map.
- [3] Ransom Consulting, Inc. 19 September 2018. ASTM Phase I Environmental Site Assessment for the Former McGoldrick Property.
- [4] Ransom Consulting, Inc. 10 December 2019. Phase II Environmental Site Assessment for the Former McGoldrick Property.
- [5] Weston Solutions, July 2020. Standard Operating Procedure for the PID-MultiRAE Model PGM-50; SOP No. WSI/S5-018, Superfund Technical Assessment and Response Team (START), Billerica, Massachusetts.
- [6] Weston Solutions, Inc. July 2020. Standard Operating Procedure for Ludlum Model 19 Micro R Meter, SOP No. WSI/S5-022, START, Billerica, Massachusetts.
- [7] Weston Solutions, Inc. 17 August 2020. Sampling and Analysis Plan for the McGoldrick Paper Company Site, Hinsdale, Cheshire County, New Hampshire. Document Control No. R-50034.
- [8] Weston Solutions, Inc. July 2020. Standard Operating Procedure for Drum and Tank Sampling, SOP No. WSI/S5-008, Superfund Technical Assessment and Response Team (START), Billerica, Massachusetts.
- [9] Weston Solutions, Inc. July 2020. Standard Operating Procedure for Surface and Subsurface Soil Sampling, SOP No. WSI/S5-001, Superfund Technical Assessment and Response Team (START), Billerica, Massachusetts.
- [10] Weston Solutions, Inc. July 2020. Standard Operating Procedure for Trimble™ Global Positioning System (GPS), SOP No. WSI/S5-020, Superfund Technical Assessment and Response Team (START), Billerica, Massachusetts.
- [11] U.S. Environmental Protection Agency. 27 August 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080025. McGoldrick Paper Co, Hinsdale, New Hampshire - BNAs in Soils Medium Level.
- [12] U.S. Environmental Protection Agency. 31 August 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080026. McGoldrick Paper Co, Hinsdale, New Hampshire - BNAs in Soils Medium Level.
- [13] U.S. Environmental Protection Agency. 16 September 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080025. McGoldrick Paper Co, Hinsdale, New Hampshire - Pesticides and PCBs Medium Level in Soil.

- [14] U.S. Environmental Protection Agency. 16 September 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080026. McGoldrick Paper Co, Hinsdale, New Hampshire - Pesticides and PCBs Medium Level in Soil.
- [15] U.S. Environmental Protection Agency. 21 September 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080025. McGoldrick Paper Co, Hinsdale, New Hampshire - Metals in Soil by ICP-OES.
- [16] U.S. Environmental Protection Agency. 21 September 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080026. McGoldrick Paper Co, Hinsdale, New Hampshire - Metals in Soil by ICP-OES.
- [17] U.S. Environmental Protection Agency. 21 September 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080025. McGoldrick Paper Co, Hinsdale, New Hampshire - Direct Mercury Analysis in Soil.
- [18] U.S. Environmental Protection Agency. 21 September 2020. Laboratory Services and Applied Sciences Division (LSASD). Laboratory Report. Project No. 20080026. McGoldrick Paper Co, Hinsdale, New Hampshire - Direct Mercury Analysis in Soil.
- [19] Eurofins. 16 September 2020. Eurofins TestAmerica, Canton. Analytical Report. Laboratory Job ID: 240-135325-1. Client Project/Site: DAS Case 0935F. For White Water Associates, 429 River Lane, PO BOX 27, Amasa, Michigan 49903.

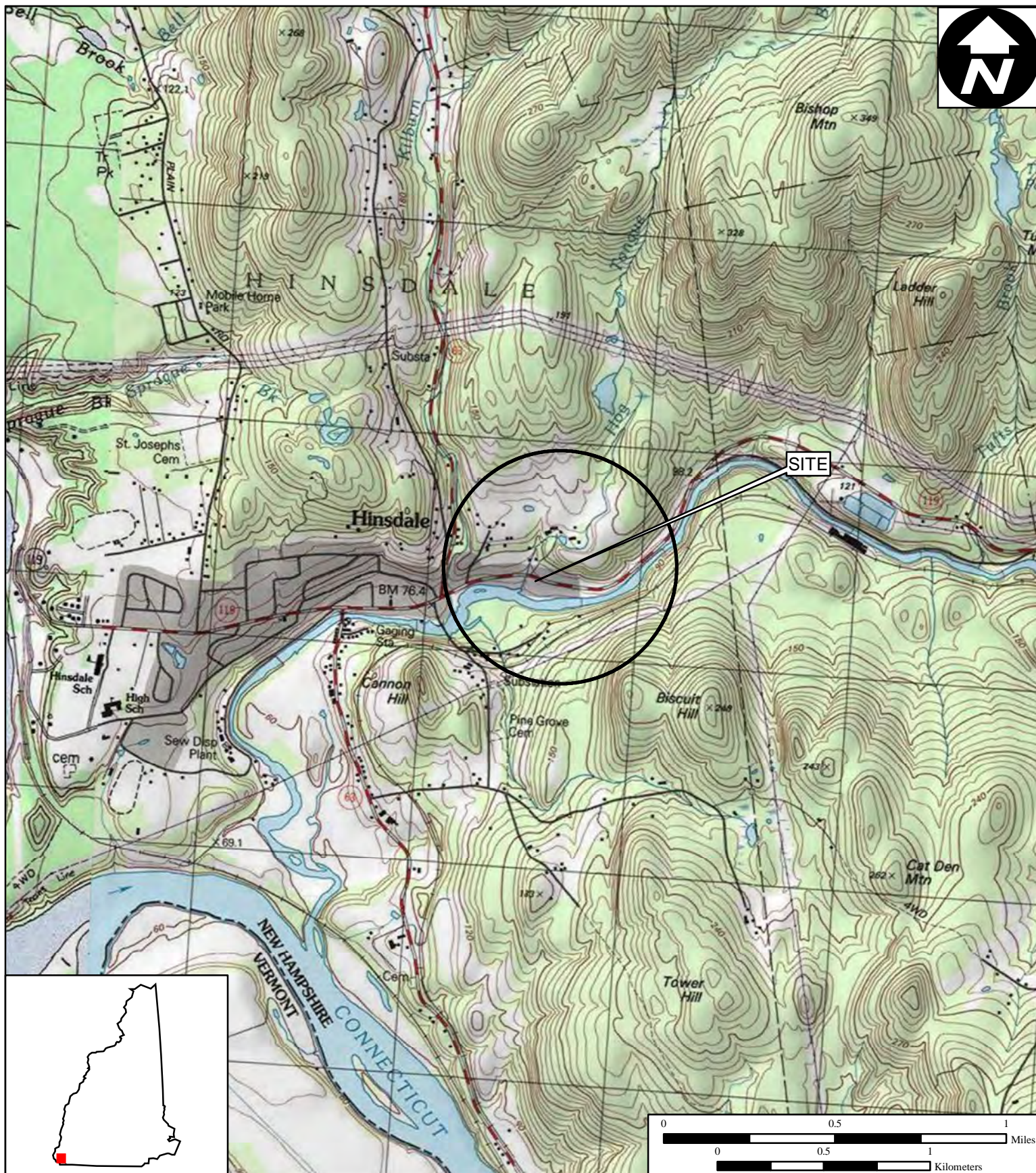
### III. Appendices

## Appendix A

### Figures

- Figure 1 - Site Location Map
- Figure 2 - Site Diagram
- Figure 3 - Sample Location Map





**Figure 1**

**Site Location Map**

**McGoldrick Paper Company Site  
54-54A Canal Street  
Hinsdale, New Hampshire**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) V  
Contract No. 68HE0120D0001**

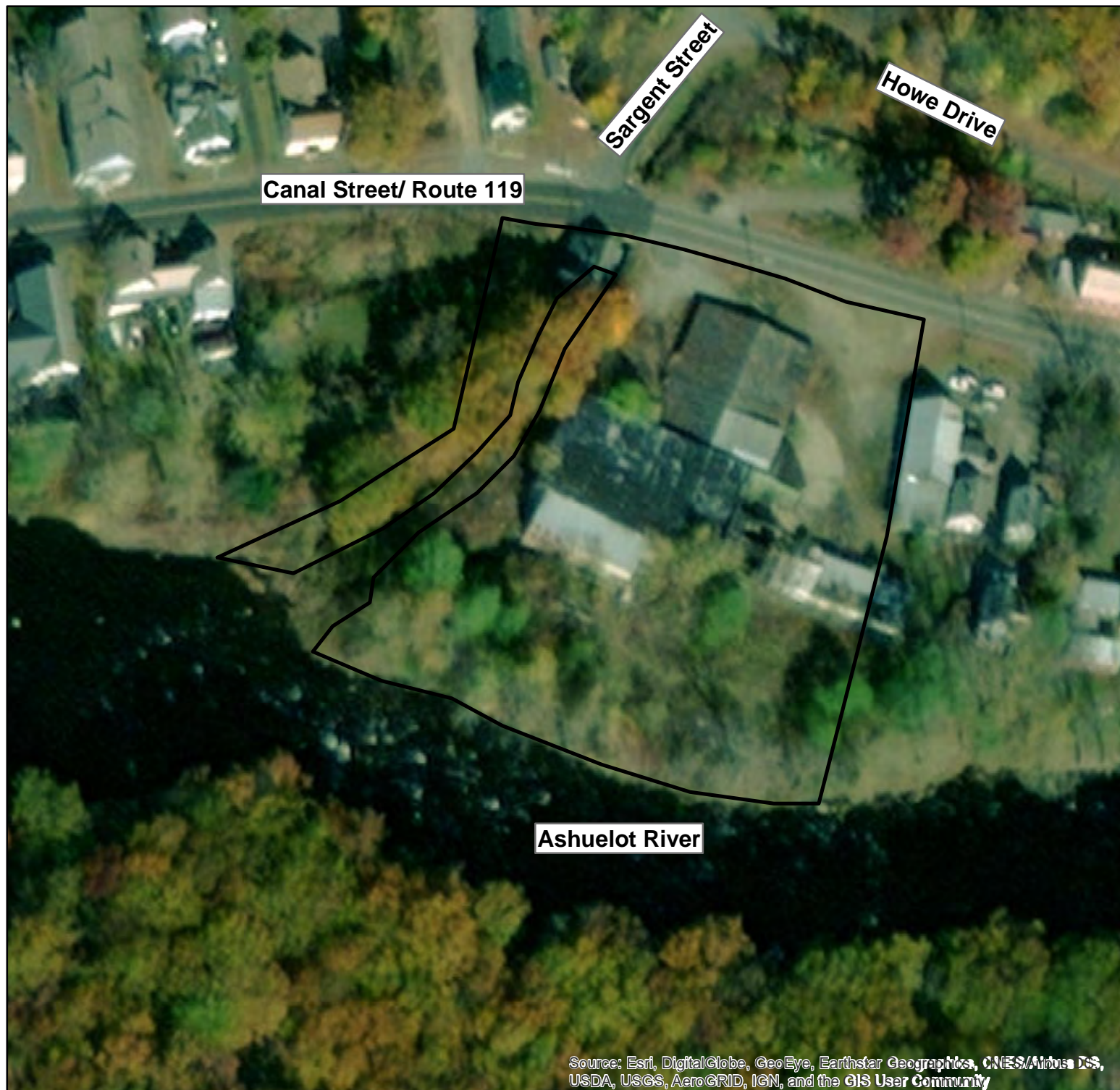
**AD Number:** TOFP-01-20-07-0022  
**Created by:** T. Evans  
**Created on:** 11 August 2020  
**Modified by:** B. Mace  
**Modified on:** 20 August 2020

**Data Sources:**

Topos: MicroPath/USGS/USA Topo Maps  
Quadrangle Name: Hinsdale, NH  
All other data: START







**Figure 2**

**Site Diagram**


**McGoldrick Paper Co. Site  
54-54A Canal Street  
Hinsdale, New Hampshire**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) V  
Contract No. 68HE0120D0001  
AD Number: TOFP-01-20-07-0022  
Created by: T. Evans  
Created on: 11 August 2020  
Modified by: B. Mace  
Modified on: 20 August 2020**

**LEGEND**

 Site Boundary



0 100 200  
  
Feet

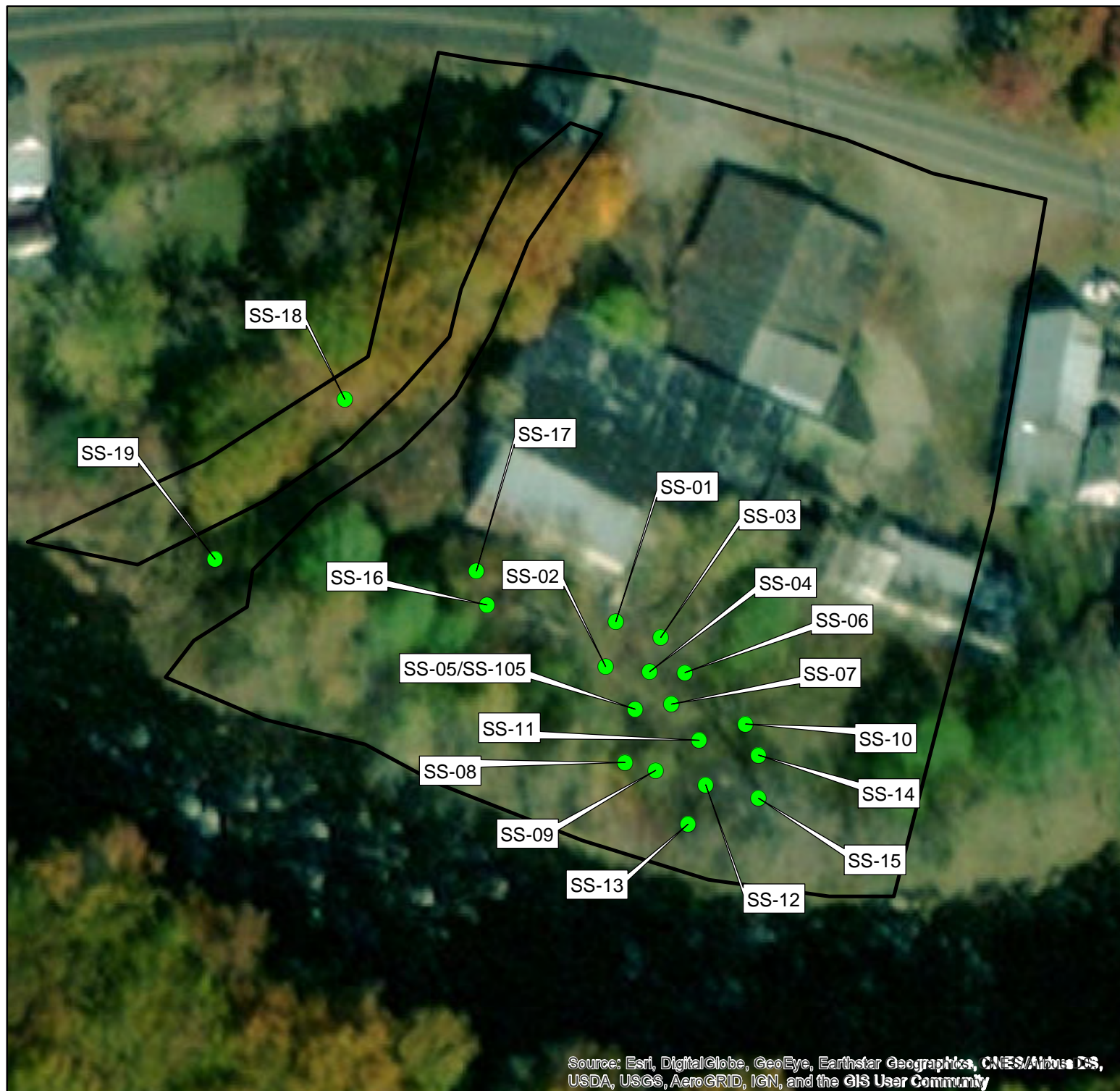
**Data Sources:**

Imagery: ESRI, i-cubed, USDA FSA, USGS  
AEX, GeoEye, Getmapping, Aerogrid, IGP  
Topos: USA TopoMaps  
All other data: START



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,  
USDA, USGS, AeroGRID, IGN, and the GIS User Community







**Figure 3**

**Sample Location Map**

**McGoldrick Paper Co. Site  
54-54A Canal Street  
Hinsdale, New Hampshire**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) V  
Contract No. 68HE0120D0001  
AD Number: TOFP-01-20-07-0022  
Created by: T. Evans  
Created on: 11 August 2020  
Modified by: B. Mace  
Modified on: 20 August 2020**

**LEGEND**

-  Site Boundary
-  Soil Sample Location



0 50 100 150  
Feet

**Data Sources:**

Imagery: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,  
USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Topos: USA TopoMaps  
All other data: START



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,  
USDA, USGS, AeroGRID, IGN, and the GIS User Community

## Appendix B

### Tables

Table 1	-	Container Descriptions
Table 2	-	Summary of Surface Soil Analytical Results
Table 3	-	Summary of Drum, Container, and Tote Analytical Results

TABLE 1

**DRUM DESCRIPTIONS  
MCGOLDRICK PAPER CO. SITE  
HINSDALE, CHESHIRE COUNTY, NEW HAMPSHIRE**

<b>LABEL/DESCRIPTION</b>	<b>CONTAINER SIZE</b>	<b>EST. QTY.</b>
Flam/Toxic Lab pack	55 gallon	2
Caustic Lab pack	15 gallon	1
Non-Regulated Lab Pack	55 gallon	3
Organic Peroxide Lab pack	5 gallon	1
Pesticide Lab pack	5 gallon	1
Aerosol Lab pack	30 gallon	1
Fire Extinguishers	55 gallon	1
Propane Cylinders (2)	30 gallon	1
Oil Loosepack	tpack	1
Oil Loosepack	55 gallon	2
Oil, Oil/Water, Oil/Coolants - Disposal (consolidated)	gallon	1,500
<b>BASEMENT - LABEL/DESCRIPTION</b>	<b>CONTAINER SIZE</b>	<b>EST. QTY.</b>
ML-02 Nutmeg Chemical NB-130 (assume oxidizing)	40 gallon in 85-gallon drum	3
Lubrimate Grease - non regulated	16 gallon in 55-gallon drum	3
ML-03 Dart non-regulated flocculant	20 gallon in 55-gallon drum	1
ML-04 Water based drum	30 gallon in 55-gallon drum	1
<b>GREEN DOOR AREA - LABEL/DESCRIPTION</b>	<b>CONTAINER SIZE</b>	<b>EST. QTY.</b>
ML-05 Rochester Midland OS-161 - non regulated amine solution	55 gallon	1
ML-06 Potassium Hydroxide (solution)	55 gallon	1
ML-07 Rainwater - Non-regulated	55 gallon in 85-gallon drum	1
<b>MAIN BUILDING - LABEL/DESCRIPTION</b>	<b>CONTAINER SIZE</b>	<b>EST. QTY.</b>
ML-11 Gas and Oil	20 gallon in 55-gallon drum	1
ML-14 Gas and Oil	55 gallon	1
ML-24 Lubrimate Grease - non regulated	16 gallon in 55-gallon drum	1
ML-26 Grifcote FR-50-VOC	330 gallon tote	1
ML-32 Olympic Adhesive Startex 1433 - non regulated polymer solution	55 gallon in 85-gallon drum	1
ML-33/34 Lubrimate Grease - non regulated	15 gallon in each 55-gallon drum	2
ML-35 Rainwater/Silicon non regulated solution	55 gallon in 85-gallon drum	1
ML-36 Rochester Midland Tamed Acid (Hydrochloric Acid)	55 gallon	1
ML-37 Rochester Midland Mid Floc -non regulated aluminum hydrochloride solution	55 gallon in 85-gallon drum	1
ML-40 Anionic Flocculant Emulsion 1315L- non regulated	55 gallon in 85-gallon drum	1
<b>LARGE ROOM BY LOADING DOCK</b>		
ML-43 Oil & Gas (need bottom cap)	275 gallon tote	1
ML-44 No Label	55 gallon	1
ML-45 Transmission Fluid - non regulated	55 gallon	1
ML-46 Boiler Treatment Potassium Hydroxide Solution	55 gallon	1
ML-47 BASF Polymin PR 971I liquid	55 gallon	1

**TABLE 1**

**DRUM DESCRIPTIONS  
MCGOLDRICK PAPER CO. SITE  
HINSDALE, CHESHIRE COUNTY, NEW HAMPSHIRE**

ML-48/49 Polyacrylamide Emulsion Midfloc 5140E - non regulated	55 gallon in 85-gallon drum	2
ML-50 Midfloc 1321L - non regulated aluminum hydrochloride	55 gallon	1
ML-51 Rain water, trash & debris - non regulated	55 gallon in 85-gallon drum	1
ML-53 Rochester Midland CD-900 - non regulated polyacrylic acid solution	275 gallon tote	1
ML-54 Lion Flocc 3044	275 gallon tote	1
ML-55 Midfloc 1316E - non regulated ammonium acetate (need bottom cap)	330 gallon tote	1
ML-56 Midfloc 1316E - non regulated ammonium acetate (need bottom & top caps)	275 gallon tote	1
ML-57 No Label	55 gallon	1
ML-58 Gen Flocc F82135 Polyacrylamide Emulsion	55 gallon in 85-gallon drum	1
ML-59 Waterwise Flocculant 168	55 gallon in 85-gallon drum	1
ML-60 Sodium Hydroxide	16 gallon	1
ML-61 Potassium Hydroxide Boiler Treatment	55 gallon in 85-gallon drum	1
ML-62/64 Waterwise Flocculant 168 (anionic polyacrylamide emulsion)	55 gallon in 85-gallon drum	2
ML-65 Grease - non regulated	15 gallon in 55-gallon drum	1
ML-66 Acid based Cleaner (HCl?)	30 gallon	1
ML-67 Waterwise 372 Potassium Hydroxide Boiler Treatment	55 gallon	1
ML-68 Dubois Jettacin Flam/Caustic	15 gallon in 55-gallon drum	1
ML-69 Green Coolant	30 gallon	1

TABLE 2

SUMMARY OF SOIL SAMPLE RESULTS

MCGOLDRICK PAPER CO. SITE, HINSDALE, NEW HAMPSHIRE

COMPOUND	SAMPLE LOCATION: SAMPLE NUMBER: SAMPLE DEPTH:			SS-01 S50022NH-0031 0-6 inches	SS-02 S50022NH-0032 0-6 inches	SS-03 S50022NH-0033 0-6 inches	SS-04 S50022NH-0034 0-6 inches	SS-05 S50022NH-0035 0-6 inches	SS-105 S50022NH-0036 0-6 inches	SS-06 S50022NH-0037 0-6 inches
	RML-Res	RML-Ind	NHDES S-1							
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)	µg/kg			µg/kg						
Acetophenone	23,000,000	350,000,000	NL	ND	240	320	ND	ND	ND	ND
Benzoic Acid	760,000,000	9,800,000,000	350,000	340	410	360	360	ND	ND	ND
Naphthalene	200,000	860,000	28,000	ND	490	ND	ND	ND	ND	ND
2-Methylnaphthalene	720,000	9,000,000	96,000	ND	670	ND	ND	ND	ND	ND
1-Methylnaphthalene	1,800,000	7,300,000	NL	ND	230	ND	ND	ND	ND	ND
Acenaphthylene	NL	NL	490,000	220	130	ND	120	110	200	ND
Acenaphthene	11,000,000	140,000,000	340,000	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	230,000	3,500,000	NL	ND	ND	ND	ND	ND	ND	ND
Fluorene	7,200,000	90,000,000	77,000	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NL	NL	NL	700	650	410	530	500	1,500	110
Anthracene	54,000,000	680,000,000	1,000,000	180	160	100	120	110	470	ND
Carbazole	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	7,200,000	90,000,000	960,000	1,400	1,100	620	850	1,000	3,900	240
Pyrene	5,400,000	68,000,000	720,000	1,100	790	430	630	720	2,700	180
Benzo(a)anthracene	110,000	2,100,000	1,000	720	530	270	390	450	1,600	110
Chrysene	11,000,000	210,000,000	120,000	850	760	300	530	600	1,600	170
bis(2-Ethylhexyl)phthalate	3,800,000	16,000,000	NL	660	680	1,700	ND	ND	ND	ND
Benzo(b)fluoranthene	110,000	2,100,000	1,000	680	670	250	440	470	1,200	150
Benzo(k)fluoranthene	1,100,000	21,000,000	12,000	530	510	200	330	390	1,100	98
Benzo(a)pyrene	11,000	210,000	700	720	540	260	410	460	1,400	130
Indeno(1,2,3-cd)pyrene	110,000	2,100,000	1,000	420	330	140	250	270	630	ND
Dibenz(a,h)anthracene	11,000	210,000	700	170	130	ND	100	110	250	28
Benzo(g,h,i)perylene	NL	NL	NL	460	330	170	270	270	630	87
POLYCHLORINATED BIPHENYLS (PCBs)	µg/kg			µg/kg						
Aroclor-1254	3,500	44,000	1,000	ND	ND	ND	ND	ND	ND	ND
METALS	mg/kg			mg/kg						
Aluminum	230,000	3,400,000	NL	7,900	7,600	9,900	9,600	9,600	9,000	10,000
Arsenic	68	300	11	27	27	7.2	23	26	21	10
Barium	46,000	650,000	1,000	100	96	43	91	92	77	52
Beryllium	470	6,900	12	ND	ND	ND	0.85	0.82	ND	ND
Calcium	NL	NL	NL	3,800	2,500	13,000	2,800	2,500	2,300	1,900
Cadmium*	210	2,900	33	ND	ND	ND	ND	ND	ND	ND
Cobalt	70	1,000	NL	6.8	8.9	5.0	8.7	11	9.9	7.2
Chromium	NL	NL	NL	15	16	23	17	17	17	16
Copper	9,400	140,000	NL	380	52	86	56	64	54	45
Iron	160,000	2,500,000	NL	20,000	20,000	12,000	19,000	21,000	20,000	16,000
Magnesium	NL	NL	NL	2,300	2,200	2,200	2,700	2,500	2,600	3,000
Manganese	5,500	77,000	1,000	230	270	310	240	310	280	410
Nickel**	4,600	67,000	400	17	20	13	22	21	19	16
Lead	400	800	400	97	74	21	49	74	64	27
Antimony	94	1,400	9	ND	ND	ND	ND	ND	ND	ND
Vanadium	1,200	17,000	NL	25	24	18	29	27	25	25
Zinc	70,000	1,100,000	1,000	190	170	91	130	150	130	100
Mercury	33	140	7.0	0.21	0.11	0.050	0.094	0.25	0.12	0.033

NOTES:

ANALYTICAL METHODS

Samples analyzed by U.S. EPA LSASD as follows:  
SVOCs: EPA Region I SOP EIASOP-BNAS1, BNAs in Soil Medium Level.  
Pesticides and PCBs: EPA Region I SOP EIASOP-PESTSOIL2.SOP, Pesticides and PCBs Medium level in Soil.  
Metals and mercury: EPA Region I EIASOP-OPTIMAS0, Metals in Soil Medium Level by ICP-OES;  
and EPA Region I EIASOP-INGMA1, Direct Mercury Analysis in Soil.

- 1) mg/kg = milligrams per kilogram
- 2) µg/kg = micrograms per kilogram
- 3) NL = Not Listed.
- 4) ND = Not Detected.
- 5) EPA RML-Res = US EPA Removal Management Level for Residential Soil.
- 6) EPA RML-Ind = US EPA Removal Management Level for Industrial Soil.
- 7) NHDES S-1 = New Hampshire Department of Environmental Services Standards for Soil Category S-1.
- 8) Values bolded and shaded in yellow indicate compounds exceeding the NHDES S-1 Standard.
- 9) Values bolded and shaded in orange indicate compounds exceeding the EPA Residential RML.
- 10) Values bolded and shaded in red indicate compounds exceeding the EPA Industrial RML.
- 11) Results are reported in the units noted.
- 12) A compound is listed in the table above only if it was detected in at least one of the samples analyzed. Compounds that were analyzed for, but not detected, have been omitted.
- \* The listed EPA RMLs are for Cadmium (Diet). There is no EPA RML for elemental Cadmium.
- \*\* The listed EPA RMLs for Nickel are the RMLs for Nickel Soluble Salts. There is no EPA RML for elemental Nickel.

TABLE 2

SUMMARY OF SOIL SAMPLE RESULTS

MCGOLDRICK PAPER CO. SITE, HINSDALE, NEW HAMPSHIRE

COMPOUND	SAMPLE LOCATION: SAMPLE NUMBER: SAMPLE DEPTH:			SS-07 S50022NH-0038 0-6 inches	SS-08 S50022NH-0039 0-6 inches	SS-09 S50022NH-0040 0-6 inches	SS-10 S50022NH-0041 0-6 inches	SS-11 S50022NH-0042 0-6 inches	SS-12 S50022NH-0043 0-6 inches	SS-13 S50022NH-0044 0-6 inches
	RML-Res	RML-Ind	NHDES S-1							
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)	µg/kg			µg/kg						
Acetophenone	23,000,000	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	760,000,000	9,800,000,000	350,000	380	ND	390	ND	430	ND	ND
Naphthalene	200,000	860,000	28,000	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	720,000	9,000,000	96,000	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	1,800,000	7,300,000	NL	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NL	NL	490,000	200	150	ND	110	120	140	ND
Acenaphthene	11,000,000	140,000,000	340,000	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	230,000	3,500,000	NL	ND	ND	ND	ND	ND	ND	ND
Fluorene	7,200,000	90,000,000	77,000	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NL	NL	NL	600	230	330	400	270	640	160
Anthracene	54,000,000	680,000,000	1,000,000	150	110	99	90	ND	180	ND
Carbazole	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	7,200,000	90,000,000	960,000	1,300	580	620	720	470	1,100	330
Pyrene	5,400,000	68,000,000	720,000	910	500	450	610	380	800	260
Benzo(a)anthracene	110,000	2,100,000	1,000	540	390	350	360	230	550	150
Chrysene	11,000,000	210,000,000	120,000	700	460	440	450	360	620	190
bis(2-Ethylhexyl)phthalate	3,800,000	16,000,000	NL	ND	130	320	ND	ND	ND	ND
Benzo(b)fluoranthene	110,000	2,100,000	1,000	630	390	460	370	320	510	150
Benzo(k)fluoranthene	1,100,000	21,000,000	12,000	440	310	350	270	230	410	130
Benzo(a)pyrene	11,000	210,000	700	590	380	390	370	280	510	160
Indeno(1,2,3-cd)pyrene	110,000	2,100,000	1,000	310	190	270	230	180	280	97
Dibenz(a,h)anthracene	11,000	210,000	700	120	ND	100	93	ND	120	ND
Benzo(g,h,i)perylene	NL	NL	NL	340	190	280	260	210	290	110
POLYCHLORINATED BIPHENYLS (PCBs)	µg/kg			µg/kg						
Aroclor-1254	3,500	44,000	1,000	1,300	ND	ND	ND	ND	ND	ND
METALS	mg/kg			mg/kg						
Aluminum	230,000	3,400,000	NL	10,000	12,000	12,000	9,300	11,000	9,000	11,000
Arsenic	68	300	11	25	36	48	16	83	31	8.8
Barium	46,000	650,000	1,000	110	130	200	83	260	240	92
Beryllium	470	6,900	12	ND	0.93	0.99	ND	ND	ND	ND
Calcium	NL	NL	NL	3,600	4,600	7,300	2,600	5,300	11,000	2,300
Cadmium*	210	2,900	33	ND	ND	1.4	ND	15	ND	ND
Cobalt	70	1,000	NL	9.3	10	9.2	7.5	8.3	7.5	8.6
Chromium	NL	NL	NL	20	30	41	16	76	27	21
Copper	9,400	140,000	NL	73	99	250	78	700	88	32
Iron	160,000	2,500,000	NL	20,000	24,000	25,000	18,000	23,000	26,000	19,000
Magnesium	NL	NL	NL	2,900	3,900	2,900	3,000	3,400	3,100	5,100
Manganese	5,500	77,000	1,000	330	370	350	270	590	910	410
Nickel**	4,600	67,000	400	24	26	29	19	25	27	21
Lead	400	800	400	63	81	120	47	2,500	80	25
Antimony	94	1,400	9	ND	ND	2.3	ND	670	ND	ND
Vanadium	1,200	17,000	NL	33	33	31	34	30	32	33
Zinc	70,000	1,100,000	1,000	150	170	370	110	630	250	69
Mercury	33	140	7.0	0.086	0.078	0.12	0.10	0.061	0.11	0.040

NOTES:

ANALYTICAL METHODS

Samples analyzed by U.S. EPA LSASD as follows:  
SVOCs: EPA Region I SOP EIASOP-BNAS1, BNAs in Soil Medium Level.  
Pesticides and PCBs: EPA Region I SOP EIASOP-PESTSOIL2.SOP, Pesticides and PCBs Medium level in Soil.  
Metals and mercury: EPA Region I EIASOP-OPTIMAS0, Metals in Soil Medium Level by ICP-OES;  
and EPA Region I EIASOP-INGMA1, Direct Mercury Analysis in Soil.

- 1) mg/kg = milligrams per kilogram
- 2) µg/kg = micrograms per kilogram
- 3) NL = Not Listed.
- 4) ND = Not Detected.
- 5) EPA RML-Res = US EPA Removal Management Level for Residential Soil.
- 6) EPA RML-Ind = US EPA Removal Management Level for Industrial Soil.
- 7) NHDES S-1 = New Hampshire Department of Environmental Services Standards for Soil Category S-1.
- 8) Values bolded and shaded in yellow indicate compounds exceeding the NHDES S-1 Standard.
- 9) Values bolded and shaded in orange indicate compounds exceeding the EPA Residential RML.
- 10) Values bolded and shaded in red indicate compounds exceeding the EPA Industrial RML.
- 11) Results are reported in the units noted.
- 12) A compound is listed in the table above only if it was detected in at least one of the samples analyzed. Compounds that were analyzed for, but not detected, have been omitted.
- \* The listed EPA RMLs are for Cadmium (Diet). There is no EPA RML for elemental Cadmium.
- \*\* The listed EPA RMLs for Nickel are the RMLs for Nickel Soluble Salts. There is no EPA RML for elemental Nickel.



TABLE 2

SUMMARY OF SOIL SAMPLE RESULTS

MCGOLDRICK PAPER CO. SITE, HINSDALE, NEW HAMPSHIRE

COMPOUND	SAMPLE LOCATION: SAMPLE NUMBER: SAMPLE DEPTH:			SS-14 S50022NH-0045 0-6 inches	SS-15 S50022NH-0046 0-6 inches	SS-16 S50022NH-0047 0-6 inches	SS-17 S50022NH-0048 0-6 inches	SS-18 S50022NH-0049 0-6 inches	SS-19 S50022NH-0050 0-6 inches
	RML-Res	RML-Ind	NHDES S-1						
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)	µg/kg			µg/kg					
Acetophenone	23,000,000	350,000,000	NL	ND	ND	ND	ND	ND	ND
Benzoic Acid	760,000,000	9,800,000,000	350,000	ND	ND	ND	ND	8,100	ND
Naphthalene	200,000	860,000	28,000	150	ND	ND	180	ND	ND
2-Methylnaphthalene	720,000	9,000,000	96,000	140	ND	ND	120	ND	ND
1-Methylnaphthalene	1,800,000	7,300,000	NL	ND	ND	ND	110	ND	ND
Acenaphthylene	NL	NL	490,000	120	ND	170	390	110	340
Acenaphthene	11,000,000	140,000,000	340,000	93	ND	ND	250	ND	ND
Dibenzofuran	230,000	3,500,000	NL	ND	ND	ND	340	ND	ND
Fluorene	7,200,000	90,000,000	77,000	100	ND	ND	360	ND	ND
Phenanthrene	NL	NL	NL	1,000	330	380	4,900	200	830
Anthracene	54,000,000	680,000,000	1,000,000	180	ND	140	670	ND	230
Carbazole	NL	NL	NL	ND	ND	ND	630	ND	ND
Fluoranthene	7,200,000	90,000,000	960,000	1,400	790	1,200	5,900	470	1,500
Pyrene	5,400,000	68,000,000	720,000	780	570	820	3,600	360	1,700
Benzo(a)anthracene	110,000	2,100,000	1,000	510	390	540	1,600	210	1,100
Chrysene	11,000,000	210,000,000	120,000	630	410	690	2,300	300	1,100
bis(2-Ethylhexyl)phthalate	3,800,000	16,000,000	NL	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	110,000	2,100,000	1,000	560	390	680	1,900	250	670
Benzo(k)fluoranthene	1,100,000	21,000,000	12,000	310	290	510	1,500	200	600
Benzo(a)pyrene	11,000	210,000	700	490	410	620	1,800	250	880
Indeno(1,2,3-cd)pyrene	110,000	2,100,000	1,000	290	220	370	1,000	150	410
Dibenz(a,h)anthracene	11,000	210,000	700	92	ND	130	340	ND	160
Benzo(g,h,i)perylene	NL	NL	NL	310	230	390	1,000	160	460
POLYCHLORINATED BIPHENYLS (PCBs)	µg/kg			µg/kg					
Aroclor-1254	3,500	44,000	1,000	ND	ND	ND	ND	ND	ND
METALS	mg/kg			mg/kg					
Aluminum	230,000	3,400,000	NL	8,000	12,000	11,000	6,600	3,800	7,200
Arsenic	68	300	11	13	13	52	21	15	3.6
Barium	46,000	650,000	1,000	88	87	210	120	39	24
Beryllium	470	6,900	12	ND	ND	1.4	ND	ND	ND
Calcium	NL	NL	NL	2,300	2,900	3,700	4,000	610	530
Cadmium*	210	2,900	33	ND	ND	ND	ND	ND	ND
Cobalt	70	1,000	NL	5.7	10	8.5	6.3	ND	5.3
Chromium	NL	NL	NL	15	50	17	16	5.9	11
Copper	9,400	140,000	NL	42	130	51	92	14	13
Iron	160,000	2,500,000	NL	15,000	37,000	23,000	18,000	9,200	14,000
Magnesium	NL	NL	NL	2,500	4,600	2,700	1,700	990	3,200
Manganese	5,500	77,000	1,000	290	490	210	230	100	240
Nickel**	4,600	67,000	400	15	47	22	16	4.7	13
Lead	400	800	400	98	88	75	230	54	9.3
Antimony	94	1,400	9	ND	ND	ND	3.7	ND	ND
Vanadium	1,200	17,000	NL	27	30	32	24	17	17
Zinc	70,000	1,100,000	1,000	160	130	130	330	24	62
Mercury	33	140	7.0	0.22	0.080	0.24	0.43	0.073	ND

NOTES:

ANALYTICAL METHODS

Samples analyzed by U.S. EPA LSASD as follows:  
SVOCs: EPA Region I SOP EIASOP-BNAS1, BNAs in Soil Medium Level.  
Pesticides and PCBs: EPA Region I SOP EIASOP-PESTSOIL2.SOP, Pesticides and PCBs Medium level in Soil.  
Metals and mercury: EPA Region I EIASOP-OPTIMAS0, Metals in Soil Medium Level by ICP-OES;  
and EPA Region I EIASOP-INGMA1, Direct Mercury Analysis in Soil.

- 1) mg/kg = milligrams per kilogram
- 2) µg/kg = micrograms per kilogram
- 3) NL = Not Listed.
- 4) ND = Not Detected.
- 5) EPA RML-Res = US EPA Removal Management Level for Residential Soil.
- 6) EPA RML-Ind = US EPA Removal Management Level for Industrial Soil.
- 7) NHDES S-1 = New Hampshire Department of Environmental Services Standards for Soil Category S-1.
- 8) Values bolded and shaded in yellow indicate compounds exceeding the NHDES S-1 Standard.
- 9) Values bolded and shaded in orange indicate compounds exceeding the EPA Residential RML.
- 10) Values bolded and shaded in red indicate compounds exceeding the EPA Industrial RML.
- 11) Results are reported in the units noted.
- 12) A compound is listed in the table above only if it was detected in at least one of the samples analyzed. Compounds that were analyzed for, but not detected, have been omitted.
- \* The listed EPA RMLs are for Cadmium (Diet). There is no EPA RML for elemental Cadmium.
- \*\* The listed EPA RMLs for Nickel are the RMLs for Nickel Soluble Salts. There is no EPA RML for elemental Nickel.

TABLE 3

**SUMMARY OF DRUM, CONTAINER, AND TOTE ANALYTICAL RESULTS**  
**MCGOLDRICK PAPER CO. SITE**  
**HINSDALE, NEW HAMPSHIRE**

SAMPLE NUMBER:	S50022NH-0001	S50022NH-0002	S50022NH-0003	S50022NH-0004	S50022NH-0005	S50022NH-0006
LOCATION ID:	T-1	T-2	T-4	T-5	T-6	D-01
LABORATORY NUMBER:	240-135325-1	240-135325-2	240-135325-3	240-135325-4	240-135325-5	240-135325-6
<b>VOCs</b>						
	<b>µg/kg</b>					
1,2,4-Trichlorobenzene	180 J	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	800 J
Acetone	1,100 J B	6,200 J B	14,000 J B	ND	16,000 J B	3,200 J B
Benzene	ND	ND	ND	640,000	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	700,000	ND	ND
Ethylbenzene	ND	ND	ND	1,900,000	74,000	ND
Isopropylbenzene	ND	ND	ND	200,000 J	50,000	ND
Methyl acetate	ND	3,300 J	56,000 J	ND	ND	ND
Methylcyclohexane	ND	ND	ND	850,000	9,200 J	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND
Methylene Chloride	220 J B	ND	2,000 J B	38,000 J B	1,900 J B	ND
Styrene	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	8,500,000 B	26,000 B	280 J B
Xylenes, Total	ND	ND	ND	9,900,000	540,000	1,100 J
<b>SVOCs</b>						
	<b>µg/kg</b>					
1,1'-Biphenyl	ND	ND	ND	220,000 J	260,000 J	170,000 J
2-Methylnaphthalene	ND	ND	ND	2,400,000	2,800,000	1,200,000
Acenaphthene	ND	ND	ND	190,000 J	220,000 J	230,000 J
Anthracene	ND	ND	ND	71,000 J	82,000 J	79,000 J
Benzo[a]anthracene	ND	ND	ND	57,000 J	68,000 J	99,000 J
Benzo[a]pyrene	ND	ND	ND	26,000 J	31,000 J	53,000 J
Benzo[b]fluoranthene	ND	ND	ND	13,000 J	14,000 J	26,000 J
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	33,000 J	43,000 J	ND
Chrysene	ND	ND	ND	59,000 J	81,000 J	110,000 J
Dibenzofuran	ND	ND	ND	65,000 J	78,000 J	110,000 J
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	34,000 J	32,000 J	51,000 J
Fluorene	ND	ND	ND	200,000 J	260,000 J	300,000 J
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	850,000	830,000	32,000 J
Phenanthrene	ND	ND	ND	590,000	730,000	880,000
Phenol	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	160,000 J	210,000 J	290,000 J
3 & 4 Methylphenol	ND	ND	ND	ND	ND	ND
<b>PESTICIDES</b>						
	<b>µg/kg</b>					
4,4'-DDD	ND	ND	ND	510 J	ND	110 J
Aldrin	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	120 J	370 J	170 J
Endrin	ND	ND	ND	610 J	540 J	500 J
Methoxychlor	ND	ND	ND	ND	ND	ND
trans-Chlordane	ND	ND	ND	ND	ND	ND
<b>METALS</b>						
	<b>mg/kg</b>					
Aluminum	ND	ND	ND	ND	ND	ND
Antimony	ND	ND	ND	ND	ND	ND
Arsenic	0.32 J	0.4 J	ND	ND	ND	ND
Barium	ND	ND	ND	ND	ND	0.48 J
Cadmium	ND	ND	ND	ND	ND	ND
Calcium	ND	ND	ND	ND	ND	ND
Chromium	ND	ND	ND	ND	ND	ND
Cobalt	ND	ND	ND	ND	ND	ND
Copper	ND	4.6	ND	0.87 J	ND	ND
Iron	ND	ND	ND	ND	ND	12 J
Lead	ND	ND	ND	0.96 J	ND	0.49 J
Magnesium	ND	ND	ND	ND	ND	ND
Manganese	0.31 J	ND	ND	ND	ND	ND
Nickel	ND	ND	ND	3.3 J	4.3	1.7 J
Potassium	ND	180 J B	ND	ND	ND	170 J B
Selenium	0.57 J	ND	ND	ND	ND	ND
Sodium	2,600 B	41,000	1,200 B	ND	ND	200 J B
Vanadium	ND	ND	ND	12	19	3.4 J
Zinc	ND	ND	ND	18	ND	5.9
<b>pH (9045)</b>	7	8	6	4.5	4.3	7.9
<b>OIL ID</b>						
Oil ID C8-C36 (Oil) m8015	ND	--	1,000,000	420,000	490,000	19,000
Oil ID C8-C36 (Liquid) m8015	--	140,000	--	--	--	--

**NOTES:**

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ND = Not detected; compound was not detected above the method detection limit.

-- = Sample not analyzed for the compound.

J = Results are estimated; concentration was above the method detection limit, but below the quantitation limit.

J- = Results are biased low due to analysis outside of analytical holding time.

B = Compound was detected in the associated method blank.



TABLE 3

**SUMMARY OF DRUM, CONTAINER, AND TOTE ANALYTICAL RESULTS**  
**MCGOLDRICK PAPER CO. SITE**  
**HINSDALE, NEW HAMPSHIRE**

SAMPLE NUMBER:	S50022NH-0007	S50022NH-0008	S50022NH-0009	S50022NH-0010	S50022NH-0011	S50022NH-0012
LOCATION ID:	D-02	D-03	D-04	D-05	D-06	D-07
LABORATORY NUMBER:	240-135325-7	240-135325-8	240-135325-9	240-135325-10	240-135325-11	240-135325-12
<b>VOCs</b>	<b>µg/kg</b>					
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	ND
Acetone	1,400 J B	1,100 J B	1,800 J B	1,600 J B	2,600 J B	3,300 J B
Benzene	ND	ND	ND	ND	860 J	ND
Chloromethane	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	1,800 J	ND
Ethylbenzene	ND	ND	ND	ND	32,000	ND
Isopropylbenzene	ND	ND	ND	ND	35,000	ND
Methyl acetate	ND	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	9,300	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	100 J B	110 J B	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	460 J	ND
Toluene	100 J B	ND	110 J B	110 J B	20,000 B	180 J B
Xylenes, Total	ND	ND	ND	ND	110,000	260 J
<b>SVOCs</b>	<b>µg/kg</b>					
1,1'-Biphenyl	ND	ND	ND	ND	41,000 J	ND
2-Methylnaphthalene	ND	ND	ND	ND	500,000	ND
Acenaphthene	ND	ND	ND	ND	38,000 J	ND
Anthracene	ND	ND	ND	ND	9,800 J	ND
Benzo[a]anthracene	ND	ND	ND	ND	9,400 J	ND
Benzo[a]pyrene	ND	ND	ND	ND	5,200 J	ND
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	12,000 J	ND
Dibenzofuran	ND	ND	ND	ND	21,000 J	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	6,500 J	ND
Fluorene	ND	ND	ND	ND	47,000 J	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	96,000 J	ND
Phenanthrene	ND	ND	ND	ND	120,000 J	ND
Phenol	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	32,000 J	ND
3 & 4 Methylphenol	ND	ND	ND	ND	ND	ND
<b>PESTICIDES</b>	<b>µg/kg</b>					
4,4'-DDD	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND
trans-Chlordane	ND	ND	ND	ND	ND	ND
<b>METALS</b>	<b>mg/kg</b>					
Aluminum	ND	ND	ND	ND	5.5 J	ND
Antimony	ND	ND	ND	ND	ND	ND
Arsenic	0.3 J	0.35 J	ND	ND	ND	ND
Barium	ND	0.37 J	ND	ND	39	ND
Cadmium	ND	ND	ND	ND	0.054 J	ND
Calcium	ND	ND	ND	ND	60 J	ND
Chromium	ND	0.74 J	ND	ND	0.32 J	ND
Cobalt	ND	ND	ND	ND	ND	ND
Copper	ND	ND	ND	ND	6.4	4.1
Iron	ND	ND	ND	ND	200	ND
Lead	ND	ND	ND	ND	2.2	ND
Magnesium	ND	ND	ND	ND	ND	ND
Manganese	ND	ND	ND	ND	1.3 J	ND
Nickel	ND	ND	ND	ND	1.1 J	ND
Potassium	ND	92,000 B	160 J B	55 J B	46 J B	200 J B
Selenium	0.43 J	ND	ND	ND	ND	ND
Sodium	980 B	26,000 B	83 J B	110 J B	1,300 B	39,000 B
Vanadium	ND	ND	ND	ND	2.3 J	ND
Zinc	ND	ND	ND	ND	180	ND
<b>pH (9045)</b>	7.4	12.6	7.1	10.5	6	9
<b>OIL ID</b>						
Oil ID C8-C36 (Oil) m8015	--	--	--	--	80,000	--
Oil ID C8-C36 (Liquid) m8015	14	36	12	5	--	210,000

**NOTES:**

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ND = Not detected; compound was not detected above the method detection limit.

-- = Sample not analyzed for the compound.

J = Results are estimated; concentration was above the method detection limit, but below the quantitation limit.

J- = Results are biased low due to analysis outside of analytical holding time.

B = Compound was detected in the associated method blank.

TABLE 3

**SUMMARY OF DRUM, CONTAINER, AND TOTE ANALYTICAL RESULTS  
MCGOLDRICK PAPER CO. SITE  
HINSDALE, NEW HAMPSHIRE**

SAMPLE NUMBER:	S50022NH-0013	S50022NH-0014	S50022NH-0015	S50022NH-0016	S50022NH-0017	S50022NH-0018
LOCATION ID:	D-08	D-09	D-10	D-11	D-12	D-13
LABORATORY NUMBER:	240-135325-13	240-135325-14	240-135325-15	240-135325-16	240-135325-17	240-135325-18
<b>VOCs</b>	<b>µg/kg</b>					
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	ND
Acetone	1,600 J B	ND	3,400 J B	1,800 J B	24,000 J- B	420,000 J- B
Benzene	ND	11,000	ND	ND	ND	470,000 J-
Chloromethane	ND	ND	ND	ND	ND	ND
Cyclohexane	160 J	11,000	ND	ND	ND	350,000 J-
Ethylbenzene	26,000	150,000	230 J	ND	ND	3,000,000 J-
Isopropylbenzene	10,000	27,000	ND	ND	ND	ND
Methyl acetate	ND	ND	ND	ND	ND	ND
Methylcyclohexane	3,600	19,000	ND	ND	ND	390,000 J-
Methyl tert-butyl ether	ND	3,500 J	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	48,000 J- B
Styrene	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Toluene	16,000 B	240,000 B	400 J B	120 J B	ND	9,400,000 J- B
Xylenes, Total	180,000	860,000	1,500 J	480 J	100 J-	17,000,000 J-
<b>SVOCs</b>	<b>µg/kg</b>					
1,1'-Biphenyl	ND	ND	ND	ND	21,000 J	ND
2-Methylnaphthalene	380,000 J	330,000 J	ND	270,000 J	370,000	270,000 J
Acenaphthene	27,000 J	ND	ND	13,000 J	18,000 J	ND
Anthracene	ND	17,000 J	ND	17,000 J	16,000 J	11,000 J
Benzo[a]anthracene	25,000 J	27,000 J	ND	19,000 J	9,400 J	ND
Benzo[a]pyrene	ND	18,000	ND	14,000 J	5,600 J	11,000 J
Benzo[b]fluoranthene	ND	18,000 J	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	24,000 J	ND	11,000 J	ND	ND
Bis(2-ethylhexyl) phthalate	82,000 J	ND	ND	220,000 J	37,000 J	58,000 J
Carbazole	ND	ND	ND	ND	ND	ND
Chrysene	ND	19,000 J	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	25,000 J	ND	14,000 J	10,000 J	11,000 J
Fluorene	37,000 J	14,000 J	ND	28,000 J	36,000 J	18,000 J
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	55,000 J
Naphthalene	130,000 J	210,000 J	ND	160,000 J	120,000 J	300,000 J
Phenanthrene	110,000 J	58,000 J	ND	61,000 J	55,000 J	38,000 J
Phenol	ND	ND	ND	ND	ND	ND
Pyrene	59,000 J	61,000 J	ND	42,000 J	21,000 J	27,000 J
3 & 4 Methylphenol	ND	ND	ND	ND	ND	ND
<b>PESTICIDES</b>	<b>µg/kg</b>					
4,4'-DDD	ND	ND	ND	ND	ND	1,500 J
Aldrin	ND	ND	ND	ND	72 J	ND
Endosulfan I	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	260	ND	ND
Endrin	ND	ND	570	89	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	1,800
trans-Chlordane	ND	ND	ND	ND	ND	ND
<b>METALS</b>	<b>mg/kg</b>					
Aluminum	ND	ND	ND	ND	16 J	ND
Antimony	ND	0.69 J	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND	ND
Barium	ND	ND	ND	ND	ND	1.8 J
Cadmium	ND	ND	ND	ND	ND	ND
Calcium	410 J	250 J	ND	45 J	ND	510
Chromium	0.4 J	0.2 J	ND	0.14 J	ND	16
Cobalt	ND	ND	ND	ND	ND	0.19 J
Copper	32	10	ND	10	5.2	17
Iron	110	65	ND	ND	46	55
Lead	21	35	ND	0.45 J	1.5	480
Magnesium	ND	ND	ND	ND	ND	ND
Manganese	0.67 J	0.44 J	ND	ND	1.6	0.66 J
Nickel	ND	ND	ND	0.22 J	ND	0.22 J
Potassium	ND	ND	2,900 B	850 B	890 B	ND
Selenium	ND	ND	ND	ND	ND	ND
Sodium	ND	ND	940 B	2,900 B	1,700 B	62 J B
Vanadium	ND	ND	ND	ND	ND	ND
Zinc	140	100	ND	26	11	270
<b>pH (9045)</b>	5.5	5.5	9.5	7.5	6	6
<b>OIL ID</b>						
Oil ID C8-C36 (Oil) m8015	530,000	530,000	--	53,000	--	480,000
Oil ID C8-C36 (Liquid) m8015	--	--	10,000	--	13,000	--

**NOTES:**

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ND = Not detected; compound was not detected above the method detection limit.

-- = Sample not analyzed for the compound.

J = Results are estimated; concentration was above the method detection limit, but below the quantitation limit.

J- = Results are biased low due to analysis outside of analytical holding time.

B = Compound was detected in the associated method blank.

TABLE 3

**SUMMARY OF DRUM, CONTAINER, AND TOTE ANALYTICAL RESULTS**  
**MCGOLDRICK PAPER CO. SITE**  
**HINSDALE, NEW HAMPSHIRE**

SAMPLE NUMBER:	S50022NH-0019	S50022NH-0020	S50022NH-0021	S50022NH-0022	S50022NH-0024	S50022NH-0025
LOCATION ID:	D-14	D-15	D-16	D-17	D-19	D-20
LABORATORY NUMBER:	240-135325-19	240-135325-20	240-135325-21	240-135325-22	240-135325-24	240-135325-25
<b>VOCs</b>	<b>µg/kg</b>					
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	260 J	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	ND	2,400 J	ND	ND	ND	ND
Acetone	14,000 J- B	2,300 J B	11,000 J- B	1,600 J B	1,900 J B	21,000 J B
Benzene	ND	930 J	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	390 J	ND	ND	ND	ND
Ethylbenzene	ND	27,000	11,000 J-	ND	ND	ND
Isopropylbenzene	ND	3,300	9,600 J-	ND	ND	4,400 J
Methyl acetate	ND	ND	ND	ND	ND	ND
Methylcyclohexane	ND	1,500	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND
Methylene Chloride	490 J- B	200 J B	1,400 J- B	140 J B	270 J B	3,200 J B
Styrene	ND	1,600	ND	ND	ND	1,600 J
Tetrachloroethene	ND	67,000	ND	ND	ND	ND
Toluene	500 J- B	66,000 B	1,600 J- B	160 J B	270 J B	1,500 J B
Xylenes, Total	640 J-	170,000 B	140,000 J-B	110 J B	700 J B	7,000 J B
<b>SVOCs</b>	<b>µg/kg</b>					
1,1'-Biphenyl	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	20,000	320,000 J	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Fluorene	ND	1,200 J	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	83,000 J	ND	ND	ND
Naphthalene	ND	13,000 J	190,000 J	ND	ND	ND
Phenanthrene	ND	1,200 J	ND	ND	ND	ND
Phenol	1,300 J	ND	ND	ND	ND	ND
Pyrene	ND	720 J	25,000 J	ND	ND	ND
3 & 4 Methylphenol	ND	ND	ND	ND	ND	ND
<b>PESTICIDES</b>	<b>µg/kg</b>					
4,4'-DDD	ND	ND	1,000	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND
Endosulfan I	17 J	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND
trans-Chlordane	ND	ND	ND	ND	ND	ND
<b>METALS</b>	<b>mg/kg</b>					
Aluminum	ND	ND	14 J	4.7 J	ND	ND
Antimony	ND	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND	ND
Barium	ND	0.64 J	4.9 J	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND
Calcium	ND	ND	670	ND	38 J	ND
Chromium	ND	ND	0.84	ND	ND	ND
Cobalt	ND	ND	ND	ND	ND	ND
Copper	4.2	1.1 J	43	ND	ND	ND
Iron	ND	ND	240	ND	ND	ND
Lead	0.76 J	0.41 J	23	ND	ND	ND
Magnesium	ND	ND	ND	ND	ND	ND
Manganese	ND	ND	2.7	ND	ND	ND
Nickel	0.19 J	ND	1.5 J	ND	ND	ND
Potassium	1,800 B	ND	88 JB	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND
Sodium	1,600 B	ND	96 J	64 J	ND	600
Vanadium	ND	ND	ND	ND	ND	ND
Zinc	7	9.6	310	1.2 J	11	2.3
<b>pH (9045)</b>	7.4	7.8	6	7.4	13.5	6.5
<b>OIL ID</b>						
Oil ID C8-C36 (Oil) m8015	--	220,000	520,000	--	200,000	930,000
Oil ID C8-C36 (Liquid) m8015	3,800	--	--	26	--	--

**NOTES:**

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ND = Not detected; compound was not detected above the method detection limit.

-- = Sample not analyzed for the compound.

J = Results are estimated; concentration was above the method detection limit, but below the quantitation limit.

J- = Results are biased low due to analysis outside of analytical holding time.

B = Compound was detected in the associated method blank.

TABLE 3

**SUMMARY OF DRUM, CONTAINER, AND TOTE ANALYTICAL RESULTS  
MCGOLDRICK PAPER CO. SITE  
HINSDALE, NEW HAMPSHIRE**

SAMPLE NUMBER:	S50022NH-0026	S50022NH-0027	S50022NH-0028	S50022NH-0029	S50022NH-0030
LOCATION ID:	D-21	D-22	D-23	D-24	T-7
LABORATORY NUMBER:	240-135325-26	240-135325-27	240-135325-28	240-135325-29	240-135325-30
<b>VOCs</b>					
	µg/kg				
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	300 J	ND	ND
4-Methyl-2-pentanone (MIBK)	ND	ND	1,000 J	360 J	ND
Acetone	5,500 J B	1,100 J B	1,600 J B	1,600 J B	260,000 J B
Benzene	ND	ND	ND	ND	84,000 J
Chloromethane	4,100 J	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	42,000 J
Ethylbenzene	ND	ND	400 J	150 J	970,000
Isopropylbenzene	ND	ND	ND	ND	120,000
Methyl acetate	40,000	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	99,000 J
Methyl tert-butyl ether	ND	ND	ND	ND	ND
Methylene Chloride	1,000 J B	200 J B	260 J B	300 J B	15,000 J B
Styrene	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	120,000
Toluene	480 J B	140 J B	1,200 B	450 J B	3,600,000 B
Xylenes, Total	560 J B	110 J B	3,600 B	1,500 J B	5,400,000 B
<b>SVOCs</b>					
	µg/kg				
1,1'-Biphenyl	ND	ND	ND	ND	43,000 J
2-Methylnaphthalene	ND	ND	4,200 J	ND	750,000
Acenaphthene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	20,000 J
Benzo[a]anthracene	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	ND	8,600 J	ND	ND	180,000 J
Carbazole	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	3,200 J	ND	ND	45,000 J
Fluoranthene	ND	ND	ND	ND	27,000 J
Fluorene	ND	ND	940 J	ND	47,000 J
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	430,000 J
Phenanthrene	ND	ND	ND	ND	140,000 J
Phenol	ND	13,000 J	ND	ND	ND
Pyrene	ND	ND	ND	ND	54,000 J
3 & 4 Methylphenol	ND	10,000 J	ND	ND	ND
<b>PESTICIDES</b>					
	µg/kg				
4,4'-DDD	ND	ND	ND	ND	ND
Aldrin	ND	ND	900	530	ND
Endosulfan I	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND
trans-Chlordane	ND	ND	ND	2,100 J	ND
<b>METALS</b>					
	mg/kg				
Aluminum	5.8 J	84,000 B	5 J	ND	5.4 J
Antimony	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND
Barium	ND	ND	ND	ND	3 J
Cadmium	ND	0.044 J	ND	ND	0.095 J
Calcium	ND	190 J	ND	36 J	320 J
Chromium	0.18 J	0.51 J	ND	ND	0.29 J
Cobalt	ND	ND	ND	ND	ND
Copper	ND	2.1	ND	ND	21
Iron	ND	71	ND	ND	72
Lead	ND	1.6 J	ND	ND	14
Magnesium	ND	37 J	ND	ND	ND
Manganese	ND	5.8	ND	ND	0.74 JB
Nickel	ND	1.9 J	ND	ND	0.46 J
Potassium	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND
Sodium	ND	1,300	ND	ND	ND
Vanadium	ND	4.4	ND	ND	ND
Zinc	ND	12	11	11	140
pH (9045)	7	0.1	4.3	7.5	6.5
<b>OIL ID</b>					
Oil ID C8-C36 (Oil) m8015	--	ND	210,000	250,000	510,000
Oil ID C8-C36 (Liquid) m8015	14,000	--	--	--	--

**NOTES:**

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ND = Not detected; compound was not detected above the method detection limit.

-- = Sample not analyzed for the compound.

J = Results are estimated; concentration was above the method detection limit, but below the quantitation limit.

JB = Results are biased low due to analysis outside of analytical holding time.

B = Compound was detected in the associated method blank.

## Appendix C

### Photodocumentation Log

**PHOTODOCUMENTATION LOG**  
**McGoldrick Paper Co. Site • Hinsdale, New Hampshire**



**SCENE:** View of the exterior of the Main Building on the McGoldrick Paper Co. Site. Photograph taken facing southwest.

**DATE:** 17 August 2020

**PHOTOGRAPHER:** T. Evans

**TIME:** 0947 hours

**CAMERA:** Apple iPhone 8



**SCENE:** View of the exterior of the Storage Barn/Garage, containing one drum of product. Photograph taken facing east.

**DATE:** 17 August 2020

**PHOTOGRAPHER:** T. Evans

**TIME:** 1010 hours

**CAMERA:** Apple iPhone 8



**PHOTODOCUMENTATION LOG**  
**McGoldrick Paper Co. Site • Hinsdale, New Hampshire**



**SCENE:** View of the interior of the Main Building. Miscellaneous debris, totes, drums, and containers are located throughout the building. Photograph taken facing northwest.

**DATE:** 17 August 2020

**PHOTOGRAPHER:** T. Evans

**TIME:** 1011 hours

**CAMERA:** Apple iPhone 8



**SCENE:** View of a 15-gallon polyethylene drum of an unknown liquid, located in the Storage Barn/Garage on the western side of the property. Photograph taken facing southwest.

**DATE:** 17 August 2020

**PHOTOGRAPHER:** P. Callahan

**TIME:** 1243 hours

**CAMERA:** Apple iPhone 8

**PHOTODOCUMENTATION LOG**  
**McGoldrick Paper Co. Site • Hinsdale, New Hampshire**



**SCENE:** View of various drums and containers located in the northwest section of the Main Building. Photograph taken facing northeast.

**DATE:** 18 August 2020

**PHOTOGRAPHER:** T. Evans

**TIME:** 1129 hours

**CAMERA:** Apple iPhone 8



**SCENE:** View of four Intermediate Bulk Container (IBC) polyethylene totes (totes) and several drums located in the northeast section of the Main Building. Photograph taken facing northeast.

**DATE:** 18 August 2020

**PHOTOGRAPHER:** T. Evans

**TIME:** 1130 hours

**CAMERA:** Apple iPhone 8



**PHOTODOCUMENTATION LOG**  
**McGoldrick Paper Co. Site • Hinsdale, New Hampshire**



**SCENE:** View of drums and containers located in the central section of the Main Building. Photograph taken facing northeast.

**DATE:** 18 August 2020

**PHOTOGRAPHER:** T. Evans

**TIME:** 1132 hours

**CAMERA:** Apple iPhone 8



**SCENE:** View of tote number T-6, located in the Main Building, that was sampled by START personnel. Photograph taken facing northwest.

**DATE:** 18 August 2020

**PHOTOGRAPHER:** T. Evans

**TIME:** 1132 hours

**CAMERA:** Apple iPhone 8

## Appendix D

### Analytical Data (EPA LSASD) and Chain-of-Custody Records

## Laboratory Report

August 27, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project Number: 20080025

Project: McGoldrick Paper Co - Hindsdale, NH

Analysis: BNAs in Soils Medium Level

EPA Chemist: Caitlin Brown

Date Samples Received by the Laboratory: 08/19/2020

## Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, LSBSOP-BNASOIL4.

Samples were prepared using pressurized fluid extraction. The samples were analyzed using high resolution capillary column chromatography and quadrapole mass spectrometry (GC/MS). The SOP for this analysis is based on US EPA SW-846 methods 3545A and 8270C and EIASOP-BNAGCMS9

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

DANIEL

BOUDREAU

Digitally signed by  
DANIEL BOUDREAUDate: 2020.08.27  
11:35:28 -04'00'

20080025\$BNAMS

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0031  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 10.927 grams  
Wet Weight Prepared: 12.141 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87569  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 90%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	230	
110-86-1	Pyridine	ND	230	
66-27-3	Methyl methanesulfonate	ND	230	
62-50-0	Ethyl methanesulfonate	ND	230	
108-95-2	Phenol	ND	230	
62-53-3	Aniline	ND	230	
111-44-4	Bis(2-Chloroethyl)ether	ND	230	
95-57-8	2-Chlorophenol	ND	230	
541-73-1	1,3-Dichlorobenzene	ND	230	
106-46-7	1,4-Dichlorobenzene	ND	230	
100-51-6	Benzyl alcohol	ND	230	
95-50-1	1,2-Dichlorobenzene	ND	230	
95-48-7	2-Methylphenol	ND	230	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	230	
98-86-2	Acetophenone	ND	230	
108-39-4/106-44-5	3&4-Methylphenol	ND	460	
621-64-7	N-nitroso-di-n-propylamine	ND	230	
67-72-1	Hexachloroethane	ND	230	
98-95-3	Nitrobenzene	ND	230	
78-59-1	Isophorone	ND	230	
88-75-5	2-Nitrophenol	ND	230	
105-67-9	2,4-dimethylphenol	ND	230	
111-91-1	bis(-2-Chloroethoxy)methane	ND	230	
65-85-0	Benzoic acid	340	230	
120-83-2	2,4-Dichlorophenol	ND	230	
120-82-1	1,2,4-Trichlorobenzene	ND	230	
91-20-3	Naphthalene	ND	92	
87-65-0	2,6-Dichlorophenol	ND	230	
106-47-8	4-Chloroaniline	ND	230	
1888-71-7	Hexachloropropene	ND	230	
87-68-3	Hexachlorobutadiene	ND	230	
59-50-7	4-Chloro-3-methylphenol	ND	230	
120-58-1	Isosafrole	ND	230	
91-57-6	2-Methylnaphthalene	ND	92	
90-12-0	1-Methylnaphthalene	ND	92	
77-47-4	Hexachlorocyclopentadiene	ND	230	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	230	
88-06-2	2,4,6-Trichlorophenol	ND	230	
95-95-4	2,4,5-Trichlorophenol	ND	230	
94-59-7	Safrole	ND	230	
91-58-7	2-Chloronaphthalene	ND	230	
88-74-4	2-Nitroaniline	ND	230	
130-15-4	1,4-Naphthoquinone	ND	230	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0031	Lab Sample ID:	AB87569
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	90%
Dry Weight Prepared:	10.927 grams	Extract Dilution:	1
Wet Weight Prepared:	12.141 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	230	
99-65-0	1,3-Dinitrobenzene	ND	230	
606-20-2	2,6-Dinitrotoluene	ND	230	
208-96-8	Acenaphthylene	220	92	
99-09-2	3-Nitroaniline	ND	230	
83-32-9	Acenaphthene	ND	92	
51-28-5	2,4-Dinitrophenol	ND	920	
100-02-7	4-Nitrophenol	ND	230	
608-93-5	Pentachlorobenzene	ND	230	
132-64-9	Dibenzofuran	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	230	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	230	
84-66-2	Diethylphthalate	ND	230	
86-73-7	Fluorene	ND	92	
7005-72-3	4-Chlorophenyl-phenylether	ND	230	
100-01-6	4-Nitroaniline	ND	230	
534-52-1	4,6-Dinitro-2-methylphenol	ND	460	
86-30-6	N-Nitrosodiphenylamine	ND	230	
103-33-3	Azobenzene	ND	230	
62-44-2	Phenacetin	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	230	
118-74-1	Hexachlorobenzene	ND	230	
87-86-5	Pentachlorophenol	ND	460	
82-68-8	Pentachloronitrobenzene	ND	230	
85-01-8	Phenanthrene	700	92	
120-12-7	Anthracene	180	92	
86-74-8	Carbazole	ND	230	
84-74-2	Di-n-butylphthalate	ND	230	
56-57-5	4-nitroquinoline-1-oxide	ND	920	
465-73-6	Isodrin	ND	230	
206-44-0	Fluoranthene	1400	92	
92-87-5	Benzidine	ND	230	
129-00-0	Pyrene	1100	92	
510-15-6	Chlorobenzilate	ND	230	
85-68-7	Butylbenzylphthalate	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	230	
56-55-3	Benzo(a)anthracene	720	92	
218-01-9	Chrysene	850	92	
117-81-7	Bis(2-ethylhexyl)phthalate	660	230	
117-84-0	Di-n-octyl phthalate	ND	230	
205-99-2	Benzo(b)fluoranthene	680	92	
207-08-9	Benzo(k)fluoranthene	530	92	
50-32-8	Benzo(a)pyrene	720	92	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0031	Lab Sample ID:	AB87569
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	90%
Dry Weight Prepared:	10.927 grams	Extract Dilution:	1
Wet Weight Prepared:	12.141 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	230	
193-39-5	Indeno(1,2,3-cd)pyrene	420	92	
53-70-3	Dibenz(a,h)anthracene	170	92	
191-24-2	Benzo(g,h,i)perylene	460	92	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	55	35 - 102
Phenol-d6 (SS2)	60	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	65	38 - 91
2,4,6-Tribromophenol (SS5)	90	31 - 102
p-Terphenyl-d14 (SS6)	75	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0032  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 10.382 grams  
Wet Weight Prepared: 12.017 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87570  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 86%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	240	
110-86-1	Pyridine	ND	240	
66-27-3	Methyl methanesulfonate	ND	240	
62-50-0	Ethyl methanesulfonate	ND	240	
108-95-2	Phenol	ND	240	
62-53-3	Aniline	ND	240	
111-44-4	Bis(2-Chloroethyl)ether	ND	240	
95-57-8	2-Chlorophenol	ND	240	
541-73-1	1,3-Dichlorobenzene	ND	240	
106-46-7	1,4-Dichlorobenzene	ND	240	
100-51-6	Benzyl alcohol	ND	240	
95-50-1	1,2-Dichlorobenzene	ND	240	
95-48-7	2-Methylphenol	ND	240	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	240	
98-86-2	Acetophenone	240	240	
108-39-4/106-44-5	3&4-Methylphenol	ND	480	
621-64-7	N-nitroso-di-n-propylamine	ND	240	
67-72-1	Hexachloroethane	ND	240	
98-95-3	Nitrobenzene	ND	240	
78-59-1	Isophorone	ND	240	
88-75-5	2-Nitrophenol	ND	240	
105-67-9	2,4-dimethylphenol	ND	240	
111-91-1	bis(-2-Chloroethoxy)methane	ND	240	
65-85-0	Benzoic acid	410	240	
120-83-2	2,4-Dichlorophenol	ND	240	
120-82-1	1,2,4-Trichlorobenzene	ND	240	
91-20-3	Naphthalene	490	96	
87-65-0	2,6-Dichlorophenol	ND	240	
106-47-8	4-Chloroaniline	ND	240	
1888-71-7	Hexachloropropene	ND	240	
87-68-3	Hexachlorobutadiene	ND	240	
59-50-7	4-Chloro-3-methylphenol	ND	240	
120-58-1	Isosafrole	ND	240	
91-57-6	2-Methylnaphthalene	670	96	
90-12-0	1-Methylnaphthalene	230	96	
77-47-4	Hexachlorocyclopentadiene	ND	240	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	240	
88-06-2	2,4,6-Trichlorophenol	ND	240	
95-95-4	2,4,5-Trichlorophenol	ND	240	
94-59-7	Safrole	ND	240	
91-58-7	2-Chloronaphthalene	ND	240	
88-74-4	2-Nitroaniline	ND	240	
130-15-4	1,4-Naphthoquinone	ND	240	



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0032  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 10.382 grams  
Wet Weight Prepared: 12.017 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87570  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 86%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	240	
99-65-0	1,3-Dinitrobenzene	ND	240	
606-20-2	2,6-Dinitrotoluene	ND	240	
208-96-8	Acenaphthylene	130	96	
99-09-2	3-Nitroaniline	ND	240	
83-32-9	Acenaphthene	ND	96	
51-28-5	2,4-Dinitrophenol	ND	960	
100-02-7	4-Nitrophenol	ND	240	
608-93-5	Pentachlorobenzene	ND	240	
132-64-9	Dibenzofuran	ND	240	
121-14-2	2,4-Dinitrotoluene	ND	240	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	240	
84-66-2	Diethylphthalate	ND	240	
86-73-7	Fluorene	ND	96	
7005-72-3	4-Chlorophenyl-phenylether	ND	240	
100-01-6	4-Nitroaniline	ND	240	
534-52-1	4,6-Dinitro-2-methylphenol	ND	480	
86-30-6	N-Nitrosodiphenylamine	ND	240	
103-33-3	Azobenzene	ND	240	
62-44-2	Phenacetin	ND	240	
101-55-3	4-Bromophenyl-phenylether	ND	240	
118-74-1	Hexachlorobenzene	ND	240	
87-86-5	Pentachlorophenol	ND	480	
82-68-8	Pentachloronitrobenzene	ND	240	
85-01-8	Phenanthrene	650	96	
120-12-7	Anthracene	160	96	
86-74-8	Carbazole	ND	240	
84-74-2	Di-n-butylphthalate	ND	240	
56-57-5	4-nitroquinoline-1-oxide	ND	960	
465-73-6	Isodrin	ND	240	
206-44-0	Fluoranthene	1100	96	
92-87-5	Benzidine	ND	240	
129-00-0	Pyrene	790	96	
510-15-6	Chlorobenzilate	ND	240	
85-68-7	Butylbenzylphthalate	ND	240	
91-94-1	3,3'-Dichlorobenzidine	ND	240	
56-55-3	Benzo(a)anthracene	530	96	
218-01-9	Chrysene	760	96	
117-81-7	Bis(2-ethylhexyl)phthalate	680	240	
117-84-0	Di-n-octyl phthalate	ND	240	
205-99-2	Benzo(b)fluoranthene	670	96	
207-08-9	Benzo(k)fluoranthene	510	96	
50-32-8	Benzo(a)pyrene	540	96	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0032	Lab Sample ID:	AB87570
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	86%
Dry Weight Prepared:	10.382 grams	Extract Dilution:	1
Wet Weight Prepared:	12.017 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	240	
193-39-5	Indeno(1,2,3-cd)pyrene	330	96	
53-70-3	Dibenz(a,h)anthracene	130	96	
191-24-2	Benzo(g,h,i)perylene	330	96	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	60	35 - 102
Phenol-d6 (SS2)	68	41 - 106
Nitrobenzene-d5 (SS3)	60	38 - 106
2-Fluorobiphenyl (SS4)	70	38 - 91
2,4,6-Tribromophenol (SS5)	88	31 - 102
p-Terphenyl-d14 (SS6)	90	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

Tentatively Identified Compounds

1,3-dimethyl-benzene 1100 ppb J  
1-ethyl-2-methyl-benzene 1200 ppb J

McGoldrick Paper Co - Hindsdale, NH

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	100%
Dry Weight Prepared:	10.075 grams	Extract Dilution:	1
Wet Weight Prepared:	10.078 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	250	
110-86-1	Pyridine	ND	250	
66-27-3	Methyl methanesulfonate	ND	250	
62-50-0	Ethyl methanesulfonate	ND	250	
108-95-2	Phenol	ND	250	
62-53-3	Aniline	ND	250	
111-44-4	Bis(2-Chloroethyl)ether	ND	250	
95-57-8	2-Chlorophenol	ND	250	
541-73-1	1,3-Dichlorobenzene	ND	250	
106-46-7	1,4-Dichlorobenzene	ND	250	
100-51-6	Benzyl alcohol	ND	250	
95-50-1	1,2-Dichlorobenzene	ND	250	
95-48-7	2-Methylphenol	ND	250	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	250	
98-86-2	Acetophenone	ND	250	
108-39-4/106-44-5	3&4-Methylphenol	ND	500	
621-64-7	N-nitroso-di-n-propylamine	ND	250	
67-72-1	Hexachloroethane	ND	250	
98-95-3	Nitrobenzene	ND	250	
78-59-1	Isophorone	ND	250	
88-75-5	2-Nitrophenol	ND	250	
105-67-9	2,4-dimethylphenol	ND	250	
111-91-1	bis(-2-Chloroethoxy)methane	ND	250	
65-85-0	Benzoic acid	ND	250	
120-83-2	2,4-Dichlorophenol	ND	250	
120-82-1	1,2,4-Trichlorobenzene	ND	250	
91-20-3	Naphthalene	ND	99	
87-65-0	2,6-Dichlorophenol	ND	250	
106-47-8	4-Chloroaniline	ND	250	
1888-71-7	Hexachloropropene	ND	250	
87-68-3	Hexachlorobutadiene	ND	250	
59-50-7	4-Chloro-3-methylphenol	ND	250	
120-58-1	Isosafrole	ND	250	
91-57-6	2-Methylnaphthalene	ND	99	
90-12-0	1-Methylnaphthalene	ND	99	
77-47-4	Hexachlorocyclopentadiene	ND	250	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	250	
88-06-2	2,4,6-Trichlorophenol	ND	250	
95-95-4	2,4,5-Trichlorophenol	ND	250	
94-59-7	Safrole	ND	250	
91-58-7	2-Chloronaphthalene	ND	250	
88-74-4	2-Nitroaniline	ND	250	
130-15-4	1,4-Naphthoquinone	ND	250	

McGoldrick Paper Co - Hindsdale, NH

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	100%
Dry Weight Prepared:	10.075 grams	Extract Dilution:	1
Wet Weight Prepared:	10.078 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	250	
99-65-0	1,3-Dinitrobenzene	ND	250	
606-20-2	2,6-Dinitrotoluene	ND	250	
208-96-8	Acenaphthylene	ND	99	
99-09-2	3-Nitroaniline	ND	250	
83-32-9	Acenaphthene	ND	99	
51-28-5	2,4-Dinitrophenol	ND	993	
100-02-7	4-Nitrophenol	ND	250	
608-93-5	Pentachlorobenzene	ND	250	
132-64-9	Dibenzofuran	ND	250	
121-14-2	2,4-Dinitrotoluene	ND	250	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	250	
84-66-2	Diethylphthalate	ND	250	
86-73-7	Fluorene	ND	99	
7005-72-3	4-Chlorophenyl-phenylether	ND	250	
100-01-6	4-Nitroaniline	ND	250	
534-52-1	4,6-Dinitro-2-methylphenol	ND	500	
86-30-6	N-Nitrosodiphenylamine	ND	250	
103-33-3	Azobenzene	ND	250	
62-44-2	Phenacetin	ND	250	
101-55-3	4-Bromophenyl-phenylether	ND	250	
118-74-1	Hexachlorobenzene	ND	250	
87-86-5	Pentachlorophenol	ND	500	
82-68-8	Pentachloronitrobenzene	ND	250	
85-01-8	Phenanthrene	ND	99	
120-12-7	Anthracene	ND	99	
86-74-8	Carbazole	ND	250	
84-74-2	Di-n-butylphthalate	ND	250	
56-57-5	4-nitroquinoline-1-oxide	ND	993	
465-73-6	Isodrin	ND	250	
206-44-0	Fluoranthene	ND	99	
92-87-5	Benzidine	ND	250	
129-00-0	Pyrene	ND	99	
510-15-6	Chlorobenzilate	ND	250	
85-68-7	Butylbenzylphthalate	ND	250	
91-94-1	3,3'-Dichlorobenzidine	ND	250	
56-55-3	Benzo(a)anthracene	ND	99	
218-01-9	Chrysene	ND	99	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	250	
117-84-0	Di-n-octyl phthalate	ND	250	
205-99-2	Benzo(b)fluoranthene	ND	99	
207-08-9	Benzo(k)fluoranthene	ND	99	
50-32-8	Benzo(a)pyrene	ND	99	

McGoldrick Paper Co - Hindsdale, NH

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	100%
Dry Weight Prepared:	10.075 grams	Extract Dilution:	1
Wet Weight Prepared:	10.078 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	250	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	99	
53-70-3	Dibenz(a,h)anthracene	ND	99	
191-24-2	Benzo(g,h,i)perylene	ND	99	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	64	35 - 107
Phenol-d6 (SS2)	66	40 - 109
Nitrobenzene-d5 (SS3)	62	30 - 113
2-Fluorobiphenyl (SS4)	62	34 - 112
2,4,6-Tribromophenol (SS5)	63	34 - 130
p-Terphenyl-d14 (SS6)	83	20 - 143

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0033  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 12.177 grams  
Wet Weight Prepared: 15.722 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87571  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 77%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	210	
110-86-1	Pyridine	ND	210	
66-27-3	Methyl methanesulfonate	ND	210	
62-50-0	Ethyl methanesulfonate	ND	210	
108-95-2	Phenol	ND	210	
62-53-3	Aniline	ND	210	
111-44-4	Bis(2-Chloroethyl)ether	ND	210	
95-57-8	2-Chlorophenol	ND	210	
541-73-1	1,3-Dichlorobenzene	ND	210	
106-46-7	1,4-Dichlorobenzene	ND	210	
100-51-6	Benzyl alcohol	ND	210	
95-50-1	1,2-Dichlorobenzene	ND	210	
95-48-7	2-Methylphenol	ND	210	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	210	
98-86-2	Acetophenone	320	210	
108-39-4/106-44-5	3&4-Methylphenol	ND	410	
621-64-7	N-nitroso-di-n-propylamine	ND	210	
67-72-1	Hexachloroethane	ND	210	
98-95-3	Nitrobenzene	ND	210	
78-59-1	Isophorone	ND	210	
88-75-5	2-Nitrophenol	ND	210	
105-67-9	2,4-dimethylphenol	ND	210	
111-91-1	bis(-2-Chloroethoxy)methane	ND	210	
65-85-0	Benzoic acid	360	210	
120-83-2	2,4-Dichlorophenol	ND	210	
120-82-1	1,2,4-Trichlorobenzene	ND	210	
91-20-3	Naphthalene	ND	82	
87-65-0	2,6-Dichlorophenol	ND	210	
106-47-8	4-Chloroaniline	ND	210	
1888-71-7	Hexachloropropene	ND	210	
87-68-3	Hexachlorobutadiene	ND	210	
59-50-7	4-Chloro-3-methylphenol	ND	210	
120-58-1	Isosafrole	ND	210	
91-57-6	2-Methylnaphthalene	ND	82	
90-12-0	1-Methylnaphthalene	ND	82	
77-47-4	Hexachlorocyclopentadiene	ND	210	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	
88-06-2	2,4,6-Trichlorophenol	ND	210	
95-95-4	2,4,5-Trichlorophenol	ND	210	
94-59-7	Safrole	ND	210	
91-58-7	2-Chloronaphthalene	ND	210	
88-74-4	2-Nitroaniline	ND	210	
130-15-4	1,4-Naphthoquinone	ND	210	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0033	Lab Sample ID:	AB87571
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	77%
Dry Weight Prepared:	12.177 grams	Extract Dilution:	1
Wet Weight Prepared:	15.722 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	210	
99-65-0	1,3-Dinitrobenzene	ND	210	
606-20-2	2,6-Dinitrotoluene	ND	210	
208-96-8	Acenaphthylene	ND	82	
99-09-2	3-Nitroaniline	ND	210	
83-32-9	Acenaphthene	ND	82	
51-28-5	2,4-Dinitrophenol	ND	820	
100-02-7	4-Nitrophenol	ND	210	
608-93-5	Pentachlorobenzene	ND	210	
132-64-9	Dibenzofuran	ND	210	
121-14-2	2,4-Dinitrotoluene	ND	210	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	
84-66-2	Diethylphthalate	ND	210	
86-73-7	Fluorene	ND	82	
7005-72-3	4-Chlorophenyl-phenylether	ND	210	
100-01-6	4-Nitroaniline	ND	210	
534-52-1	4,6-Dinitro-2-methylphenol	ND	410	
86-30-6	N-Nitrosodiphenylamine	ND	210	
103-33-3	Azobenzene	ND	210	
62-44-2	Phenacetin	ND	210	
101-55-3	4-Bromophenyl-phenylether	ND	210	
118-74-1	Hexachlorobenzene	ND	210	
87-86-5	Pentachlorophenol	ND	410	
82-68-8	Pentachloronitrobenzene	ND	210	
85-01-8	Phenanthrene	410	82	
120-12-7	Anthracene	100	82	
86-74-8	Carbazole	ND	210	
84-74-2	Di-n-butylphthalate	ND	210	
56-57-5	4-nitroquinoline-1-oxide	ND	820	
465-73-6	Isodrin	ND	210	
206-44-0	Fluoranthene	620	82	
92-87-5	Benzidine	ND	210	
129-00-0	Pyrene	430	82	
510-15-6	Chlorobenzilate	ND	210	
85-68-7	Butylbenzylphthalate	ND	210	
91-94-1	3,3'-Dichlorobenzidine	ND	210	
56-55-3	Benzo(a)anthracene	270	82	
218-01-9	Chrysene	300	82	
117-81-7	Bis(2-ethylhexyl)phthalate	1700	210	
117-84-0	Di-n-octyl phthalate	ND	210	
205-99-2	Benzo(b)fluoranthene	250	82	
207-08-9	Benzo(k)fluoranthene	200	82	
50-32-8	Benzo(a)pyrene	260	82	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0033	Lab Sample ID:	AB87571
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	77%
Dry Weight Prepared:	12.177 grams	Extract Dilution:	1
Wet Weight Prepared:	15.722 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	210	
193-39-5	Indeno(1,2,3-cd)pyrene	140	82	
53-70-3	Dibenz(a,h)anthracene	ND	82	
191-24-2	Benzo(g,h,i)perylene	170	82	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	50	35 - 102
Phenol-d6 (SS2)	68	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	70	38 - 91
2,4,6-Tribromophenol (SS5)	90	31 - 102
p-Terphenyl-d14 (SS6)	85	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0034  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 10.879 grams  
Wet Weight Prepared: 13.254 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87572  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 82%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	230	
110-86-1	Pyridine	ND	230	
66-27-3	Methyl methanesulfonate	ND	230	
62-50-0	Ethyl methanesulfonate	ND	230	
108-95-2	Phenol	ND	230	
62-53-3	Aniline	ND	230	
111-44-4	Bis(2-Chloroethyl)ether	ND	230	
95-57-8	2-Chlorophenol	ND	230	
541-73-1	1,3-Dichlorobenzene	ND	230	
106-46-7	1,4-Dichlorobenzene	ND	230	
100-51-6	Benzyl alcohol	ND	230	
95-50-1	1,2-Dichlorobenzene	ND	230	
95-48-7	2-Methylphenol	ND	230	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	230	
98-86-2	Acetophenone	ND	230	
108-39-4/106-44-5	3&4-Methylphenol	ND	460	
621-64-7	N-nitroso-di-n-propylamine	ND	230	
67-72-1	Hexachloroethane	ND	230	
98-95-3	Nitrobenzene	ND	230	
78-59-1	Isophorone	ND	230	
88-75-5	2-Nitrophenol	ND	230	
105-67-9	2,4-dimethylphenol	ND	230	
111-91-1	bis(-2-Chloroethoxy)methane	ND	230	
65-85-0	Benzoic acid	360	230	
120-83-2	2,4-Dichlorophenol	ND	230	
120-82-1	1,2,4-Trichlorobenzene	ND	230	
91-20-3	Naphthalene	ND	92	
87-65-0	2,6-Dichlorophenol	ND	230	
106-47-8	4-Chloroaniline	ND	230	
1888-71-7	Hexachloropropene	ND	230	
87-68-3	Hexachlorobutadiene	ND	230	
59-50-7	4-Chloro-3-methylphenol	ND	230	
120-58-1	Isosafrole	ND	230	
91-57-6	2-Methylnaphthalene	ND	92	
90-12-0	1-Methylnaphthalene	ND	92	
77-47-4	Hexachlorocyclopentadiene	ND	230	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	230	
88-06-2	2,4,6-Trichlorophenol	ND	230	
95-95-4	2,4,5-Trichlorophenol	ND	230	
94-59-7	Safrole	ND	230	
91-58-7	2-Chloronaphthalene	ND	230	
88-74-4	2-Nitroaniline	ND	230	
130-15-4	1,4-Naphthoquinone	ND	230	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0034  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 10.879 grams  
Wet Weight Prepared: 13.254 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87572  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 82%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	230	
99-65-0	1,3-Dinitrobenzene	ND	230	
606-20-2	2,6-Dinitrotoluene	ND	230	
208-96-8	Acenaphthylene	120	92	
99-09-2	3-Nitroaniline	ND	230	
83-32-9	Acenaphthene	ND	92	
51-28-5	2,4-Dinitrophenol	ND	920	
100-02-7	4-Nitrophenol	ND	230	
608-93-5	Pentachlorobenzene	ND	230	
132-64-9	Dibenzofuran	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	230	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	230	
84-66-2	Diethylphthalate	ND	230	
86-73-7	Fluorene	ND	92	
7005-72-3	4-Chlorophenyl-phenylether	ND	230	
100-01-6	4-Nitroaniline	ND	230	
534-52-1	4,6-Dinitro-2-methylphenol	ND	460	
86-30-6	N-Nitrosodiphenylamine	ND	230	
103-33-3	Azobenzene	ND	230	
62-44-2	Phenacetin	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	230	
118-74-1	Hexachlorobenzene	ND	230	
87-86-5	Pentachlorophenol	ND	460	
82-68-8	Pentachloronitrobenzene	ND	230	
85-01-8	Phenanthrene	530	92	
120-12-7	Anthracene	120	92	
86-74-8	Carbazole	ND	230	
84-74-2	Di-n-butylphthalate	ND	230	
56-57-5	4-nitroquinoline-1-oxide	ND	920	
465-73-6	Isodrin	ND	230	
206-44-0	Fluoranthene	850	92	
92-87-5	Benzidine	ND	230	
129-00-0	Pyrene	630	92	
510-15-6	Chlorobenzilate	ND	230	
85-68-7	Butylbenzylphthalate	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	230	
56-55-3	Benzo(a)anthracene	390	92	
218-01-9	Chrysene	530	92	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	230	
117-84-0	Di-n-octyl phthalate	ND	230	
205-99-2	Benzo(b)fluoranthene	440	92	
207-08-9	Benzo(k)fluoranthene	330	92	
50-32-8	Benzo(a)pyrene	410	92	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0034	Lab Sample ID:	AB87572
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	82%
Dry Weight Prepared:	10.879 grams	Extract Dilution:	1
Wet Weight Prepared:	13.254 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	230	
193-39-5	Indeno(1,2,3-cd)pyrene	250	92	
53-70-3	Dibenz(a,h)anthracene	100	92	
191-24-2	Benzo(g,h,i)perylene	270	92	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	50	35 - 102
Phenol-d6 (SS2)	60	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	65	38 - 91
2,4,6-Tribromophenol (SS5)	83	31 - 102
p-Terphenyl-d14 (SS6)	75	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0035  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 11.582 grams  
Wet Weight Prepared: 13.660 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87573  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 85%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	220	
110-86-1	Pyridine	ND	220	
66-27-3	Methyl methanesulfonate	ND	220	
62-50-0	Ethyl methanesulfonate	ND	220	
108-95-2	Phenol	ND	220	
62-53-3	Aniline	ND	220	
111-44-4	Bis(2-Chloroethyl)ether	ND	220	
95-57-8	2-Chlorophenol	ND	220	
541-73-1	1,3-Dichlorobenzene	ND	220	
106-46-7	1,4-Dichlorobenzene	ND	220	
100-51-6	Benzyl alcohol	ND	220	
95-50-1	1,2-Dichlorobenzene	ND	220	
95-48-7	2-Methylphenol	ND	220	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	220	
98-86-2	Acetophenone	ND	220	
108-39-4/106-44-5	3&4-Methylphenol	ND	430	
621-64-7	N-nitroso-di-n-propylamine	ND	220	
67-72-1	Hexachloroethane	ND	220	
98-95-3	Nitrobenzene	ND	220	
78-59-1	Isophorone	ND	220	
88-75-5	2-Nitrophenol	ND	220	
105-67-9	2,4-dimethylphenol	ND	220	
111-91-1	bis(-2-Chloroethoxy)methane	ND	220	
65-85-0	Benzoic acid	ND	220	
120-83-2	2,4-Dichlorophenol	ND	220	
120-82-1	1,2,4-Trichlorobenzene	ND	220	
91-20-3	Naphthalene	ND	86	
87-65-0	2,6-Dichlorophenol	ND	220	
106-47-8	4-Chloroaniline	ND	220	
1888-71-7	Hexachloropropene	ND	220	
87-68-3	Hexachlorobutadiene	ND	220	
59-50-7	4-Chloro-3-methylphenol	ND	220	
120-58-1	Isosafrole	ND	220	
91-57-6	2-Methylnaphthalene	ND	86	
90-12-0	1-Methylnaphthalene	ND	86	
77-47-4	Hexachlorocyclopentadiene	ND	220	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	
88-06-2	2,4,6-Trichlorophenol	ND	220	
95-95-4	2,4,5-Trichlorophenol	ND	220	
94-59-7	Safrole	ND	220	
91-58-7	2-Chloronaphthalene	ND	220	
88-74-4	2-Nitroaniline	ND	220	
130-15-4	1,4-Naphthoquinone	ND	220	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0035  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 11.582 grams  
Wet Weight Prepared: 13.660 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87573  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 85%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	220	
99-65-0	1,3-Dinitrobenzene	ND	220	
606-20-2	2,6-Dinitrotoluene	ND	220	
208-96-8	Acenaphthylene	110	86	
99-09-2	3-Nitroaniline	ND	220	
83-32-9	Acenaphthene	ND	86	
51-28-5	2,4-Dinitrophenol	ND	860	
100-02-7	4-Nitrophenol	ND	220	
608-93-5	Pentachlorobenzene	ND	220	
132-64-9	Dibenzofuran	ND	220	
121-14-2	2,4-Dinitrotoluene	ND	220	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	
84-66-2	Diethylphthalate	ND	220	
86-73-7	Fluorene	ND	86	
7005-72-3	4-Chlorophenyl-phenylether	ND	220	
100-01-6	4-Nitroaniline	ND	220	
534-52-1	4,6-Dinitro-2-methylphenol	ND	430	
86-30-6	N-Nitrosodiphenylamine	ND	220	
103-33-3	Azobenzene	ND	220	
62-44-2	Phenacetin	ND	220	
101-55-3	4-Bromophenyl-phenylether	ND	220	
118-74-1	Hexachlorobenzene	ND	220	
87-86-5	Pentachlorophenol	ND	430	
82-68-8	Pentachloronitrobenzene	ND	220	
85-01-8	Phenanthrene	500	86	
120-12-7	Anthracene	110	86	
86-74-8	Carbazole	ND	220	
84-74-2	Di-n-butylphthalate	ND	220	
56-57-5	4-nitroquinoline-1-oxide	ND	860	
465-73-6	Isodrin	ND	220	
206-44-0	Fluoranthene	1000	86	
92-87-5	Benzidine	ND	220	
129-00-0	Pyrene	720	86	
510-15-6	Chlorobenzilate	ND	220	
85-68-7	Butylbenzylphthalate	ND	220	
91-94-1	3,3'-Dichlorobenzidine	ND	220	
56-55-3	Benzo(a)anthracene	450	86	
218-01-9	Chrysene	600	86	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	220	
117-84-0	Di-n-octyl phthalate	ND	220	
205-99-2	Benzo(b)fluoranthene	470	86	
207-08-9	Benzo(k)fluoranthene	390	86	
50-32-8	Benzo(a)pyrene	460	86	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0035	Lab Sample ID:	AB87573
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	85%
Dry Weight Prepared:	11.582 grams	Extract Dilution:	1
Wet Weight Prepared:	13.660 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	220	
193-39-5	Indeno(1,2,3-cd)pyrene	270	86	
53-70-3	Dibenz(a,h)anthracene	110	86	
191-24-2	Benzo(g,h,i)perylene	270	86	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	48	35 - 102
Phenol-d6 (SS2)	55	41 - 106
Nitrobenzene-d5 (SS3)	50	38 - 106
2-Fluorobiphenyl (SS4)	55	38 - 91
2,4,6-Tribromophenol (SS5)	70	31 - 102
p-Terphenyl-d14 (SS6)	70	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0036	Lab Sample ID:	AB87574
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	86%
Dry Weight Prepared:	13.137 grams	Extract Dilution:	1
Wet Weight Prepared:	15.235 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	190	
110-86-1	Pyridine	ND	190	
66-27-3	Methyl methanesulfonate	ND	190	
62-50-0	Ethyl methanesulfonate	ND	190	
108-95-2	Phenol	ND	190	
62-53-3	Aniline	ND	190	
111-44-4	Bis(2-Chloroethyl)ether	ND	190	
95-57-8	2-Chlorophenol	ND	190	
541-73-1	1,3-Dichlorobenzene	ND	190	
106-46-7	1,4-Dichlorobenzene	ND	190	
100-51-6	Benzyl alcohol	ND	190	
95-50-1	1,2-Dichlorobenzene	ND	190	
95-48-7	2-Methylphenol	ND	190	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	190	
98-86-2	Acetophenone	ND	190	
108-39-4/106-44-5	3&4-Methylphenol	ND	380	
621-64-7	N-nitroso-di-n-propylamine	ND	190	
67-72-1	Hexachloroethane	ND	190	
98-95-3	Nitrobenzene	ND	190	
78-59-1	Isophorone	ND	190	
88-75-5	2-Nitrophenol	ND	190	
105-67-9	2,4-dimethylphenol	ND	190	
111-91-1	bis(-2-Chloroethoxy)methane	ND	190	
65-85-0	Benzoic acid	ND	190	
120-83-2	2,4-Dichlorophenol	ND	190	
120-82-1	1,2,4-Trichlorobenzene	ND	190	
91-20-3	Naphthalene	ND	76	
87-65-0	2,6-Dichlorophenol	ND	190	
106-47-8	4-Chloroaniline	ND	190	
1888-71-7	Hexachloropropene	ND	190	
87-68-3	Hexachlorobutadiene	ND	190	
59-50-7	4-Chloro-3-methylphenol	ND	190	
120-58-1	Isosafrole	ND	190	
91-57-6	2-Methylnaphthalene	ND	76	
90-12-0	1-Methylnaphthalene	ND	76	
77-47-4	Hexachlorocyclopentadiene	ND	190	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	
88-06-2	2,4,6-Trichlorophenol	ND	190	
95-95-4	2,4,5-Trichlorophenol	ND	190	
94-59-7	Safrole	ND	190	
91-58-7	2-Chloronaphthalene	ND	190	
88-74-4	2-Nitroaniline	ND	190	
130-15-4	1,4-Naphthoquinone	ND	190	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0036	Lab Sample ID:	AB87574
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	86%
Dry Weight Prepared:	13.137 grams	Extract Dilution:	1
Wet Weight Prepared:	15.235 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	190	
99-65-0	1,3-Dinitrobenzene	ND	190	
606-20-2	2,6-Dinitrotoluene	ND	190	
208-96-8	Acenaphthylene	200	76	
99-09-2	3-Nitroaniline	ND	190	
83-32-9	Acenaphthene	ND	76	
51-28-5	2,4-Dinitrophenol	ND	760	
100-02-7	4-Nitrophenol	ND	190	
608-93-5	Pentachlorobenzene	ND	190	
132-64-9	Dibenzofuran	ND	190	
121-14-2	2,4-Dinitrotoluene	ND	190	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	
84-66-2	Diethylphthalate	ND	190	
86-73-7	Fluorene	ND	76	
7005-72-3	4-Chlorophenyl-phenylether	ND	190	
100-01-6	4-Nitroaniline	ND	190	
534-52-1	4,6-Dinitro-2-methylphenol	ND	380	
86-30-6	N-Nitrosodiphenylamine	ND	190	
103-33-3	Azobenzene	ND	190	
62-44-2	Phenacetin	ND	190	
101-55-3	4-Bromophenyl-phenylether	ND	190	
118-74-1	Hexachlorobenzene	ND	190	
87-86-5	Pentachlorophenol	ND	380	
82-68-8	Pentachloronitrobenzene	ND	190	
85-01-8	Phenanthrene	1500	76	
120-12-7	Anthracene	470	76	
86-74-8	Carbazole	ND	190	
84-74-2	Di-n-butylphthalate	ND	190	
56-57-5	4-nitroquinoline-1-oxide	ND	760	
465-73-6	Isodrin	ND	190	
206-44-0	Fluoranthene	3900	76	
92-87-5	Benzidine	ND	190	
129-00-0	Pyrene	2700	76	
510-15-6	Chlorobenzilate	ND	190	
85-68-7	Butylbenzylphthalate	ND	190	
91-94-1	3,3'-Dichlorobenzidine	ND	190	
56-55-3	Benzo(a)anthracene	1600	76	
218-01-9	Chrysene	1600	76	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	190	
117-84-0	Di-n-octyl phthalate	ND	190	
205-99-2	Benzo(b)fluoranthene	1200	76	
207-08-9	Benzo(k)fluoranthene	1100	76	
50-32-8	Benzo(a)pyrene	1400	76	



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0036	Lab Sample ID:	AB87574
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	86%
Dry Weight Prepared:	13.137 grams	Extract Dilution:	1
Wet Weight Prepared:	15.235 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	190	
193-39-5	Indeno(1,2,3-cd)pyrene	630	76	
53-70-3	Dibenz(a,h)anthracene	250	76	
191-24-2	Benzo(g,h,i)perylene	630	76	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	53	35 - 102
Phenol-d6 (SS2)	60	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	75	31 - 102
p-Terphenyl-d14 (SS6)	75	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

Tentatively Identified Compounds

2-methyl-anthracene 1100 ppb J  
2-methyl-phenanthrene 850 ppb J  
Benzo[j]fluoranthene 1200 ppb J

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0037  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 12.377 grams  
Wet Weight Prepared: 12.986 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87575  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 95%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	200	
110-86-1	Pyridine	ND	200	
66-27-3	Methyl methanesulfonate	ND	200	
62-50-0	Ethyl methanesulfonate	ND	200	
108-95-2	Phenol	ND	200	
62-53-3	Aniline	ND	200	
111-44-4	Bis(2-Chloroethyl)ether	ND	200	
95-57-8	2-Chlorophenol	ND	200	
541-73-1	1,3-Dichlorobenzene	ND	200	
106-46-7	1,4-Dichlorobenzene	ND	200	
100-51-6	Benzyl alcohol	ND	200	
95-50-1	1,2-Dichlorobenzene	ND	200	
95-48-7	2-Methylphenol	ND	200	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	200	
98-86-2	Acetophenone	ND	200	
108-39-4/106-44-5	3&4-Methylphenol	ND	400	
621-64-7	N-nitroso-di-n-propylamine	ND	200	
67-72-1	Hexachloroethane	ND	200	
98-95-3	Nitrobenzene	ND	200	
78-59-1	Isophorone	ND	200	
88-75-5	2-Nitrophenol	ND	200	
105-67-9	2,4-dimethylphenol	ND	200	
111-91-1	bis(-2-Chloroethoxy)methane	ND	200	
65-85-0	Benzoic acid	ND	200	
120-83-2	2,4-Dichlorophenol	ND	200	
120-82-1	1,2,4-Trichlorobenzene	ND	200	
91-20-3	Naphthalene	ND	81	
87-65-0	2,6-Dichlorophenol	ND	200	
106-47-8	4-Chloroaniline	ND	200	
1888-71-7	Hexachloropropene	ND	200	
87-68-3	Hexachlorobutadiene	ND	200	
59-50-7	4-Chloro-3-methylphenol	ND	200	
120-58-1	Isosafrole	ND	200	
91-57-6	2-Methylnaphthalene	ND	81	
90-12-0	1-Methylnaphthalene	ND	81	
77-47-4	Hexachlorocyclopentadiene	ND	200	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	
88-06-2	2,4,6-Trichlorophenol	ND	200	
95-95-4	2,4,5-Trichlorophenol	ND	200	
94-59-7	Safrole	ND	200	
91-58-7	2-Chloronaphthalene	ND	200	
88-74-4	2-Nitroaniline	ND	200	
130-15-4	1,4-Naphthoquinone	ND	200	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0037	Lab Sample ID:	AB87575
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	95%
Dry Weight Prepared:	12.377 grams	Extract Dilution:	1
Wet Weight Prepared:	12.986 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	200	
99-65-0	1,3-Dinitrobenzene	ND	200	
606-20-2	2,6-Dinitrotoluene	ND	200	
208-96-8	Acenaphthylene	ND	81	
99-09-2	3-Nitroaniline	ND	200	
83-32-9	Acenaphthene	ND	81	
51-28-5	2,4-Dinitrophenol	ND	810	
100-02-7	4-Nitrophenol	ND	200	
608-93-5	Pentachlorobenzene	ND	200	
132-64-9	Dibenzofuran	ND	200	
121-14-2	2,4-Dinitrotoluene	ND	200	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	
84-66-2	Diethylphthalate	ND	200	
86-73-7	Fluorene	ND	81	
7005-72-3	4-Chlorophenyl-phenylether	ND	200	
100-01-6	4-Nitroaniline	ND	200	
534-52-1	4,6-Dinitro-2-methylphenol	ND	400	
86-30-6	N-Nitrosodiphenylamine	ND	200	
103-33-3	Azobenzene	ND	200	
62-44-2	Phenacetin	ND	200	
101-55-3	4-Bromophenyl-phenylether	ND	200	
118-74-1	Hexachlorobenzene	ND	200	
87-86-5	Pentachlorophenol	ND	400	
82-68-8	Pentachloronitrobenzene	ND	200	
85-01-8	Phenanthrene	110	81	
120-12-7	Anthracene	ND	81	
86-74-8	Carbazole	ND	200	
84-74-2	Di-n-butylphthalate	ND	200	
56-57-5	4-nitroquinoline-1-oxide	ND	810	
465-73-6	Isodrin	ND	200	
206-44-0	Fluoranthene	240	81	
92-87-5	Benzidine	ND	200	
129-00-0	Pyrene	180	81	
510-15-6	Chlorobenzilate	ND	200	
85-68-7	Butylbenzylphthalate	ND	200	
91-94-1	3,3'-Dichlorobenzidine	ND	200	
56-55-3	Benzo(a)anthracene	110	81	
218-01-9	Chrysene	170	81	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	200	
117-84-0	Di-n-octyl phthalate	ND	200	
205-99-2	Benzo(b)fluoranthene	150	81	
207-08-9	Benzo(k)fluoranthene	98	81	
50-32-8	Benzo(a)pyrene	130	81	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0037	Lab Sample ID:	AB87575
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	95%
Dry Weight Prepared:	12.377 grams	Extract Dilution:	1
Wet Weight Prepared:	12.986 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	200	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	81	
53-70-3	Dibenz(a,h)anthracene	28	81	
191-24-2	Benzo(g,h,i)perylene	87	81	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	58	35 - 102
Phenol-d6 (SS2)	65	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	65	38 - 91
2,4,6-Tribromophenol (SS5)	88	31 - 102
p-Terphenyl-d14 (SS6)	80	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0038	Lab Sample ID:	AB87576
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	84%
Dry Weight Prepared:	11.087 grams	Extract Dilution:	1
Wet Weight Prepared:	13.232 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	230	
110-86-1	Pyridine	ND	230	
66-27-3	Methyl methanesulfonate	ND	230	
62-50-0	Ethyl methanesulfonate	ND	230	
108-95-2	Phenol	ND	230	
62-53-3	Aniline	ND	230	
111-44-4	Bis(2-Chloroethyl)ether	ND	230	
95-57-8	2-Chlorophenol	ND	230	
541-73-1	1,3-Dichlorobenzene	ND	230	
106-46-7	1,4-Dichlorobenzene	ND	230	
100-51-6	Benzyl alcohol	ND	230	
95-50-1	1,2-Dichlorobenzene	ND	230	
95-48-7	2-Methylphenol	ND	230	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	230	
98-86-2	Acetophenone	ND	230	
108-39-4/106-44-5	3&4-Methylphenol	ND	450	
621-64-7	N-nitroso-di-n-propylamine	ND	230	
67-72-1	Hexachloroethane	ND	230	
98-95-3	Nitrobenzene	ND	230	
78-59-1	Isophorone	ND	230	
88-75-5	2-Nitrophenol	ND	230	
105-67-9	2,4-dimethylphenol	ND	230	
111-91-1	bis(-2-Chloroethoxy)methane	ND	230	
65-85-0	Benzoic acid	380	230	
120-83-2	2,4-Dichlorophenol	ND	230	
120-82-1	1,2,4-Trichlorobenzene	ND	230	
91-20-3	Naphthalene	ND	90	
87-65-0	2,6-Dichlorophenol	ND	230	
106-47-8	4-Chloroaniline	ND	230	
1888-71-7	Hexachloropropene	ND	230	
87-68-3	Hexachlorobutadiene	ND	230	
59-50-7	4-Chloro-3-methylphenol	ND	230	
120-58-1	Isosafrole	ND	230	
91-57-6	2-Methylnaphthalene	ND	90	
90-12-0	1-Methylnaphthalene	ND	90	
77-47-4	Hexachlorocyclopentadiene	ND	230	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	230	
88-06-2	2,4,6-Trichlorophenol	ND	230	
95-95-4	2,4,5-Trichlorophenol	ND	230	
94-59-7	Safrole	ND	230	
91-58-7	2-Chloronaphthalene	ND	230	
88-74-4	2-Nitroaniline	ND	230	
130-15-4	1,4-Naphthoquinone	ND	230	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0038  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 11.087 grams  
Wet Weight Prepared: 13.232 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87576  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 84%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	230	
99-65-0	1,3-Dinitrobenzene	ND	230	
606-20-2	2,6-Dinitrotoluene	ND	230	
208-96-8	Acenaphthylene	200	90	
99-09-2	3-Nitroaniline	ND	230	
83-32-9	Acenaphthene	ND	90	
51-28-5	2,4-Dinitrophenol	ND	900	
100-02-7	4-Nitrophenol	ND	230	
608-93-5	Pentachlorobenzene	ND	230	
132-64-9	Dibenzofuran	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	230	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	230	
84-66-2	Diethylphthalate	ND	230	
86-73-7	Fluorene	ND	90	
7005-72-3	4-Chlorophenyl-phenylether	ND	230	
100-01-6	4-Nitroaniline	ND	230	
534-52-1	4,6-Dinitro-2-methylphenol	ND	450	
86-30-6	N-Nitrosodiphenylamine	ND	230	
103-33-3	Azobenzene	ND	230	
62-44-2	Phenacetin	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	230	
118-74-1	Hexachlorobenzene	ND	230	
87-86-5	Pentachlorophenol	ND	450	
82-68-8	Pentachloronitrobenzene	ND	230	
85-01-8	Phenanthrene	600	90	
120-12-7	Anthracene	150	90	
86-74-8	Carbazole	ND	230	
84-74-2	Di-n-butylphthalate	ND	230	
56-57-5	4-nitroquinoline-1-oxide	ND	900	
465-73-6	Isodrin	ND	230	
206-44-0	Fluoranthene	1300	90	
92-87-5	Benzidine	ND	230	
129-00-0	Pyrene	910	90	
510-15-6	Chlorobenzilate	ND	230	
85-68-7	Butylbenzylphthalate	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	230	
56-55-3	Benzo(a)anthracene	540	90	
218-01-9	Chrysene	700	90	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	230	
117-84-0	Di-n-octyl phthalate	ND	230	
205-99-2	Benzo(b)fluoranthene	630	90	
207-08-9	Benzo(k)fluoranthene	440	90	
50-32-8	Benzo(a)pyrene	590	90	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0038	Lab Sample ID:	AB87576
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	84%
Dry Weight Prepared:	11.087 grams	Extract Dilution:	1
Wet Weight Prepared:	13.232 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	230	
193-39-5	Indeno(1,2,3-cd)pyrene	310	90	
53-70-3	Dibenz(a,h)anthracene	120	90	
191-24-2	Benzo(g,h,i)perylene	340	90	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	48	35 - 102
Phenol-d6 (SS2)	60	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	70	31 - 102
p-Terphenyl-d14 (SS6)	75	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0039  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 11.946 grams  
Wet Weight Prepared: 14.069 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87577  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 85%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	210	
110-86-1	Pyridine	ND	210	
66-27-3	Methyl methanesulfonate	ND	210	
62-50-0	Ethyl methanesulfonate	ND	210	
108-95-2	Phenol	ND	210	
62-53-3	Aniline	ND	210	
111-44-4	Bis(2-Chloroethyl)ether	ND	210	
95-57-8	2-Chlorophenol	ND	210	
541-73-1	1,3-Dichlorobenzene	ND	210	
106-46-7	1,4-Dichlorobenzene	ND	210	
100-51-6	Benzyl alcohol	ND	210	
95-50-1	1,2-Dichlorobenzene	ND	210	
95-48-7	2-Methylphenol	ND	210	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	210	
98-86-2	Acetophenone	ND	210	
108-39-4/106-44-5	3&4-Methylphenol	ND	420	
621-64-7	N-nitroso-di-n-propylamine	ND	210	
67-72-1	Hexachloroethane	ND	210	
98-95-3	Nitrobenzene	ND	210	
78-59-1	Isophorone	ND	210	
88-75-5	2-Nitrophenol	ND	210	
105-67-9	2,4-dimethylphenol	ND	210	
111-91-1	bis(-2-Chloroethoxy)methane	ND	210	
65-85-0	Benzoic acid	ND	210	
120-83-2	2,4-Dichlorophenol	ND	210	
120-82-1	1,2,4-Trichlorobenzene	ND	210	
91-20-3	Naphthalene	ND	84	
87-65-0	2,6-Dichlorophenol	ND	210	
106-47-8	4-Chloroaniline	ND	210	
1888-71-7	Hexachloropropene	ND	210	
87-68-3	Hexachlorobutadiene	ND	210	
59-50-7	4-Chloro-3-methylphenol	ND	210	
120-58-1	Isosafrole	ND	210	
91-57-6	2-Methylnaphthalene	ND	84	
90-12-0	1-Methylnaphthalene	ND	84	
77-47-4	Hexachlorocyclopentadiene	ND	210	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	
88-06-2	2,4,6-Trichlorophenol	ND	210	
95-95-4	2,4,5-Trichlorophenol	ND	210	
94-59-7	Safrole	ND	210	
91-58-7	2-Chloronaphthalene	ND	210	
88-74-4	2-Nitroaniline	ND	210	
130-15-4	1,4-Naphthoquinone	ND	210	



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0039  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/24/2020  
Dry Weight Prepared: 11.946 grams  
Wet Weight Prepared: 14.069 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87577  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 85%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	210	
99-65-0	1,3-Dinitrobenzene	ND	210	
606-20-2	2,6-Dinitrotoluene	ND	210	
208-96-8	Acenaphthylene	150	84	
99-09-2	3-Nitroaniline	ND	210	
83-32-9	Acenaphthene	ND	84	
51-28-5	2,4-Dinitrophenol	ND	840	
100-02-7	4-Nitrophenol	ND	210	
608-93-5	Pentachlorobenzene	ND	210	
132-64-9	Dibenzofuran	ND	210	
121-14-2	2,4-Dinitrotoluene	ND	210	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	
84-66-2	Diethylphthalate	ND	210	
86-73-7	Fluorene	ND	84	
7005-72-3	4-Chlorophenyl-phenylether	ND	210	
100-01-6	4-Nitroaniline	ND	210	
534-52-1	4,6-Dinitro-2-methylphenol	ND	420	
86-30-6	N-Nitrosodiphenylamine	ND	210	
103-33-3	Azobenzene	ND	210	
62-44-2	Phenacetin	ND	210	
101-55-3	4-Bromophenyl-phenylether	ND	210	
118-74-1	Hexachlorobenzene	ND	210	
87-86-5	Pentachlorophenol	ND	420	
82-68-8	Pentachloronitrobenzene	ND	210	
85-01-8	Phenanthrene	230	84	
120-12-7	Anthracene	110	84	
86-74-8	Carbazole	ND	210	
84-74-2	Di-n-butylphthalate	ND	210	
56-57-5	4-nitroquinoline-1-oxide	ND	840	
465-73-6	Isodrin	ND	210	
206-44-0	Fluoranthene	580	84	
92-87-5	Benzidine	ND	210	
129-00-0	Pyrene	500	84	
510-15-6	Chlorobenzilate	ND	210	
85-68-7	Butylbenzylphthalate	ND	210	
91-94-1	3,3'-Dichlorobenzidine	ND	210	
56-55-3	Benzo(a)anthracene	390	84	
218-01-9	Chrysene	460	84	
117-81-7	Bis(2-ethylhexyl)phthalate	130	210	
117-84-0	Di-n-octyl phthalate	ND	210	
205-99-2	Benzo(b)fluoranthene	390	84	
207-08-9	Benzo(k)fluoranthene	310	84	
50-32-8	Benzo(a)pyrene	380	84	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0039	Lab Sample ID:	AB87577
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/24/2020	Percent Solids:	85%
Dry Weight Prepared:	11.946 grams	Extract Dilution:	1
Wet Weight Prepared:	14.069 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	210	
193-39-5	Indeno(1,2,3-cd)pyrene	190	84	
53-70-3	Dibenz(a,h)anthracene	ND	84	
191-24-2	Benzo(g,h,i)perylene	190	84	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	43	35 - 102
Phenol-d6 (SS2)	55	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	60	31 - 102
p-Terphenyl-d14 (SS6)	75	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0040  
Date of Collection: 8/18/2020  
Date of Preparation: 8/24/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 10.387 grams  
Wet Weight Prepared: 12.050 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87578  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 86%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	240	
110-86-1	Pyridine	ND	240	
66-27-3	Methyl methanesulfonate	ND	240	
62-50-0	Ethyl methanesulfonate	ND	240	
108-95-2	Phenol	ND	240	
62-53-3	Aniline	ND	240	
111-44-4	Bis(2-Chloroethyl)ether	ND	240	
95-57-8	2-Chlorophenol	ND	240	
541-73-1	1,3-Dichlorobenzene	ND	240	
106-46-7	1,4-Dichlorobenzene	ND	240	
100-51-6	Benzyl alcohol	ND	240	
95-50-1	1,2-Dichlorobenzene	ND	240	
95-48-7	2-Methylphenol	ND	240	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	240	
98-86-2	Acetophenone	ND	240	
108-39-4/106-44-5	3&4-Methylphenol	ND	480	
621-64-7	N-nitroso-di-n-propylamine	ND	240	
67-72-1	Hexachloroethane	ND	240	
98-95-3	Nitrobenzene	ND	240	
78-59-1	Isophorone	ND	240	
88-75-5	2-Nitrophenol	ND	240	
105-67-9	2,4-dimethylphenol	ND	240	
111-91-1	bis(-2-Chloroethoxy)methane	ND	240	
65-85-0	Benzoic acid	390	240	
120-83-2	2,4-Dichlorophenol	ND	240	
120-82-1	1,2,4-Trichlorobenzene	ND	240	
91-20-3	Naphthalene	ND	96	
87-65-0	2,6-Dichlorophenol	ND	240	
106-47-8	4-Chloroaniline	ND	240	
1888-71-7	Hexachloropropene	ND	240	
87-68-3	Hexachlorobutadiene	ND	240	
59-50-7	4-Chloro-3-methylphenol	ND	240	
120-58-1	Isosafrole	ND	240	
91-57-6	2-Methylnaphthalene	ND	96	
90-12-0	1-Methylnaphthalene	ND	96	
77-47-4	Hexachlorocyclopentadiene	ND	240	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	240	
88-06-2	2,4,6-Trichlorophenol	ND	240	
95-95-4	2,4,5-Trichlorophenol	ND	240	
94-59-7	Safrole	ND	240	
91-58-7	2-Chloronaphthalene	ND	240	
88-74-4	2-Nitroaniline	ND	240	
130-15-4	1,4-Naphthoquinone	ND	240	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0040	Lab Sample ID:	AB87578
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	86%
Dry Weight Prepared:	10.387 grams	Extract Dilution:	1
Wet Weight Prepared:	12.050 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	240	
99-65-0	1,3-Dinitrobenzene	ND	240	
606-20-2	2,6-Dinitrotoluene	ND	240	
208-96-8	Acenaphthylene	ND	96	
99-09-2	3-Nitroaniline	ND	240	
83-32-9	Acenaphthene	ND	96	
51-28-5	2,4-Dinitrophenol	ND	960	
100-02-7	4-Nitrophenol	ND	240	
608-93-5	Pentachlorobenzene	ND	240	
132-64-9	Dibenzofuran	ND	240	
121-14-2	2,4-Dinitrotoluene	ND	240	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	240	
84-66-2	Diethylphthalate	ND	240	
86-73-7	Fluorene	ND	96	
7005-72-3	4-Chlorophenyl-phenylether	ND	240	
100-01-6	4-Nitroaniline	ND	240	
534-52-1	4,6-Dinitro-2-methylphenol	ND	480	
86-30-6	N-Nitrosodiphenylamine	ND	240	
103-33-3	Azobenzene	ND	240	
62-44-2	Phenacetin	ND	240	
101-55-3	4-Bromophenyl-phenylether	ND	240	
118-74-1	Hexachlorobenzene	ND	240	
87-86-5	Pentachlorophenol	ND	480	
82-68-8	Pentachloronitrobenzene	ND	240	
85-01-8	Phenanthrene	330	96	
120-12-7	Anthracene	99	96	
86-74-8	Carbazole	ND	240	
84-74-2	Di-n-butylphthalate	ND	240	
56-57-5	4-nitroquinoline-1-oxide	ND	960	
465-73-6	Isodrin	ND	240	
206-44-0	Fluoranthene	620	96	
92-87-5	Benzidine	ND	240	
129-00-0	Pyrene	450	96	
510-15-6	Chlorobenzilate	ND	240	
85-68-7	Butylbenzylphthalate	ND	240	
91-94-1	3,3'-Dichlorobenzidine	ND	240	
56-55-3	Benzo(a)anthracene	350	96	
218-01-9	Chrysene	440	96	
117-81-7	Bis(2-ethylhexyl)phthalate	320	240	
117-84-0	Di-n-octyl phthalate	ND	240	
205-99-2	Benzo(b)fluoranthene	460	96	
207-08-9	Benzo(k)fluoranthene	350	96	
50-32-8	Benzo(a)pyrene	390	96	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0040	Lab Sample ID:	AB87578
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/24/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	86%
Dry Weight Prepared:	10.387 grams	Extract Dilution:	1
Wet Weight Prepared:	12.050 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	240	
193-39-5	Indeno(1,2,3-cd)pyrene	270	96	
53-70-3	Dibenz(a,h)anthracene	100	96	
191-24-2	Benzo(g,h,i)perylene	280	96	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	43	35 - 102
Phenol-d6 (SS2)	55	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	65	31 - 102
p-Terphenyl-d14 (SS6)	75	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. These compounds are calibrated using linear regression. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB87570

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
1,2,4,5-Tetrachlorobenzene	3628	ND	2300	63	38 - 111
1,2,4-Trichlorobenzene	3628	ND	2000	55	41 - 102
1,2-Dichlorobenzene	3628	ND	1700	47	37 - 92
1,3-Dichlorobenzene	3628	ND	1600	44	34 - 89
1,3-Dinitrobenzene	3628	ND	2700	74	23 - 148
1,4-Dichlorobenzene	3628	ND	1600	44	33 - 91
1,4-Naphthoquinone	3628	ND	1100	30	2.5 - 119
1-Methylnaphthalene	3628	230	2400	60	36 - 111
2,2'-oxybis(1-chloropropane)	3628	ND	1800	50	38 - 96
2,3,4,6-Tetrachlorophenol	3628	ND	3400	94	38 - 132
2,4,5-Trichlorophenol	3628	ND	2900	80	42 - 127
2,4,6-Trichlorophenol	3628	ND	2800	77	44 - 120
2,4-Dichlorophenol	3628	ND	2500	69	44 - 119
2,4-Dinitrophenol	3628	ND	1300	36	2.5 - 92
2,4-Dinitrotoluene	3628	ND	2900	80	37 - 129
2,4-dimethylphenol	3628	ND	1600	44	29 - 122
2,6-Dichlorophenol	3628	ND	2400	66	43 - 112
2,6-Dinitrotoluene	3628	ND	2700	74	38 - 121
2-Chloronaphthalene	3628	ND	2300	63	40 - 109
2-Chlorophenol	3628	ND	2000	55	41 - 108
2-Methylnaphthalene	3628	670	2700	56	33 - 112
2-Methylphenol	3628	ND	2200	61	41 - 111
2-Nitroaniline	3628	ND	2700	74	39 - 125
2-Nitrophenol	3628	ND	2100	58	37 - 114
3&4-Methylphenol	7256	ND	4600	63	5.0 - 152
3,3'-Dichlorobenzidine	3628	ND	540	15	2.5 - 121
3-Methylcholanthrene	3628	ND	2800	77	29 - 123
3-Nitroaniline	3628	ND	1700	47	22 - 113
4,6-Dinitro-2-methylphenol	3628	ND	1500	41	2.5 - 116
4-Bromophenyl-phenylether	3628	ND	2800	77	38 - 122
4-Chloro-3-methylphenol	3628	ND	2800	77	43 - 127
4-Chloroaniline	3628	ND	710	20	4.5 - 100
4-Chlorophenyl-phenylether	3628	ND	2800	77	43 - 118
4-Nitroaniline	3628	ND	1400	39	20 - 120
4-Nitrophenol	3628	ND	3100	85	15 - 165
4-nitroquinoline-1-oxide	3628	ND	ND	ND	2.5 - 117
Acenaphthene	3628	ND	2400	66	21 - 125
Acenaphthylene	3628	130	2400	63	26 - 120
Acetophenone	3628	240	2200	54	31 - 111
Aniline	3628	ND	290	8	2.5 - 87
Anthracene	3628	160	2800	73	18 - 133
Azobenzene	3628	ND	2500	69	30 - 118
Benzidine	3628	ND	ND	ND	2.5 - 48
Benzo(a)anthracene	3628	530	3300	76	30 - 127
Benzo(a)pyrene	3628	540	3100	71	28 - 127
Benzo(b)fluoranthene	3628	670	3600	81	34 - 129
Benzo(g,h,i)perylene	3628	330	2300	54	1.0 - 158
Benzo(k)fluoranthene	3628	510	3000	69	29 - 132

20080025\$BNAMS

McGoldrick Paper Co - Hindsdale, NH

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB87570

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
Benzoic acid	3628	410	2500	58	2.5 - 75
Benzyl alcohol	3628	ND	2200	61	42 - 114
Bis(2-Chloroethyl)ether	3628	ND	2300	63	32 - 109
Bis(2-ethylhexyl)phthalate	3628	680	3400	75	9.7 - 145
Butylbenzylphthalate	3628	ND	2700	74	35 - 126
Carbazole	3628	ND	2900	80	18 - 132
Chlorobenzilate	3628	ND	3100	85	37 - 125
Chrysene	3628	760	3400	73	27 - 129
Di-n-butylphthalate	3628	ND	2900	80	39 - 129
Di-n-octyl phthalate	3628	ND	3000	83	32 - 149
Dibenz(a,h)anthracene	3628	130	2500	65	1.0 - 177
Dibenzofuran	3628	ND	2600	72	21 - 126
Diethylphthalate	3628	ND	2700	74	43 - 119
Dimethyl phthalate	3628	ND	2600	72	41 - 115
Ethyl methanesulfonate	3628	ND	1900	52	37 - 101
Fluoranthene	3628	1100	4000	80	39 - 134
Fluorene	3628	ND	2700	74	6.1 - 140
Hexachlorobenzene	3628	ND	2900	80	38 - 119
Hexachlorobutadiene	3628	ND	2100	58	38 - 108
Hexachlorocyclopentadiene	3628	ND	250	7	2.5 - 110
Hexachloroethane	3628	ND	1300	36	5.5 - 104
Hexachloropropene	3628	ND	720	20	2.5 - 127
Indeno(1,2,3-cd)pyrene	3628	330	2500	60	1.0 - 164
Isodrin	3628	ND	2500	69	2.5 - 147
Isophorone	3628	ND	2000	55	42 - 108
Isosafrole	3628	ND	2200	61	43 - 107
Methyl methanesulfonate	3628	ND	1800	50	32 - 108
N-Nitrosodiphenylamine	3628	ND	2400	66	41 - 118
N-nitroso-di-n-propylamine	3628	ND	2000	55	40 - 104
N-nitrosodimethylamine	3628	ND	1600	44	19 - 92
Naphthalene	3628	490	2400	53	19 - 117
Nitrobenzene	3628	ND	2000	55	38 - 105
Pentachlorobenzene	3628	ND	2800	77	37 - 121
Pentachloronitrobenzene	3628	ND	3000	83	37 - 132
Pentachlorophenol	3628	ND	2500	69	30 - 119
Phenacetin	3628	ND	2900	80	38 - 127
Phenanthrene	3628	650	3100	68	2.5 - 149
Phenol	3628	ND	2100	58	39 - 112
Pyrene	3628	790	3200	66	24 - 135
Pyridine	3628	ND	1100	30	5.0 - 73
Safrole	3628	ND	2300	63	39 - 110
bis(-2-Chloroethoxy)methane	3628	ND	2100	58	36 - 101

McGoldrick Paper Co - Hindsdale, NH

Laboratory Duplicate Results

Sample ID: AB87570

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATION RESULT ug/Kg	PRECISION RPD %	QC LIMITS
1,2,4,5-Tetrachlorobenzene	ND	ND	NC	50
1,2,4-Trichlorobenzene	ND	ND	NC	50
1,2-Dichlorobenzene	ND	ND	NC	50
1,3-Dichlorobenzene	ND	ND	NC	50
1,3-Dinitrobenzene	ND	ND	NC	50
1,4-Dichlorobenzene	ND	ND	NC	50
1,4-Naphthoquinone	ND	ND	NC	50
1-Methylnaphthalene	230	188	20.0	50
2,2'-oxybis(1-chloropropane)	ND	ND	NC	50
2,3,4,6-Tetrachlorophenol	ND	ND	NC	50
2,4,5-Trichlorophenol	ND	ND	NC	50
2,4,6-Trichlorophenol	ND	ND	NC	50
2,4-Dichlorophenol	ND	ND	NC	50
2,4-Dinitrophenol	ND	ND	NC	50
2,4-Dinitrotoluene	ND	ND	NC	50
2,4-dimethylphenol	ND	ND	NC	50
2,6-Dichlorophenol	ND	ND	NC	50
2,6-Dinitrotoluene	ND	ND	NC	50
2-Chloronaphthalene	ND	ND	NC	50
2-Chlorophenol	ND	ND	NC	50
2-Methylnaphthalene	670	546	20.3	50
2-Methylphenol	ND	ND	NC	50
2-Nitroaniline	ND	ND	NC	50
2-Nitrophenol	ND	ND	NC	50
3&4-Methylphenol	ND	ND	NC	50
3,3'-Dichlorobenzidine	ND	ND	NC	50
3-Methylcholanthrene	ND	ND	NC	50
3-Nitroaniline	ND	ND	NC	50
4,6-Dinitro-2-methylphenol	ND	ND	NC	50
4-Bromophenyl-phenylether	ND	ND	NC	50
4-Chloro-3-methylphenol	ND	ND	NC	50
4-Chloroaniline	ND	ND	NC	50
4-Chlorophenyl-phenylether	ND	ND	NC	50
4-Nitroaniline	ND	ND	NC	50
4-Nitrophenol	ND	ND	NC	50
4-nitroquinoline-1-oxide	ND	ND	NC	50
Acenaphthene	ND	ND	NC	50
Acenaphthylene	130	112	14.8	50
Acetophenone	240	ND	ND	50
Aniline	ND	ND	NC	50
Anthracene	160	92.0	53.7	50
Azobenzene	ND	ND	NC	50
Benzidine	ND	ND	NC	50
Benzo(a)anthracene	530	383	32.1	50
Benzo(a)pyrene	540	413	26.7	50
Benzo(b)fluoranthene	670	520	25.1	50
Benzo(g,h,i)perylene	330	305	7.8	50
Benzo(k)fluoranthene	510	390	26.6	50
Benzoic acid	410	333	20.5	50
Benzyl alcohol	ND	ND	NC	50
Bis(2-Chloroethyl)ether	ND	242	ND	50
Bis(2-ethylhexyl)phthalate	680	604	11.8	50

20080025\$BNAMS



McGoldrick Paper Co - Hindsdale, NH

Laboratory Duplicate Results

Sample ID: AB87570

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
Butylbenzylphthalate	ND	ND	NC	50
Carbazole	ND	ND	NC	50
Chlorobenzilate	ND	ND	NC	50
Chrysene	760	580	26.8	50
Di-n-butylphthalate	ND	ND	NC	50
Di-n-octyl phthalate	ND	ND	NC	50
Dibenz(a,h)anthracene	130	119	8.2	50
Dibenzofuran	ND	ND	NC	50
Diethylphthalate	ND	ND	NC	50
Dimethyl phthalate	ND	ND	NC	50
Ethyl methanesulfonate	ND	ND	NC	52
Fluoranthene	1100	758	36.8	50
Fluorene	ND	ND	NC	50
Hexachlorobenzene	ND	ND	NC	50
Hexachlorobutadiene	ND	ND	NC	50
Hexachlorocyclopentadiene	ND	ND	NC	50
Hexachloroethane	ND	ND	NC	50
Hexachloropropene	ND	ND	NC	50
Indeno(1,2,3-cd)pyrene	330	297	10.5	50
Isodrin	ND	ND	NC	50
Isophorone	ND	ND	NC	50
Isosafrole	ND	ND	NC	50
Methyl methanesulfonate	ND	ND	NC	50
N-Nitrosodiphenylamine	ND	ND	NC	50
N-nitroso-di-n-propylamine	ND	ND	NC	50
N-nitrosodimethylamine	ND	ND	NC	50
Naphthalene	490	392	22.2	50
Nitrobenzene	ND	ND	NC	50
Pentachlorobenzene	ND	ND	NC	50
Pentachloronitrobenzene	ND	ND	NC	50
Pentachlorophenol	ND	ND	NC	50
Phenacetin	ND	ND	NC	50
Phenanthrene	650	460	34.1	50
Phenol	ND	ND	NC	50
Pyrene	790	553	35.2	50
Pyridine	ND	ND	NC	50
Safrole	ND	ND	NC	50
bis(-2-Chloroethoxy)methane	ND	ND	NC	50

McGoldrick Paper Co - Hindsdale, NH

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
1,2,4,5-Tetrachlorobenzene	3800	2700	71	49 - 107
1,2,4-Trichlorobenzene	3800	2469	65	50 - 102
1,2-Dichlorobenzene	3800	2238	59	46 - 94
1,3-Dichlorobenzene	3800	2138	56	45 - 90
1,3-Dinitrobenzene	3800	2918	77	57 - 128
1,4-Dichlorobenzene	3800	2186	58	44 - 92
1,4-Naphthoquinone	3800	2669	70	58 - 111
1-Methylnaphthalene	3800	2535	67	54 - 105
2,2'-oxybis(1-chloropropane)	3800	2360	62	46 - 97
2,3,4,6-Tetrachlorophenol	3800	2641	70	38 - 124
2,4,5-Trichlorophenol	3800	2761	73	46 - 114
2,4,6-Trichlorophenol	3800	2583	68	48 - 108
2,4-Dichlorophenol	3800	2710	71	55 - 113
2,4-Dinitrophenol	3800	919	24	10 - 85
2,4-Dinitrotoluene	3800	3101	82	59 - 120
2,4-dimethylphenol	3800	2651	70	41 - 118
2,6-Dichlorophenol	3800	2678	71	52 - 108
2,6-Dinitrotoluene	3800	2911	77	57 - 115
2-Chloronaphthalene	3800	2592	68	52 - 104
2-Chlorophenol	3800	2560	67	53 - 104
2-Methylnaphthalene	3800	2550	67	54 - 104
2-Methylphenol	3800	2714	71	55 - 106
2-Nitroaniline	3800	2785	73	52 - 118
2-Nitrophenol	3800	2251	59	40 - 107
3&4-Methylphenol	7600	5501	72	41 - 117
3,3'-Dichlorobenzidine	3800	2619	69	45 - 106
3-Methylcholanthrene	3800	3222	85	52 - 116
3-Nitroaniline	3800	2605	69	52 - 106
4,6-Dinitro-2-methylphenol	3800	1328	35	10 - 104
4-Bromophenyl-phenylether	3800	3054	80	52 - 118
4-Chloro-3-methylphenol	3800	2841	75	60 - 118
4-Chloroaniline	3800	2101	55	37 - 91
4-Chlorophenyl-phenylether	3800	2944	78	56 - 113
4-Nitroaniline	3800	2848	75	57 - 114
4-Nitrophenol	3800	2462	65	42 - 133
4-nitroquinoline-1-oxide	3800	2157	57	40 - 110
Acenaphthene	3800	2600	68	53 - 105
Acenaphthylene	3800	2584	68	55 - 105
Acetophenone	3800	2560	67	54 - 99
Aniline	3800	2037	54	27 - 88
Anthracene	3800	2835	75	59 - 111
Azobenzene	3800	2707	71	47 - 109
Benzidine	3800	1229	32	2 - 119
Benzo(a)anthracene	3800	3015	79	56 - 112
Benzo(a)pyrene	3800	3006	79	56 - 116
Benzo(b)fluoranthene	3800	3093	81	52 - 117
Benzo(g,h,i)perylene	3800	2937	77	44 - 128
Benzo(k)fluoranthene	3800	2841	75	52 - 120
Benzoic acid	3800	ND	0	10 - 132
Benzyl alcohol	3800	2637	69	51 - 110
Bis(2-Chloroethyl)ether	3800	2436	64	47 - 97
Bis(2-ethylhexyl)phthalate	3800	2957	78	47 - 121
Butylbenzylphthalate	3800	2835	75	50 - 119
Carbazole	3800	2925	77	56 - 115

McGoldrick Paper Co - Hindsdale, NH

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
Chlorobenzilate	3800	3303	87	52 - 119
Chrysene	3800	2928	77	55 - 112
Di-n-butylphthalate	3800	2960	78	56 - 120
Di-n-octyl phthalate	3800	3038	80	40 - 128
Dibenz(a,h)anthracene	3800	2994	79	44 - 126
Dibenzofuran	3800	2722	72	57 - 106
Diethylphthalate	3800	2935	77	60 - 113
Dimethyl phthalate	3800	2866	75	57 - 115
Ethyl methanesulfonate	3800	2578	68	51 - 99
Fluoranthene	3800	3092	81	57 - 119
Fluorene	3800	2793	74	58 - 110
Hexachlorobenzene	3800	3097	82	54 - 115
Hexachlorobutadiene	3800	2536	67	43 - 111
Hexachlorocyclopentadiene	3800	2300	61	31 - 108
Hexachloroethane	3800	2204	58	46 - 90
Hexachloropropene	3800	2568	68	42 - 113
Indeno(1,2,3-cd)pyrene	3800	2999	79	46 - 126
Isodrin	3800	2992	79	54 - 113
Isophorone	3800	2559	67	55 - 105
Isosafrole	3800	2610	69	53 - 107
Methyl methanesulfonate	3800	2585	68	46 - 110
N-Nitrosodiphenylamine	3800	2794	74	55 - 117
N-nitroso-di-n-propylamine	3800	2557	67	51 - 101
N-nitrosodimethylamine	3800	2262	60	32 - 88
Naphthalene	3800	2414	64	52 - 99
Nitrobenzene	3800	2471	65	50 - 102
Pentachlorobenzene	3800	2942	77	51 - 114
Pentachloronitrobenzene	3800	3212	85	57 - 126
Pentachlorophenol	3800	2055	54	17 - 117
Phenacetin	3800	3016	79	54 - 119
Phenanthrene	3800	2802	74	57 - 109
Phenol	3800	2621	69	54 - 107
Pyrene	3800	2955	78	53 - 114
Pyridine	3800	1667	44	28 - 68
Safrole	3800	2666	70	53 - 106
bis(-2-Chloroethoxy)methane	3800	2589	68	48 - 98

Comments:

Samples in Batch: AB87569, AB87570, AB87571, AB87572, AB87573, AB87574, AB87575, AB87576, AB87577, AB87578

PN: 20080025

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0031	SS-01	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0031	SS-01	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0031	SS-01	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0032	SS-02	SVOC	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	Pest/PCB	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	TAL Metals (Include Hg)	Soil	8/18/2020	09:15	2	4 oz Glass	4 C	Y
	S50022NH-0033	SS-03	Pest/PCB	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0033	SS-03	TAL Metals (Include Hg)	Soil	8/18/2020	09:25	1	4 oz Glass	4 C	
	S50022NH-0033	SS-03	SVOC	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0034	SS-04	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0036	SS-105	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0037	SS-06	SVOC	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i>	8/19/2020 10:15	<i>[Signature]</i> LSAT	8-19-20 10:15	20C

20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

 SAMPLES TRANSFERRED FROM  
 CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> / <i>[Signature]</i>	8/19/20 10:15	<i>[Signature]</i> ESAT	8-19-20 10:15	2 °C

 20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

 PN: 20080026  
 1-2

## Laboratory Report

August 31, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project Number: 20080026

Project: McGoldrick Paper Co - Hindsdale, NH

Analysis: BNAs in Soils Medium Level

EPA Chemist: Caitlin Brown

Date Samples Received by the Laboratory: 08/19/2020

### Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, LSBSOP-BNASOIL4.

Samples were prepared using pressurized fluid extraction. The samples were analyzed using high resolution capillary column chromatography and quadrapole mass spectrometry (GC/MS). The SOP for this analysis is based on US EPA SW-846 methods 3545A and 8270C and EIASOP-BNAGCMS9

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

**DANIEL**  
**BOUDREAU**

Digitally signed by  
DANIEL BOUDREAU  
Date: 2020.08.31  
15:25:37 -04'00'

20080026\$BNAMS

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0041  
Date of Collection: 8/18/2020  
Date of Preparation: 8/25/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 12.545 grams  
Wet Weight Prepared: 13.199 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87579  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 95%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	200	
110-86-1	Pyridine	ND	200	
66-27-3	Methyl methanesulfonate	ND	200	
62-50-0	Ethyl methanesulfonate	ND	200	
108-95-2	Phenol	ND	200	
62-53-3	Aniline	ND	200	
111-44-4	Bis(2-Chloroethyl)ether	ND	200	
95-57-8	2-Chlorophenol	ND	200	
541-73-1	1,3-Dichlorobenzene	ND	200	
106-46-7	1,4-Dichlorobenzene	ND	200	
100-51-6	Benzyl alcohol	ND	200	
95-50-1	1,2-Dichlorobenzene	ND	200	
95-48-7	2-Methylphenol	ND	200	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	200	
98-86-2	Acetophenone	ND	200	
108-39-4/106-44-5	3&4-Methylphenol	ND	400	
621-64-7	N-nitroso-di-n-propylamine	ND	200	
67-72-1	Hexachloroethane	ND	200	
98-95-3	Nitrobenzene	ND	200	
78-59-1	Isophorone	ND	200	
88-75-5	2-Nitrophenol	ND	200	
105-67-9	2,4-dimethylphenol	ND	200	
111-91-1	bis(-2-Chloroethoxy)methane	ND	200	
65-85-0	Benzoic acid	ND	200	
120-83-2	2,4-Dichlorophenol	ND	200	
120-82-1	1,2,4-Trichlorobenzene	ND	200	
91-20-3	Naphthalene	ND	80	
87-65-0	2,6-Dichlorophenol	ND	200	
106-47-8	4-Chloroaniline	ND	200	
1888-71-7	Hexachloropropene	ND	200	
87-68-3	Hexachlorobutadiene	ND	200	
59-50-7	4-Chloro-3-methylphenol	ND	200	
120-58-1	Isosafrole	ND	200	
91-57-6	2-Methylnaphthalene	ND	80	
90-12-0	1-Methylnaphthalene	ND	80	
77-47-4	Hexachlorocyclopentadiene	ND	200	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	
88-06-2	2,4,6-Trichlorophenol	ND	200	
95-95-4	2,4,5-Trichlorophenol	ND	200	
94-59-7	Safrole	ND	200	
91-58-7	2-Chloronaphthalene	ND	200	
88-74-4	2-Nitroaniline	ND	200	
130-15-4	1,4-Naphthoquinone	ND	200	



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0041  
Date of Collection: 8/18/2020  
Date of Preparation: 8/25/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 12.545 grams  
Wet Weight Prepared: 13.199 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87579  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 95%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	200	
99-65-0	1,3-Dinitrobenzene	ND	200	
606-20-2	2,6-Dinitrotoluene	ND	200	
208-96-8	Acenaphthylene	110	80	
99-09-2	3-Nitroaniline	ND	200	
83-32-9	Acenaphthene	ND	80	
51-28-5	2,4-Dinitrophenol	ND	800	
100-02-7	4-Nitrophenol	ND	200	
608-93-5	Pentachlorobenzene	ND	200	
132-64-9	Dibenzofuran	ND	200	
121-14-2	2,4-Dinitrotoluene	ND	200	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	
84-66-2	Diethylphthalate	ND	200	
86-73-7	Fluorene	ND	80	
7005-72-3	4-Chlorophenyl-phenylether	ND	200	
100-01-6	4-Nitroaniline	ND	200	
534-52-1	4,6-Dinitro-2-methylphenol	ND	400	
86-30-6	N-Nitrosodiphenylamine	ND	200	
103-33-3	Azobenzene	ND	200	
62-44-2	Phenacetin	ND	200	
101-55-3	4-Bromophenyl-phenylether	ND	200	
118-74-1	Hexachlorobenzene	ND	200	
87-86-5	Pentachlorophenol	ND	400	
82-68-8	Pentachloronitrobenzene	ND	200	
85-01-8	Phenanthrene	400	80	
120-12-7	Anthracene	90	80	
86-74-8	Carbazole	ND	200	
84-74-2	Di-n-butylphthalate	ND	200	
56-57-5	4-nitroquinoline-1-oxide	ND	800	
465-73-6	Isodrin	ND	200	
206-44-0	Fluoranthene	720	80	
92-87-5	Benzidine	ND	200	
129-00-0	Pyrene	610	80	
510-15-6	Chlorobenzilate	ND	200	
85-68-7	Butylbenzylphthalate	ND	200	
91-94-1	3,3'-Dichlorobenzidine	ND	200	
56-55-3	Benzo(a)anthracene	360	80	
218-01-9	Chrysene	450	80	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	200	
117-84-0	Di-n-octyl phthalate	ND	200	
205-99-2	Benzo(b)fluoranthene	370	80	
207-08-9	Benzo(k)fluoranthene	270	80	
50-32-8	Benzo(a)pyrene	370	80	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0041	Lab Sample ID:	AB87579
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	95%
Dry Weight Prepared:	12.545 grams	Extract Dilution:	1
Wet Weight Prepared:	13.199 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	200	
193-39-5	Indeno(1,2,3-cd)pyrene	230	80	
53-70-3	Dibenz(a,h)anthracene	93	80	
191-24-2	Benzo(g,h,i)perylene	260	80	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	60	35 - 102
Phenol-d6 (SS2)	65	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	65	38 - 91
2,4,6-Tribromophenol (SS5)	85	31 - 102
p-Terphenyl-d14 (SS6)	65	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0042	Lab Sample ID:	AB87580
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	82%
Dry Weight Prepared:	11.251 grams	Extract Dilution:	1
Wet Weight Prepared:	13.783 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	220	
110-86-1	Pyridine	ND	220	
66-27-3	Methyl methanesulfonate	ND	220	
62-50-0	Ethyl methanesulfonate	ND	220	
108-95-2	Phenol	ND	220	
62-53-3	Aniline	ND	220	
111-44-4	Bis(2-Chloroethyl)ether	ND	220	
95-57-8	2-Chlorophenol	ND	220	
541-73-1	1,3-Dichlorobenzene	ND	220	
106-46-7	1,4-Dichlorobenzene	ND	220	
100-51-6	Benzyl alcohol	ND	220	
95-50-1	1,2-Dichlorobenzene	ND	220	
95-48-7	2-Methylphenol	ND	220	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	220	
98-86-2	Acetophenone	ND	220	
108-39-4/106-44-5	3&4-Methylphenol	ND	440	
621-64-7	N-nitroso-di-n-propylamine	ND	220	
67-72-1	Hexachloroethane	ND	220	
98-95-3	Nitrobenzene	ND	220	
78-59-1	Isophorone	ND	220	
88-75-5	2-Nitrophenol	ND	220	
105-67-9	2,4-dimethylphenol	ND	220	
111-91-1	bis(-2-Chloroethoxy)methane	ND	220	
65-85-0	Benzoic acid	430	220	
120-83-2	2,4-Dichlorophenol	ND	220	
120-82-1	1,2,4-Trichlorobenzene	ND	220	
91-20-3	Naphthalene	ND	89	
87-65-0	2,6-Dichlorophenol	ND	220	
106-47-8	4-Chloroaniline	ND	220	
1888-71-7	Hexachloropropene	ND	220	
87-68-3	Hexachlorobutadiene	ND	220	
59-50-7	4-Chloro-3-methylphenol	ND	220	
120-58-1	Isosafrole	ND	220	
91-57-6	2-Methylnaphthalene	ND	89	
90-12-0	1-Methylnaphthalene	ND	89	
77-47-4	Hexachlorocyclopentadiene	ND	220	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	
88-06-2	2,4,6-Trichlorophenol	ND	220	
95-95-4	2,4,5-Trichlorophenol	ND	220	
94-59-7	Safrole	ND	220	
91-58-7	2-Chloronaphthalene	ND	220	
88-74-4	2-Nitroaniline	ND	220	
130-15-4	1,4-Naphthoquinone	ND	220	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0042	Lab Sample ID:	AB87580
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	82%
Dry Weight Prepared:	11.251 grams	Extract Dilution:	1
Wet Weight Prepared:	13.783 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	220	
99-65-0	1,3-Dinitrobenzene	ND	220	
606-20-2	2,6-Dinitrotoluene	ND	220	
208-96-8	Acenaphthylene	120	89	
99-09-2	3-Nitroaniline	ND	220	
83-32-9	Acenaphthene	ND	89	
51-28-5	2,4-Dinitrophenol	ND	890	
100-02-7	4-Nitrophenol	ND	220	
608-93-5	Pentachlorobenzene	ND	220	
132-64-9	Dibenzofuran	ND	220	
121-14-2	2,4-Dinitrotoluene	ND	220	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	
84-66-2	Diethylphthalate	ND	220	
86-73-7	Fluorene	ND	89	
7005-72-3	4-Chlorophenyl-phenylether	ND	220	
100-01-6	4-Nitroaniline	ND	220	
534-52-1	4,6-Dinitro-2-methylphenol	ND	440	
86-30-6	N-Nitrosodiphenylamine	ND	220	
103-33-3	Azobenzene	ND	220	
62-44-2	Phenacetin	ND	220	
101-55-3	4-Bromophenyl-phenylether	ND	220	
118-74-1	Hexachlorobenzene	ND	220	
87-86-5	Pentachlorophenol	ND	440	
82-68-8	Pentachloronitrobenzene	ND	220	
85-01-8	Phenanthrene	270	89	
120-12-7	Anthracene	ND	89	
86-74-8	Carbazole	ND	220	
84-74-2	Di-n-butylphthalate	ND	220	
56-57-5	4-nitroquinoline-1-oxide	ND	890	
465-73-6	Isodrin	ND	220	
206-44-0	Fluoranthene	470	89	
92-87-5	Benzidine	ND	220	
129-00-0	Pyrene	380	89	
510-15-6	Chlorobenzilate	ND	220	
85-68-7	Butylbenzylphthalate	ND	220	
91-94-1	3,3'-Dichlorobenzidine	ND	220	
56-55-3	Benzo(a)anthracene	230	89	
218-01-9	Chrysene	360	89	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	220	
117-84-0	Di-n-octyl phthalate	ND	220	
205-99-2	Benzo(b)fluoranthene	320	89	
207-08-9	Benzo(k)fluoranthene	230	89	
50-32-8	Benzo(a)pyrene	280	89	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0042	Lab Sample ID:	AB87580
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	82%
Dry Weight Prepared:	11.251 grams	Extract Dilution:	1
Wet Weight Prepared:	13.783 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	220	
193-39-5	Indeno(1,2,3-cd)pyrene	180	89	
53-70-3	Dibenz(a,h)anthracene	ND	89	
191-24-2	Benzo(g,h,i)perylene	210	89	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	53	35 - 102
Phenol-d6 (SS2)	60	41 - 106
Nitrobenzene-d5 (SS3)	50	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	80	31 - 102
p-Terphenyl-d14 (SS6)	60	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

Tentatively Identified Compounds

4-((1E)-3-Hydroxy-1-propenyl)-2-methoxyphenol 1400 ppb J

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0043	Lab Sample ID:	AB87581
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	91%
Dry Weight Prepared:	11.093 grams	Extract Dilution:	1
Wet Weight Prepared:	12.256 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	230	
110-86-1	Pyridine	ND	230	
66-27-3	Methyl methanesulfonate	ND	230	
62-50-0	Ethyl methanesulfonate	ND	230	
108-95-2	Phenol	ND	230	
62-53-3	Aniline	ND	230	
111-44-4	Bis(2-Chloroethyl)ether	ND	230	
95-57-8	2-Chlorophenol	ND	230	
541-73-1	1,3-Dichlorobenzene	ND	230	
106-46-7	1,4-Dichlorobenzene	ND	230	
100-51-6	Benzyl alcohol	ND	230	
95-50-1	1,2-Dichlorobenzene	ND	230	
95-48-7	2-Methylphenol	ND	230	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	230	
98-86-2	Acetophenone	ND	230	
108-39-4/106-44-5	3&4-Methylphenol	ND	450	
621-64-7	N-nitroso-di-n-propylamine	ND	230	
67-72-1	Hexachloroethane	ND	230	
98-95-3	Nitrobenzene	ND	230	
78-59-1	Isophorone	ND	230	
88-75-5	2-Nitrophenol	ND	230	
105-67-9	2,4-dimethylphenol	ND	230	
111-91-1	bis(-2-Chloroethoxy)methane	ND	230	
65-85-0	Benzoic acid	ND	230	
120-83-2	2,4-Dichlorophenol	ND	230	
120-82-1	1,2,4-Trichlorobenzene	ND	230	
91-20-3	Naphthalene	ND	90	
87-65-0	2,6-Dichlorophenol	ND	230	
106-47-8	4-Chloroaniline	ND	230	
1888-71-7	Hexachloropropene	ND	230	
87-68-3	Hexachlorobutadiene	ND	230	
59-50-7	4-Chloro-3-methylphenol	ND	230	
120-58-1	Isosafrole	ND	230	
91-57-6	2-Methylnaphthalene	ND	90	
90-12-0	1-Methylnaphthalene	ND	90	
77-47-4	Hexachlorocyclopentadiene	ND	230	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	230	
88-06-2	2,4,6-Trichlorophenol	ND	230	
95-95-4	2,4,5-Trichlorophenol	ND	230	
94-59-7	Safrole	ND	230	
91-58-7	2-Chloronaphthalene	ND	230	
88-74-4	2-Nitroaniline	ND	230	
130-15-4	1,4-Naphthoquinone	ND	230	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0043	Lab Sample ID:	AB87581
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	91%
Dry Weight Prepared:	11.093 grams	Extract Dilution:	1
Wet Weight Prepared:	12.256 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	230	
99-65-0	1,3-Dinitrobenzene	ND	230	
606-20-2	2,6-Dinitrotoluene	ND	230	
208-96-8	Acenaphthylene	140	90	
99-09-2	3-Nitroaniline	ND	230	
83-32-9	Acenaphthene	ND	90	
51-28-5	2,4-Dinitrophenol	ND	900	
100-02-7	4-Nitrophenol	ND	230	
608-93-5	Pentachlorobenzene	ND	230	
132-64-9	Dibenzofuran	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	230	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	230	
84-66-2	Diethylphthalate	ND	230	
86-73-7	Fluorene	ND	90	
7005-72-3	4-Chlorophenyl-phenylether	ND	230	
100-01-6	4-Nitroaniline	ND	230	
534-52-1	4,6-Dinitro-2-methylphenol	ND	450	
86-30-6	N-Nitrosodiphenylamine	ND	230	
103-33-3	Azobenzene	ND	230	
62-44-2	Phenacetin	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	230	
118-74-1	Hexachlorobenzene	ND	230	
87-86-5	Pentachlorophenol	ND	450	
82-68-8	Pentachloronitrobenzene	ND	230	
85-01-8	Phenanthrene	640	90	
120-12-7	Anthracene	180	90	
86-74-8	Carbazole	ND	230	
84-74-2	Di-n-butylphthalate	ND	230	
56-57-5	4-nitroquinoline-1-oxide	ND	900	
465-73-6	Isodrin	ND	230	
206-44-0	Fluoranthene	1100	90	
92-87-5	Benzidine	ND	230	
129-00-0	Pyrene	800	90	
510-15-6	Chlorobenzilate	ND	230	
85-68-7	Butylbenzylphthalate	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	230	
56-55-3	Benzo(a)anthracene	550	90	
218-01-9	Chrysene	620	90	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	230	
117-84-0	Di-n-octyl phthalate	ND	230	
205-99-2	Benzo(b)fluoranthene	510	90	
207-08-9	Benzo(k)fluoranthene	410	90	
50-32-8	Benzo(a)pyrene	510	90	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0043	Lab Sample ID:	AB87581
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	91%
Dry Weight Prepared:	11.093 grams	Extract Dilution:	1
Wet Weight Prepared:	12.256 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	230	
193-39-5	Indeno(1,2,3-cd)pyrene	280	90	
53-70-3	Dibenz(a,h)anthracene	120	90	
191-24-2	Benzo(g,h,i)perylene	290	90	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	58	35 - 102
Phenol-d6 (SS2)	68	41 - 106
Nitrobenzene-d5 (SS3)	60	38 - 106
2-Fluorobiphenyl (SS4)	70	38 - 91
2,4,6-Tribromophenol (SS5)	63	31 - 102
p-Terphenyl-d14 (SS6)	65	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0044	Lab Sample ID:	AB87582
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	85%
Dry Weight Prepared:	12.123 grams	Extract Dilution:	1
Wet Weight Prepared:	14.233 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	210	
110-86-1	Pyridine	ND	210	
66-27-3	Methyl methanesulfonate	ND	210	
62-50-0	Ethyl methanesulfonate	ND	210	
108-95-2	Phenol	ND	210	
62-53-3	Aniline	ND	210	
111-44-4	Bis(2-Chloroethyl)ether	ND	210	
95-57-8	2-Chlorophenol	ND	210	
541-73-1	1,3-Dichlorobenzene	ND	210	
106-46-7	1,4-Dichlorobenzene	ND	210	
100-51-6	Benzyl alcohol	ND	210	
95-50-1	1,2-Dichlorobenzene	ND	210	
95-48-7	2-Methylphenol	ND	210	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	210	
98-86-2	Acetophenone	ND	210	
108-39-4/106-44-5	3&4-Methylphenol	ND	410	
621-64-7	N-nitroso-di-n-propylamine	ND	210	
67-72-1	Hexachloroethane	ND	210	
98-95-3	Nitrobenzene	ND	210	
78-59-1	Isophorone	ND	210	
88-75-5	2-Nitrophenol	ND	210	
105-67-9	2,4-dimethylphenol	ND	210	
111-91-1	bis(-2-Chloroethoxy)methane	ND	210	
65-85-0	Benzoic acid	ND	210	
120-83-2	2,4-Dichlorophenol	ND	210	
120-82-1	1,2,4-Trichlorobenzene	ND	210	
91-20-3	Naphthalene	ND	82	
87-65-0	2,6-Dichlorophenol	ND	210	
106-47-8	4-Chloroaniline	ND	210	
1888-71-7	Hexachloropropene	ND	210	
87-68-3	Hexachlorobutadiene	ND	210	
59-50-7	4-Chloro-3-methylphenol	ND	210	
120-58-1	Isosafrole	ND	210	
91-57-6	2-Methylnaphthalene	ND	82	
90-12-0	1-Methylnaphthalene	ND	82	
77-47-4	Hexachlorocyclopentadiene	ND	210	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	
88-06-2	2,4,6-Trichlorophenol	ND	210	
95-95-4	2,4,5-Trichlorophenol	ND	210	
94-59-7	Safrole	ND	210	
91-58-7	2-Chloronaphthalene	ND	210	
88-74-4	2-Nitroaniline	ND	210	
130-15-4	1,4-Naphthoquinone	ND	210	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0044	Lab Sample ID:	AB87582
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	85%
Dry Weight Prepared:	12.123 grams	Extract Dilution:	1
Wet Weight Prepared:	14.233 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	210	
99-65-0	1,3-Dinitrobenzene	ND	210	
606-20-2	2,6-Dinitrotoluene	ND	210	
208-96-8	Acenaphthylene	ND	82	
99-09-2	3-Nitroaniline	ND	210	
83-32-9	Acenaphthene	ND	82	
51-28-5	2,4-Dinitrophenol	ND	830	
100-02-7	4-Nitrophenol	ND	210	
608-93-5	Pentachlorobenzene	ND	210	
132-64-9	Dibenzofuran	ND	210	
121-14-2	2,4-Dinitrotoluene	ND	210	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	
84-66-2	Diethylphthalate	ND	210	
86-73-7	Fluorene	ND	82	
7005-72-3	4-Chlorophenyl-phenylether	ND	210	
100-01-6	4-Nitroaniline	ND	210	
534-52-1	4,6-Dinitro-2-methylphenol	ND	410	
86-30-6	N-Nitrosodiphenylamine	ND	210	
103-33-3	Azobenzene	ND	210	
62-44-2	Phenacetin	ND	210	
101-55-3	4-Bromophenyl-phenylether	ND	210	
118-74-1	Hexachlorobenzene	ND	210	
87-86-5	Pentachlorophenol	ND	410	
82-68-8	Pentachloronitrobenzene	ND	210	
85-01-8	Phenanthrene	160	82	
120-12-7	Anthracene	ND	82	
86-74-8	Carbazole	ND	210	
84-74-2	Di-n-butylphthalate	ND	210	
56-57-5	4-nitroquinoline-1-oxide	ND	830	
465-73-6	Isodrin	ND	210	
206-44-0	Fluoranthene	330	82	
92-87-5	Benzidine	ND	210	
129-00-0	Pyrene	260	82	
510-15-6	Chlorobenzilate	ND	210	
85-68-7	Butylbenzylphthalate	ND	210	
91-94-1	3,3'-Dichlorobenzidine	ND	210	
56-55-3	Benzo(a)anthracene	150	82	
218-01-9	Chrysene	190	82	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	210	
117-84-0	Di-n-octyl phthalate	ND	210	
205-99-2	Benzo(b)fluoranthene	150	82	
207-08-9	Benzo(k)fluoranthene	130	82	
50-32-8	Benzo(a)pyrene	160	82	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0044	Lab Sample ID:	AB87582
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	85%
Dry Weight Prepared:	12.123 grams	Extract Dilution:	1
Wet Weight Prepared:	14.233 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	210	
193-39-5	Indeno(1,2,3-cd)pyrene	97	82	
53-70-3	Dibenz(a,h)anthracene	ND	82	
191-24-2	Benzo(g,h,i)perylene	110	82	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	55	35 - 102
Phenol-d6 (SS2)	61	41 - 106
Nitrobenzene-d5 (SS3)	54	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	69	31 - 102
p-Terphenyl-d14 (SS6)	59	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

**McGoldrick Paper Co - Hindsdale, NH**

**Laboratory Blank**

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	100%
Dry Weight Prepared:	10.361 grams	Extract Dilution:	1
Wet Weight Prepared:	10.369 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration ug/Kg</b>	<b>RL ug/Kg</b>	<b>Qualifier</b>
-------------------	-----------------	--------------------------------	---------------------	------------------

McGoldrick Paper Co - Hindsdale, NH

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	100%
Dry Weight Prepared:	10.361 grams	Extract Dilution:	1
Wet Weight Prepared:	10.369 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	240	
110-86-1	Pyridine	ND	240	
66-27-3	Methyl methanesulfonate	ND	240	
62-50-0	Ethyl methanesulfonate	ND	240	
108-95-2	Phenol	ND	240	
62-53-3	Aniline	ND	240	
111-44-4	Bis(2-Chloroethyl)ether	ND	240	
95-57-8	2-Chlorophenol	ND	240	
541-73-1	1,3-Dichlorobenzene	ND	240	
106-46-7	1,4-Dichlorobenzene	ND	240	
100-51-6	Benzyl alcohol	ND	240	
95-50-1	1,2-Dichlorobenzene	ND	240	
95-48-7	2-Methylphenol	ND	240	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	240	
98-86-2	Acetophenone	ND	240	
108-39-4/106-44-5	3&4-Methylphenol	ND	480	
621-64-7	N-nitroso-di-n-propylamine	ND	240	
67-72-1	Hexachloroethane	ND	240	
98-95-3	Nitrobenzene	ND	240	
78-59-1	Isophorone	ND	240	
88-75-5	2-Nitrophenol	ND	240	
105-67-9	2,4-dimethylphenol	ND	240	
111-91-1	bis(-2-Chloroethoxy)methane	ND	240	
65-85-0	Benzoic acid	ND	240	
120-83-2	2,4-Dichlorophenol	ND	240	
120-82-1	1,2,4-Trichlorobenzene	ND	240	
91-20-3	Naphthalene	ND	96	
87-65-0	2,6-Dichlorophenol	ND	240	
106-47-8	4-Chloroaniline	ND	240	
1888-71-7	Hexachloropropene	ND	240	
87-68-3	Hexachlorobutadiene	ND	240	
59-50-7	4-Chloro-3-methylphenol	ND	240	
120-58-1	Isosafrole	ND	240	
91-57-6	2-Methylnaphthalene	ND	96	
90-12-0	1-Methylnaphthalene	ND	96	
77-47-4	Hexachlorocyclopentadiene	ND	240	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	240	
88-06-2	2,4,6-Trichlorophenol	ND	240	
95-95-4	2,4,5-Trichlorophenol	ND	240	
94-59-7	Safrole	ND	240	
91-58-7	2-Chloronaphthalene	ND	240	
88-74-4	2-Nitroaniline	ND	240	
130-15-4	1,4-Naphthoquinone	ND	240	

McGoldrick Paper Co - Hindsdale, NH

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	100%
Dry Weight Prepared:	10.361 grams	Extract Dilution:	1
Wet Weight Prepared:	10.369 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	240	
99-65-0	1,3-Dinitrobenzene	ND	240	
606-20-2	2,6-Dinitrotoluene	ND	240	
208-96-8	Acenaphthylene	ND	96	
99-09-2	3-Nitroaniline	ND	240	
83-32-9	Acenaphthene	ND	96	
51-28-5	2,4-Dinitrophenol	ND	965	
100-02-7	4-Nitrophenol	ND	240	
608-93-5	Pentachlorobenzene	ND	240	
132-64-9	Dibenzofuran	ND	240	
121-14-2	2,4-Dinitrotoluene	ND	240	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	240	
84-66-2	Diethylphthalate	ND	240	
86-73-7	Fluorene	ND	96	
7005-72-3	4-Chlorophenyl-phenylether	ND	240	
100-01-6	4-Nitroaniline	ND	240	
534-52-1	4,6-Dinitro-2-methylphenol	ND	480	
86-30-6	N-Nitrosodiphenylamine	ND	240	
103-33-3	Azobenzene	ND	240	
62-44-2	Phenacetin	ND	240	
101-55-3	4-Bromophenyl-phenylether	ND	240	
118-74-1	Hexachlorobenzene	ND	240	
87-86-5	Pentachlorophenol	ND	480	
82-68-8	Pentachloronitrobenzene	ND	240	
85-01-8	Phenanthrene	ND	96	
120-12-7	Anthracene	ND	96	
86-74-8	Carbazole	ND	240	
84-74-2	Di-n-butylphthalate	ND	240	
56-57-5	4-nitroquinoline-1-oxide	ND	965	
465-73-6	Isodrin	ND	240	
206-44-0	Fluoranthene	ND	96	
92-87-5	Benzidine	ND	240	
129-00-0	Pyrene	ND	96	
510-15-6	Chlorobenzilate	ND	240	
85-68-7	Butylbenzylphthalate	ND	240	
91-94-1	3,3'-Dichlorobenzidine	ND	240	
56-55-3	Benzo(a)anthracene	ND	96	
218-01-9	Chrysene	ND	96	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	240	
117-84-0	Di-n-octyl phthalate	ND	240	
205-99-2	Benzo(b)fluoranthene	ND	96	
207-08-9	Benzo(k)fluoranthene	ND	96	
50-32-8	Benzo(a)pyrene	ND	96	

McGoldrick Paper Co - Hindsdale, NH

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	100%
Dry Weight Prepared:	10.361 grams	Extract Dilution:	1
Wet Weight Prepared:	10.369 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	240	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	96	
53-70-3	Dibenz(a,h)anthracene	ND	96	
191-24-2	Benzo(g,h,i)perylene	ND	96	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	80	35 - 107
Phenol-d6 (SS2)	81	40 - 109
Nitrobenzene-d5 (SS3)	55	30 - 113
2-Fluorobiphenyl (SS4)	53	34 - 112
2,4,6-Tribromophenol (SS5)	83	34 - 130
p-Terphenyl-d14 (SS6)	57	20 - 143

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

62-75-9	N-nitrosodimethylamine	ND	230
110-86-1	Pyridine	ND	230
66-27-3	Methyl methanesulfonate	ND	230
62-50-0	Ethyl methanesulfonate	ND	230
108-95-2	Phenol	ND	230
62-53-3	Aniline	ND	230
111-44-4	Bis(2-Chloroethyl)ether	ND	230
95-57-8	2-Chlorophenol	ND	230
541-73-1	1,3-Dichlorobenzene	ND	230
106-46-7	1,4-Dichlorobenzene	ND	230
100-51-6	Benzyl alcohol	ND	230
95-50-1	1,2-Dichlorobenzene	ND	230
95-48-7	2-Methylphenol	ND	230
108-60-1	2,2'-oxybis(1-chloropropane)	ND	230
98-86-2	Acetophenone	ND	230
108-39-4/106-44-5	3&4-Methylphenol	ND	460
621-64-7	N-nitroso-di-n-propylamine	ND	230
67-72-1	Hexachloroethane	ND	230
98-95-3	Nitrobenzene	ND	230
78-59-1	Isophorone	ND	230
88-75-5	2-Nitrophenol	ND	230
105-67-9	2,4-dimethylphenol	ND	230
111-91-1	bis(-2-Chloroethoxy)methane	ND	230

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0045  
Date of Collection: 8/18/2020  
Date of Preparation: 8/25/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 10.908 grams  
Wet Weight Prepared: 12.035 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87583  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 91%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
65-85-0	Benzoic acid	ND	230	
120-83-2	2,4-Dichlorophenol	ND	230	
120-82-1	1,2,4-Trichlorobenzene	ND	230	
91-20-3	Naphthalene	150	92	
87-65-0	2,6-Dichlorophenol	ND	230	
106-47-8	4-Chloroaniline	ND	230	
1888-71-7	Hexachloropropene	ND	230	
87-68-3	Hexachlorobutadiene	ND	230	
59-50-7	4-Chloro-3-methylphenol	ND	230	
120-58-1	Isosafrole	ND	230	
91-57-6	2-Methylnaphthalene	140	92	
90-12-0	1-Methylnaphthalene	ND	92	
77-47-4	Hexachlorocyclopentadiene	ND	230	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	230	
88-06-2	2,4,6-Trichlorophenol	ND	230	
95-95-4	2,4,5-Trichlorophenol	ND	230	
94-59-7	Safrole	ND	230	
91-58-7	2-Chloronaphthalene	ND	230	
88-74-4	2-Nitroaniline	ND	230	
130-15-4	1,4-Naphthoquinone	ND	230	
131-11-3	Dimethyl phthalate	ND	230	
99-65-0	1,3-Dinitrobenzene	ND	230	
606-20-2	2,6-Dinitrotoluene	ND	230	
208-96-8	Acenaphthylene	120	92	
99-09-2	3-Nitroaniline	ND	230	
83-32-9	Acenaphthene	93	92	
51-28-5	2,4-Dinitrophenol	ND	920	
100-02-7	4-Nitrophenol	ND	230	
608-93-5	Pentachlorobenzene	ND	230	
132-64-9	Dibenzofuran	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	230	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	230	
84-66-2	Diethylphthalate	ND	230	
86-73-7	Fluorene	100	92	
7005-72-3	4-Chlorophenyl-phenylether	ND	230	
100-01-6	4-Nitroaniline	ND	230	
534-52-1	4,6-Dinitro-2-methylphenol	ND	460	
86-30-6	N-Nitrosodiphenylamine	ND	230	
103-33-3	Azobenzene	ND	230	
62-44-2	Phenacetin	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	230	
118-74-1	Hexachlorobenzene	ND	230	
87-86-5	Pentachlorophenol	ND	460	



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0045	Lab Sample ID:	AB87583
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	91%
Dry Weight Prepared:	10.908 grams	Extract Dilution:	1
Wet Weight Prepared:	12.035 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
82-68-8	Pentachloronitrobenzene	ND	230	
85-01-8	Phenanthrene	1000	92	
120-12-7	Anthracene	180	92	
86-74-8	Carbazole	ND	230	
84-74-2	Di-n-butylphthalate	ND	230	
56-57-5	4-nitroquinoline-1-oxide	ND	920	
465-73-6	Isodrin	ND	230	
206-44-0	Fluoranthene	1400	92	
92-87-5	Benzidine	ND	230	
129-00-0	Pyrene	780	92	
510-15-6	Chlorobenzilate	ND	230	
85-68-7	Butylbenzylphthalate	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	230	
56-55-3	Benzo(a)anthracene	510	92	
218-01-9	Chrysene	630	92	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	230	
117-84-0	Di-n-octyl phthalate	ND	230	
205-99-2	Benzo(b)fluoranthene	560	92	
207-08-9	Benzo(k)fluoranthene	310	92	
50-32-8	Benzo(a)pyrene	490	92	
56-49-5	3-Methylcholanthrene	ND	230	
193-39-5	Indeno(1,2,3-cd)pyrene	290	92	
53-70-3	Dibenz(a,h)anthracene	92	92	
191-24-2	Benzo(g,h,i)perylene	310	92	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	59	35 - 102
Phenol-d6 (SS2)	65	41 - 106
Nitrobenzene-d5 (SS3)	57	38 - 106
2-Fluorobiphenyl (SS4)	65	38 - 91
2,4,6-Tribromophenol (SS5)	83	31 - 102
p-Terphenyl-d14 (SS6)	58	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0046	Lab Sample ID:	AB87584
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	80%
Dry Weight Prepared:	9.633 grams	Extract Dilution:	1
Wet Weight Prepared:	12.043 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	260	
110-86-1	Pyridine	ND	260	
66-27-3	Methyl methanesulfonate	ND	260	
62-50-0	Ethyl methanesulfonate	ND	260	
108-95-2	Phenol	ND	260	
62-53-3	Aniline	ND	260	
111-44-4	Bis(2-Chloroethyl)ether	ND	260	
95-57-8	2-Chlorophenol	ND	260	
541-73-1	1,3-Dichlorobenzene	ND	260	
106-46-7	1,4-Dichlorobenzene	ND	260	
100-51-6	Benzyl alcohol	ND	260	
95-50-1	1,2-Dichlorobenzene	ND	260	
95-48-7	2-Methylphenol	ND	260	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	260	
98-86-2	Acetophenone	ND	260	
108-39-4/106-44-5	3&4-Methylphenol	ND	520	
621-64-7	N-nitroso-di-n-propylamine	ND	260	
67-72-1	Hexachloroethane	ND	260	
98-95-3	Nitrobenzene	ND	260	
78-59-1	Isophorone	ND	260	
88-75-5	2-Nitrophenol	ND	260	
105-67-9	2,4-dimethylphenol	ND	260	
111-91-1	bis(-2-Chloroethoxy)methane	ND	260	
65-85-0	Benzoic acid	ND	260	
120-83-2	2,4-Dichlorophenol	ND	260	
120-82-1	1,2,4-Trichlorobenzene	ND	260	
91-20-3	Naphthalene	ND	100	
87-65-0	2,6-Dichlorophenol	ND	260	
106-47-8	4-Chloroaniline	ND	260	
1888-71-7	Hexachloropropene	ND	260	
87-68-3	Hexachlorobutadiene	ND	260	
59-50-7	4-Chloro-3-methylphenol	ND	260	
120-58-1	Isosafrole	ND	260	
91-57-6	2-Methylnaphthalene	ND	100	
90-12-0	1-Methylnaphthalene	ND	100	
77-47-4	Hexachlorocyclopentadiene	ND	260	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	260	
88-06-2	2,4,6-Trichlorophenol	ND	260	
95-95-4	2,4,5-Trichlorophenol	ND	260	
94-59-7	Safrole	ND	260	
91-58-7	2-Chloronaphthalene	ND	260	
88-74-4	2-Nitroaniline	ND	260	
130-15-4	1,4-Naphthoquinone	ND	260	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0046	Lab Sample ID:	AB87584
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	80%
Dry Weight Prepared:	9.633 grams	Extract Dilution:	1
Wet Weight Prepared:	12.043 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	260	
99-65-0	1,3-Dinitrobenzene	ND	260	
606-20-2	2,6-Dinitrotoluene	ND	260	
208-96-8	Acenaphthylene	ND	100	
99-09-2	3-Nitroaniline	ND	260	
83-32-9	Acenaphthene	ND	100	
51-28-5	2,4-Dinitrophenol	ND	1000	
100-02-7	4-Nitrophenol	ND	260	
608-93-5	Pentachlorobenzene	ND	260	
132-64-9	Dibenzofuran	ND	260	
121-14-2	2,4-Dinitrotoluene	ND	260	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	260	
84-66-2	Diethylphthalate	ND	260	
86-73-7	Fluorene	ND	100	
7005-72-3	4-Chlorophenyl-phenylether	ND	260	
100-01-6	4-Nitroaniline	ND	260	
534-52-1	4,6-Dinitro-2-methylphenol	ND	520	
86-30-6	N-Nitrosodiphenylamine	ND	260	
103-33-3	Azobenzene	ND	260	
62-44-2	Phenacetin	ND	260	
101-55-3	4-Bromophenyl-phenylether	ND	260	
118-74-1	Hexachlorobenzene	ND	260	
87-86-5	Pentachlorophenol	ND	520	
82-68-8	Pentachloronitrobenzene	ND	260	
85-01-8	Phenanthrene	330	100	
120-12-7	Anthracene	ND	100	
86-74-8	Carbazole	ND	260	
84-74-2	Di-n-butylphthalate	ND	260	
56-57-5	4-nitroquinoline-1-oxide	ND	1000	
465-73-6	Isodrin	ND	260	
206-44-0	Fluoranthene	790	100	
92-87-5	Benzidine	ND	260	
129-00-0	Pyrene	570	100	
510-15-6	Chlorobenzilate	ND	260	
85-68-7	Butylbenzylphthalate	ND	260	
91-94-1	3,3'-Dichlorobenzidine	ND	260	
56-55-3	Benzo(a)anthracene	390	100	
218-01-9	Chrysene	410	100	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	260	
117-84-0	Di-n-octyl phthalate	ND	260	
205-99-2	Benzo(b)fluoranthene	390	100	
207-08-9	Benzo(k)fluoranthene	290	100	
50-32-8	Benzo(a)pyrene	410	100	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0046	Lab Sample ID:	AB87584
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	80%
Dry Weight Prepared:	9.633 grams	Extract Dilution:	1
Wet Weight Prepared:	12.043 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	260	
193-39-5	Indeno(1,2,3-cd)pyrene	220	100	
53-70-3	Dibenz(a,h)anthracene	ND	100	
191-24-2	Benzo(g,h,i)perylene	230	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	55	35 - 102
Phenol-d6 (SS2)	60	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	78	31 - 102
p-Terphenyl-d14 (SS6)	60	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0047  
Date of Collection: 8/18/2020  
Date of Preparation: 8/25/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 11.617 grams  
Wet Weight Prepared: 13.778 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87585  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 84%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	220	
110-86-1	Pyridine	ND	220	
66-27-3	Methyl methanesulfonate	ND	220	
62-50-0	Ethyl methanesulfonate	ND	220	
108-95-2	Phenol	ND	220	
62-53-3	Aniline	ND	220	
111-44-4	Bis(2-Chloroethyl)ether	ND	220	
95-57-8	2-Chlorophenol	ND	220	
541-73-1	1,3-Dichlorobenzene	ND	220	
106-46-7	1,4-Dichlorobenzene	ND	220	
100-51-6	Benzyl alcohol	ND	220	
95-50-1	1,2-Dichlorobenzene	ND	220	
95-48-7	2-Methylphenol	ND	220	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	220	
98-86-2	Acetophenone	ND	220	
108-39-4/106-44-5	3&4-Methylphenol	ND	430	
621-64-7	N-nitroso-di-n-propylamine	ND	220	
67-72-1	Hexachloroethane	ND	220	
98-95-3	Nitrobenzene	ND	220	
78-59-1	Isophorone	ND	220	
88-75-5	2-Nitrophenol	ND	220	
105-67-9	2,4-dimethylphenol	ND	220	
111-91-1	bis(-2-Chloroethoxy)methane	ND	220	
65-85-0	Benzoic acid	ND	220	
120-83-2	2,4-Dichlorophenol	ND	220	
120-82-1	1,2,4-Trichlorobenzene	ND	220	
91-20-3	Naphthalene	ND	86	
87-65-0	2,6-Dichlorophenol	ND	220	
106-47-8	4-Chloroaniline	ND	220	
1888-71-7	Hexachloropropene	ND	220	
87-68-3	Hexachlorobutadiene	ND	220	
59-50-7	4-Chloro-3-methylphenol	ND	220	
120-58-1	Isosafrole	ND	220	
91-57-6	2-Methylnaphthalene	ND	86	
90-12-0	1-Methylnaphthalene	ND	86	
77-47-4	Hexachlorocyclopentadiene	ND	220	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	
88-06-2	2,4,6-Trichlorophenol	ND	220	
95-95-4	2,4,5-Trichlorophenol	ND	220	
94-59-7	Safrole	ND	220	
91-58-7	2-Chloronaphthalene	ND	220	
88-74-4	2-Nitroaniline	ND	220	
130-15-4	1,4-Naphthoquinone	ND	220	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0047  
Date of Collection: 8/18/2020  
Date of Preparation: 8/25/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 11.617 grams  
Wet Weight Prepared: 13.778 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87585  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 84%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	220	
99-65-0	1,3-Dinitrobenzene	ND	220	
606-20-2	2,6-Dinitrotoluene	ND	220	
208-96-8	Acenaphthylene	170	86	
99-09-2	3-Nitroaniline	ND	220	
83-32-9	Acenaphthene	ND	86	
51-28-5	2,4-Dinitrophenol	ND	860	
100-02-7	4-Nitrophenol	ND	220	
608-93-5	Pentachlorobenzene	ND	220	
132-64-9	Dibenzofuran	ND	220	
121-14-2	2,4-Dinitrotoluene	ND	220	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	
84-66-2	Diethylphthalate	ND	220	
86-73-7	Fluorene	ND	86	
7005-72-3	4-Chlorophenyl-phenylether	ND	220	
100-01-6	4-Nitroaniline	ND	220	
534-52-1	4,6-Dinitro-2-methylphenol	ND	430	
86-30-6	N-Nitrosodiphenylamine	ND	220	
103-33-3	Azobenzene	ND	220	
62-44-2	Phenacetin	ND	220	
101-55-3	4-Bromophenyl-phenylether	ND	220	
118-74-1	Hexachlorobenzene	ND	220	
87-86-5	Pentachlorophenol	ND	430	
82-68-8	Pentachloronitrobenzene	ND	220	
85-01-8	Phenanthrene	380	86	
120-12-7	Anthracene	140	86	
86-74-8	Carbazole	ND	220	
84-74-2	Di-n-butylphthalate	ND	220	
56-57-5	4-nitroquinoline-1-oxide	ND	860	
465-73-6	Isodrin	ND	220	
206-44-0	Fluoranthene	1200	86	
92-87-5	Benzidine	ND	220	
129-00-0	Pyrene	820	86	
510-15-6	Chlorobenzilate	ND	220	
85-68-7	Butylbenzylphthalate	ND	220	
91-94-1	3,3'-Dichlorobenzidine	ND	220	
56-55-3	Benzo(a)anthracene	540	86	
218-01-9	Chrysene	690	86	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	220	
117-84-0	Di-n-octyl phthalate	ND	220	
205-99-2	Benzo(b)fluoranthene	680	86	
207-08-9	Benzo(k)fluoranthene	510	86	
50-32-8	Benzo(a)pyrene	620	86	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0047	Lab Sample ID:	AB87585
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	84%
Dry Weight Prepared:	11.617 grams	Extract Dilution:	1
Wet Weight Prepared:	13.778 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	220	
193-39-5	Indeno(1,2,3-cd)pyrene	370	86	
53-70-3	Dibenz(a,h)anthracene	130	86	
191-24-2	Benzo(g,h,i)perylene	390	86	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	55	35 - 102
Phenol-d6 (SS2)	63	41 - 106
Nitrobenzene-d5 (SS3)	55	38 - 106
2-Fluorobiphenyl (SS4)	60	38 - 91
2,4,6-Tribromophenol (SS5)	83	31 - 102
p-Terphenyl-d14 (SS6)	65	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0048  
Date of Collection: 8/18/2020  
Date of Preparation: 8/25/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 12.463 grams  
Wet Weight Prepared: 14.306 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87586  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 87%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	200	
110-86-1	Pyridine	ND	200	
66-27-3	Methyl methanesulfonate	ND	200	
62-50-0	Ethyl methanesulfonate	ND	200	
108-95-2	Phenol	ND	200	
62-53-3	Aniline	ND	200	
111-44-4	Bis(2-Chloroethyl)ether	ND	200	
95-57-8	2-Chlorophenol	ND	200	
541-73-1	1,3-Dichlorobenzene	ND	200	
106-46-7	1,4-Dichlorobenzene	ND	200	
100-51-6	Benzyl alcohol	ND	200	
95-50-1	1,2-Dichlorobenzene	ND	200	
95-48-7	2-Methylphenol	ND	200	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	200	
98-86-2	Acetophenone	ND	200	
108-39-4/106-44-5	3&4-Methylphenol	ND	400	
621-64-7	N-nitroso-di-n-propylamine	ND	200	
67-72-1	Hexachloroethane	ND	200	
98-95-3	Nitrobenzene	ND	200	
78-59-1	Isophorone	ND	200	
88-75-5	2-Nitrophenol	ND	200	
105-67-9	2,4-dimethylphenol	ND	200	
111-91-1	bis(-2-Chloroethoxy)methane	ND	200	
65-85-0	Benzoic acid	ND	200	
120-83-2	2,4-Dichlorophenol	ND	200	
120-82-1	1,2,4-Trichlorobenzene	ND	200	
91-20-3	Naphthalene	180	80	
87-65-0	2,6-Dichlorophenol	ND	200	
106-47-8	4-Chloroaniline	ND	200	
1888-71-7	Hexachloropropene	ND	200	
87-68-3	Hexachlorobutadiene	ND	200	
59-50-7	4-Chloro-3-methylphenol	ND	200	
120-58-1	Isosafrole	ND	200	
91-57-6	2-Methylnaphthalene	120	80	
90-12-0	1-Methylnaphthalene	110	80	
77-47-4	Hexachlorocyclopentadiene	ND	200	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	
88-06-2	2,4,6-Trichlorophenol	ND	200	
95-95-4	2,4,5-Trichlorophenol	ND	200	
94-59-7	Safrole	ND	200	
91-58-7	2-Chloronaphthalene	ND	200	
88-74-4	2-Nitroaniline	ND	200	
130-15-4	1,4-Naphthoquinone	ND	200	



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID: S50022NH-0048  
Date of Collection: 8/18/2020  
Date of Preparation: 8/25/2020  
Date of Analysis: 8/25/2020  
Dry Weight Prepared: 12.463 grams  
Wet Weight Prepared: 14.306 grams  
Volume Extracted: N/A  
Final Volume: 1 mL

Lab Sample ID: AB87586  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 87%  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	200	
99-65-0	1,3-Dinitrobenzene	ND	200	
606-20-2	2,6-Dinitrotoluene	ND	200	
208-96-8	Acenaphthylene	390	80	
99-09-2	3-Nitroaniline	ND	200	
83-32-9	Acenaphthene	250	80	
51-28-5	2,4-Dinitrophenol	ND	800	
100-02-7	4-Nitrophenol	ND	200	
608-93-5	Pentachlorobenzene	ND	200	
132-64-9	Dibenzofuran	340	200	
121-14-2	2,4-Dinitrotoluene	ND	200	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	
84-66-2	Diethylphthalate	ND	200	
86-73-7	Fluorene	360	80	
7005-72-3	4-Chlorophenyl-phenylether	ND	200	
100-01-6	4-Nitroaniline	ND	200	
534-52-1	4,6-Dinitro-2-methylphenol	ND	400	
86-30-6	N-Nitrosodiphenylamine	ND	200	
103-33-3	Azobenzene	ND	200	
62-44-2	Phenacetin	ND	200	
101-55-3	4-Bromophenyl-phenylether	ND	200	
118-74-1	Hexachlorobenzene	ND	200	
87-86-5	Pentachlorophenol	ND	400	
82-68-8	Pentachloronitrobenzene	ND	200	
85-01-8	Phenanthrene	4900	80	
120-12-7	Anthracene	670	80	
86-74-8	Carbazole	630	200	
84-74-2	Di-n-butylphthalate	ND	200	
56-57-5	4-nitroquinoline-1-oxide	ND	800	
465-73-6	Isodrin	ND	200	
206-44-0	Fluoranthene	5900	80	
92-87-5	Benzidine	ND	200	
129-00-0	Pyrene	3600	80	
510-15-6	Chlorobenzilate	ND	200	
85-68-7	Butylbenzylphthalate	ND	200	
91-94-1	3,3'-Dichlorobenzidine	ND	200	
56-55-3	Benzo(a)anthracene	1600	80	
218-01-9	Chrysene	2300	80	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	200	
117-84-0	Di-n-octyl phthalate	ND	200	
205-99-2	Benzo(b)fluoranthene	1900	80	
207-08-9	Benzo(k)fluoranthene	1500	80	
50-32-8	Benzo(a)pyrene	1800	80	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0048	Lab Sample ID:	AB87586
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	87%
Dry Weight Prepared:	12.463 grams	Extract Dilution:	1
Wet Weight Prepared:	14.306 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	200	
193-39-5	Indeno(1,2,3-cd)pyrene	1000	80	
53-70-3	Dibenz(a,h)anthracene	340	80	
191-24-2	Benzo(g,h,i)perylene	1000	80	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	62	35 - 102
Phenol-d6 (SS2)	67	41 - 106
Nitrobenzene-d5 (SS3)	60	38 - 106
2-Fluorobiphenyl (SS4)	68	38 - 91
2,4,6-Tribromophenol (SS5)	88	31 - 102
p-Terphenyl-d14 (SS6)	65	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

Tentatively Identified Compounds

4-((1E)-3-Hydroxy-1-propenyl)-2-methoxyphenol 1000 ppb J  
1-methyl-phenanthrene 1100 ppb J  
2-methyl-anthracene 1500 ppb J

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0049	Lab Sample ID:	AB87587
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	96%
Dry Weight Prepared:	12.517 grams	Extract Dilution:	1
Wet Weight Prepared:	13.087 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	200	
110-86-1	Pyridine	ND	200	
66-27-3	Methyl methanesulfonate	ND	200	
62-50-0	Ethyl methanesulfonate	ND	200	
108-95-2	Phenol	ND	200	
62-53-3	Aniline	ND	200	
111-44-4	Bis(2-Chloroethyl)ether	ND	200	
95-57-8	2-Chlorophenol	ND	200	
541-73-1	1,3-Dichlorobenzene	ND	200	
106-46-7	1,4-Dichlorobenzene	ND	200	
100-51-6	Benzyl alcohol	ND	200	
95-50-1	1,2-Dichlorobenzene	ND	200	
95-48-7	2-Methylphenol	ND	200	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	200	
98-86-2	Acetophenone	ND	200	
108-39-4/106-44-5	3&4-Methylphenol	ND	400	
621-64-7	N-nitroso-di-n-propylamine	ND	200	
67-72-1	Hexachloroethane	ND	200	
98-95-3	Nitrobenzene	ND	200	
78-59-1	Isophorone	ND	200	
88-75-5	2-Nitrophenol	ND	200	
105-67-9	2,4-dimethylphenol	ND	200	
111-91-1	bis(-2-Chloroethoxy)methane	ND	200	
65-85-0	Benzoic acid	8100	200	
120-83-2	2,4-Dichlorophenol	ND	200	
120-82-1	1,2,4-Trichlorobenzene	ND	200	
91-20-3	Naphthalene	ND	80	
87-65-0	2,6-Dichlorophenol	ND	200	
106-47-8	4-Chloroaniline	ND	200	
1888-71-7	Hexachloropropene	ND	200	
87-68-3	Hexachlorobutadiene	ND	200	
59-50-7	4-Chloro-3-methylphenol	ND	200	
120-58-1	Isosafrole	ND	200	
91-57-6	2-Methylnaphthalene	ND	80	
90-12-0	1-Methylnaphthalene	ND	80	
77-47-4	Hexachlorocyclopentadiene	ND	200	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	
88-06-2	2,4,6-Trichlorophenol	ND	200	
95-95-4	2,4,5-Trichlorophenol	ND	200	
94-59-7	Safrole	ND	200	
91-58-7	2-Chloronaphthalene	ND	200	
88-74-4	2-Nitroaniline	ND	200	
130-15-4	1,4-Naphthoquinone	ND	200	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0049	Lab Sample ID:	AB87587
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	96%
Dry Weight Prepared:	12.517 grams	Extract Dilution:	1
Wet Weight Prepared:	13.087 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	200	
99-65-0	1,3-Dinitrobenzene	ND	200	
606-20-2	2,6-Dinitrotoluene	ND	200	
208-96-8	Acenaphthylene	110	80	
99-09-2	3-Nitroaniline	ND	200	
83-32-9	Acenaphthene	ND	80	
51-28-5	2,4-Dinitrophenol	ND	800	
100-02-7	4-Nitrophenol	ND	200	
608-93-5	Pentachlorobenzene	ND	200	
132-64-9	Dibenzofuran	ND	200	
121-14-2	2,4-Dinitrotoluene	ND	200	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	
84-66-2	Diethylphthalate	ND	200	
86-73-7	Fluorene	ND	80	
7005-72-3	4-Chlorophenyl-phenylether	ND	200	
100-01-6	4-Nitroaniline	ND	200	
534-52-1	4,6-Dinitro-2-methylphenol	ND	400	
86-30-6	N-Nitrosodiphenylamine	ND	200	
103-33-3	Azobenzene	ND	200	
62-44-2	Phenacetin	ND	200	
101-55-3	4-Bromophenyl-phenylether	ND	200	
118-74-1	Hexachlorobenzene	ND	200	
87-86-5	Pentachlorophenol	ND	400	
82-68-8	Pentachloronitrobenzene	ND	200	
85-01-8	Phenanthrene	200	80	
120-12-7	Anthracene	ND	80	
86-74-8	Carbazole	ND	200	
84-74-2	Di-n-butylphthalate	ND	200	
56-57-5	4-nitroquinoline-1-oxide	ND	800	
465-73-6	Isodrin	ND	200	
206-44-0	Fluoranthene	470	80	
92-87-5	Benzidine	ND	200	
129-00-0	Pyrene	360	80	
510-15-6	Chlorobenzilate	ND	200	
85-68-7	Butylbenzylphthalate	ND	200	
91-94-1	3,3'-Dichlorobenzidine	ND	200	
56-55-3	Benzo(a)anthracene	210	80	
218-01-9	Chrysene	300	80	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	200	
117-84-0	Di-n-octyl phthalate	ND	200	
205-99-2	Benzo(b)fluoranthene	250	80	
207-08-9	Benzo(k)fluoranthene	200	80	
50-32-8	Benzo(a)pyrene	250	80	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0049	Lab Sample ID:	AB87587
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	96%
Dry Weight Prepared:	12.517 grams	Extract Dilution:	1
Wet Weight Prepared:	13.087 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	200	
193-39-5	Indeno(1,2,3-cd)pyrene	150	80	
53-70-3	Dibenz(a,h)anthracene	ND	80	
191-24-2	Benzo(g,h,i)perylene	160	80	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	62	35 - 102
Phenol-d6 (SS2)	66	41 - 106
Nitrobenzene-d5 (SS3)	57	38 - 106
2-Fluorobiphenyl (SS4)	62	38 - 91
2,4,6-Tribromophenol (SS5)	85	31 - 102
p-Terphenyl-d14 (SS6)	59	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0050	Lab Sample ID:	AB87588
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	94%
Dry Weight Prepared:	15.428 grams	Extract Dilution:	1
Wet Weight Prepared:	16.424 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	160	
110-86-1	Pyridine	ND	160	
66-27-3	Methyl methanesulfonate	ND	160	
62-50-0	Ethyl methanesulfonate	ND	160	
108-95-2	Phenol	ND	160	
62-53-3	Aniline	ND	160	
111-44-4	Bis(2-Chloroethyl)ether	ND	160	
95-57-8	2-Chlorophenol	ND	160	
541-73-1	1,3-Dichlorobenzene	ND	160	
106-46-7	1,4-Dichlorobenzene	ND	160	
100-51-6	Benzyl alcohol	ND	160	
95-50-1	1,2-Dichlorobenzene	ND	160	
95-48-7	2-Methylphenol	ND	160	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	160	
98-86-2	Acetophenone	ND	160	
108-39-4/106-44-5	3&4-Methylphenol	ND	320	
621-64-7	N-nitroso-di-n-propylamine	ND	160	
67-72-1	Hexachloroethane	ND	160	
98-95-3	Nitrobenzene	ND	160	
78-59-1	Isophorone	ND	160	
88-75-5	2-Nitrophenol	ND	160	
105-67-9	2,4-dimethylphenol	ND	160	
111-91-1	bis(-2-Chloroethoxy)methane	ND	160	
65-85-0	Benzoic acid	ND	160	
120-83-2	2,4-Dichlorophenol	ND	160	
120-82-1	1,2,4-Trichlorobenzene	ND	160	
91-20-3	Naphthalene	ND	65	
87-65-0	2,6-Dichlorophenol	ND	160	
106-47-8	4-Chloroaniline	ND	160	
1888-71-7	Hexachloropropene	ND	160	
87-68-3	Hexachlorobutadiene	ND	160	
59-50-7	4-Chloro-3-methylphenol	ND	160	
120-58-1	Isosafrole	ND	160	
91-57-6	2-Methylnaphthalene	ND	65	
90-12-0	1-Methylnaphthalene	ND	65	
77-47-4	Hexachlorocyclopentadiene	ND	160	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	160	
88-06-2	2,4,6-Trichlorophenol	ND	160	
95-95-4	2,4,5-Trichlorophenol	ND	160	
94-59-7	Safrole	ND	160	
91-58-7	2-Chloronaphthalene	ND	160	
88-74-4	2-Nitroaniline	ND	160	
130-15-4	1,4-Naphthoquinone	ND	160	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0050	Lab Sample ID:	AB87588
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	94%
Dry Weight Prepared:	15.428 grams	Extract Dilution:	1
Wet Weight Prepared:	16.424 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	160	
99-65-0	1,3-Dinitrobenzene	ND	160	
606-20-2	2,6-Dinitrotoluene	ND	160	
208-96-8	Acenaphthylene	340	65	
99-09-2	3-Nitroaniline	ND	160	
83-32-9	Acenaphthene	ND	65	
51-28-5	2,4-Dinitrophenol	ND	650	
100-02-7	4-Nitrophenol	ND	160	
608-93-5	Pentachlorobenzene	ND	160	
132-64-9	Dibenzofuran	ND	160	
121-14-2	2,4-Dinitrotoluene	ND	160	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	160	
84-66-2	Diethylphthalate	ND	160	
86-73-7	Fluorene	ND	65	
7005-72-3	4-Chlorophenyl-phenylether	ND	160	
100-01-6	4-Nitroaniline	ND	160	
534-52-1	4,6-Dinitro-2-methylphenol	ND	320	
86-30-6	N-Nitrosodiphenylamine	ND	160	
103-33-3	Azobenzene	ND	160	
62-44-2	Phenacetin	ND	160	
101-55-3	4-Bromophenyl-phenylether	ND	160	
118-74-1	Hexachlorobenzene	ND	160	
87-86-5	Pentachlorophenol	ND	320	
82-68-8	Pentachloronitrobenzene	ND	160	
85-01-8	Phenanthrene	830	65	
120-12-7	Anthracene	230	65	
86-74-8	Carbazole	ND	160	
84-74-2	Di-n-butylphthalate	ND	160	
56-57-5	4-nitroquinoline-1-oxide	ND	650	
465-73-6	Isodrin	ND	160	
206-44-0	Fluoranthene	1500	65	
92-87-5	Benzidine	ND	160	
129-00-0	Pyrene	1700	65	
510-15-6	Chlorobenzilate	ND	160	
85-68-7	Butylbenzylphthalate	ND	160	
91-94-1	3,3'-Dichlorobenzidine	ND	160	
56-55-3	Benzo(a)anthracene	1100	65	
218-01-9	Chrysene	1100	65	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	160	
117-84-0	Di-n-octyl phthalate	ND	160	
205-99-2	Benzo(b)fluoranthene	670	65	
207-08-9	Benzo(k)fluoranthene	600	65	
50-32-8	Benzo(a)pyrene	880	65	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0050	Lab Sample ID:	AB87588
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	94%
Dry Weight Prepared:	15.428 grams	Extract Dilution:	1
Wet Weight Prepared:	16.424 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	160	
193-39-5	Indeno(1,2,3-cd)pyrene	410	65	
53-70-3	Dibenz(a,h)anthracene	160	65	
191-24-2	Benzo(g,h,i)perylene	460	65	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	67	35 - 102
Phenol-d6 (SS2)	72	41 - 106
Nitrobenzene-d5 (SS3)	63	38 - 106
2-Fluorobiphenyl (SS4)	67	38 - 91
2,4,6-Tribromophenol (SS5)	89	31 - 102
p-Terphenyl-d14 (SS6)	68	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.



McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0052	Lab Sample ID:	AB87589
Date of Collection:	8/19/2020	Matrix:	Lab Sand
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	100%
Dry Weight Prepared:	30.352 grams	Extract Dilution:	1
Wet Weight Prepared:	30.352 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
62-75-9	N-nitrosodimethylamine	ND	82	
110-86-1	Pyridine	ND	82	
66-27-3	Methyl methanesulfonate	ND	82	
62-50-0	Ethyl methanesulfonate	ND	82	
108-95-2	Phenol	1400	82	
62-53-3	Aniline	28	82	
111-44-4	Bis(2-Chloroethyl)ether	990	82	
95-57-8	2-Chlorophenol	ND	82	
541-73-1	1,3-Dichlorobenzene	ND	82	
106-46-7	1,4-Dichlorobenzene	ND	82	
100-51-6	Benzyl alcohol	ND	82	
95-50-1	1,2-Dichlorobenzene	ND	82	
95-48-7	2-Methylphenol	ND	82	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	82	
98-86-2	Acetophenone	ND	82	
108-39-4/106-44-5	3&4-Methylphenol	ND	160	
621-64-7	N-nitroso-di-n-propylamine	ND	82	
67-72-1	Hexachloroethane	1400	82	
98-95-3	Nitrobenzene	570	82	
78-59-1	Isophorone	ND	82	
88-75-5	2-Nitrophenol	1100	82	
105-67-9	2,4-dimethylphenol	38	82	
111-91-1	bis(-2-Chloroethoxy)methane	ND	82	
65-85-0	Benzoic acid	ND	82	
120-83-2	2,4-Dichlorophenol	ND	82	
120-82-1	1,2,4-Trichlorobenzene	ND	82	
91-20-3	Naphthalene	1100	33	
87-65-0	2,6-Dichlorophenol	ND	82	
106-47-8	4-Chloroaniline	ND	82	
1888-71-7	Hexachloropropene	ND	82	
87-68-3	Hexachlorobutadiene	ND	82	
59-50-7	4-Chloro-3-methylphenol	ND	82	
120-58-1	Isosafrole	ND	82	
91-57-6	2-Methylnaphthalene	1500	33	
90-12-0	1-Methylnaphthalene	800	33	
77-47-4	Hexachlorocyclopentadiene	ND	82	
95-94-3	1,2,4,5-Tetrachlorobenzene	610	82	
88-06-2	2,4,6-Trichlorophenol	ND	82	
95-95-4	2,4,5-Trichlorophenol	2000	82	
94-59-7	Safrole	ND	82	
91-58-7	2-Chloronaphthalene	1100	82	
88-74-4	2-Nitroaniline	ND	82	
130-15-4	1,4-Naphthoquinone	ND	82	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0052	Lab Sample ID:	AB87589
Date of Collection:	8/19/2020	Matrix:	Lab Sand
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	100%
Dry Weight Prepared:	30.352 grams	Extract Dilution:	1
Wet Weight Prepared:	30.352 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
131-11-3	Dimethyl phthalate	ND	82	
99-65-0	1,3-Dinitrobenzene	ND	82	
606-20-2	2,6-Dinitrotoluene	ND	82	
208-96-8	Acenaphthylene	930	33	
99-09-2	3-Nitroaniline	ND	82	
83-32-9	Acenaphthene	870	33	
51-28-5	2,4-Dinitrophenol	ND	330	
100-02-7	4-Nitrophenol	880	82	
608-93-5	Pentachlorobenzene	ND	82	
132-64-9	Dibenzofuran	490	82	
121-14-2	2,4-Dinitrotoluene	840	82	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	82	
84-66-2	Diethylphthalate	650	82	
86-73-7	Fluorene	1100	33	
7005-72-3	4-Chlorophenyl-phenylether	ND	82	
100-01-6	4-Nitroaniline	ND	82	
534-52-1	4,6-Dinitro-2-methylphenol	ND	160	
86-30-6	N-Nitrosodiphenylamine	ND	82	
103-33-3	Azobenzene	ND	82	
62-44-2	Phenacetin	ND	82	
101-55-3	4-Bromophenyl-phenylether	ND	82	
118-74-1	Hexachlorobenzene	520	82	
87-86-5	Pentachlorophenol	ND	160	
82-68-8	Pentachloronitrobenzene	ND	82	
85-01-8	Phenanthrene	930	33	
120-12-7	Anthracene	1600	33	
86-74-8	Carbazole	ND	82	
84-74-2	Di-n-butylphthalate	ND	82	
56-57-5	4-nitroquinoline-1-oxide	ND	330	
465-73-6	Isodrin	ND	82	
206-44-0	Fluoranthene	1000	33	
92-87-5	Benzidine	ND	82	
129-00-0	Pyrene	830	33	
510-15-6	Chlorobenzilate	ND	82	
85-68-7	Butylbenzylphthalate	ND	82	
91-94-1	3,3'-Dichlorobenzidine	ND	82	
56-55-3	Benzo(a)anthracene	780	33	
218-01-9	Chrysene	640	33	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	82	
117-84-0	Di-n-octyl phthalate	760	82	
205-99-2	Benzo(b)fluoranthene	1400	33	
207-08-9	Benzo(k)fluoranthene	640	33	
50-32-8	Benzo(a)pyrene	820	33	

McGoldrick Paper Co - Hindsdale, NH

BNAs in Soils Medium Level

Client Sample ID:	S50022NH-0052	Lab Sample ID:	AB87589
Date of Collection:	8/19/2020	Matrix:	Lab Sand
Date of Preparation:	8/25/2020	Amount Prepared:	N/A
Date of Analysis:	8/25/2020	Percent Solids:	100%
Dry Weight Prepared:	30.352 grams	Extract Dilution:	1
Wet Weight Prepared:	30.352 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	1 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
56-49-5	3-Methylcholanthrene	ND	82	
193-39-5	Indeno(1,2,3-cd)pyrene	680	33	
53-70-3	Dibenz(a,h)anthracene	460	33	
191-24-2	Benzo(g,h,i)perylene	1100	33	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	66	35 - 102
Phenol-d6 (SS2)	67	41 - 106
Nitrobenzene-d5 (SS3)	62	38 - 106
2-Fluorobiphenyl (SS4)	66	38 - 91
2,4,6-Tribromophenol (SS5)	86	31 - 102
p-Terphenyl-d14 (SS6)	73	32 - 102

**Comments:** 4,6-dinitro-2 methylphenol and pentachlorophenol do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 5 ppb.

2,4 dinitrophenol and 4-nitroquinoline-1-oxide do not meet the criterion to use average RF. The reporting level for these compounds has been raised to 10 ppb.

McGoldrick Paper Co - Hindsdale, NH

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB87583

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
1,2,4,5-Tetrachlorobenzene	3396	ND	2500	74	38 - 111
1,2,4-Trichlorobenzene	3396	ND	2100	62	41 - 102
1,2-Dichlorobenzene	3396	ND	1700	50	37 - 92
1,3-Dichlorobenzene	3396	ND	1600	47	34 - 89
1,3-Dinitrobenzene	3396	ND	2200	65	23 - 148
1,4-Dichlorobenzene	3396	ND	1700	50	33 - 91
1,4-Naphthoquinone	3396	ND	1300	38	2.5 - 119
1-Methylnaphthalene	3396	ND	2400	71	36 - 111
2,2'-oxybis(1-chloropropane)	3396	ND	1900	56	38 - 96
2,3,4,6-Tetrachlorophenol	3396	ND	3200	94	38 - 132
2,4,5-Trichlorophenol	3396	ND	2900	85	42 - 127
2,4,6-Trichlorophenol	3396	ND	2800	82	44 - 120
2,4-Dichlorophenol	3396	ND	2600	77	44 - 119
2,4-Dinitrophenol	3396	ND	700	21	2.5 - 92
2,4-Dinitrotoluene	3396	ND	2500	74	37 - 129
2,4-dimethylphenol	3396	ND	2100	62	29 - 122
2,6-Dichlorophenol	3396	ND	2500	74	43 - 112
2,6-Dinitrotoluene	3396	ND	2500	74	38 - 121
2-Chloronaphthalene	3396	ND	2400	71	40 - 109
2-Chlorophenol	3396	ND	2100	62	41 - 108
2-Methylnaphthalene	3396	140	2400	67	33 - 112
2-Methylphenol	3396	ND	2300	68	41 - 111
2-Nitroaniline	3396	ND	2500	74	39 - 125
2-Nitrophenol	3396	ND	2000	59	37 - 114
3&4-Methylphenol	6792	ND	4765	70	5.0 - 152
3,3'-Dichlorobenzidine	3396	ND	ND	ND	2.5 - 121
3-Methylcholanthrene	3396	ND	2700	80	29 - 123
3-Nitroaniline	3396	ND	940	28	22 - 113
4,6-Dinitro-2-methylphenol	3396	ND	590	17	2.5 - 116
4-Bromophenyl-phenylether	3396	ND	2800	82	38 - 122
4-Chloro-3-methylphenol	3396	ND	2700	80	43 - 127
4-Chloroaniline	3396	ND	410	12	4.5 - 100
4-Chlorophenyl-phenylether	3396	ND	2800	82	43 - 118
4-Nitroaniline	3396	ND	760	22	20 - 120
4-Nitrophenol	3396	ND	3000	88	15 - 165
4-nitroquinoline-1-oxide	3396	ND	ND	ND	2.5 - 117
Acenaphthene	3396	93.0	2500	71	21 - 125
Acenaphthylene	3396	120	2400	67	26 - 120
Acetophenone	3396	ND	2200	65	31 - 111
Aniline	3396	ND	ND	ND	2.5 - 87
Anthracene	3396	180	2800	77	18 - 133
Azobenzene	3396	ND	2400	71	30 - 118
Benzidine	3396	ND	ND	ND	2.5 - 48
Benzo(a)anthracene	3396	510	3500	88	30 - 127
Benzo(a)pyrene	3396	490	3300	83	28 - 127
Benzo(b)fluoranthene	3396	560	3800	95	34 - 129
Benzo(g,h,i)perylene	3396	310	2900	76	1.0 - 158
Benzo(k)fluoranthene	3396	310	3000	79	29 - 132

20080026\$BNAMS

McGoldrick Paper Co - Hindsdale, NH

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB87583

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
Benzoic acid	3396	ND	1700	50	2.5 - 75
Benzyl alcohol	3396	ND	2200	65	42 - 114
Bis(2-Chloroethyl)ether	3396	ND	2400	71	32 - 109
Bis(2-ethylhexyl)phthalate	3396	ND	2500	74	9.7 - 145
Butylbenzylphthalate	3396	ND	2400	71	35 - 126
Carbazole	3396	ND	2900	85	18 - 132
Chlorobenzilate	3396	ND	2800	82	37 - 125
Chrysene	3396	630	3600	88	27 - 129
Di-n-butylphthalate	3396	ND	2800	82	39 - 129
Di-n-octyl phthalate	3396	ND	2500	74	32 - 149
Dibenz(a,h)anthracene	3396	92.0	2900	83	1.0 - 177
Dibenzofuran	3396	ND	2600	77	21 - 126
Diethylphthalate	3396	ND	2700	80	43 - 119
Dimethyl phthalate	3396	ND	2500	74	41 - 115
Ethyl methanesulfonate	3396	ND	1900	56	37 - 101
Fluoranthene	3396	1400	5200	112	39 - 134
Fluorene	3396	100	2700	77	6.1 - 140
Hexachlorobenzene	3396	ND	2800	82	38 - 119
Hexachlorobutadiene	3396	ND	2300	68	38 - 108
Hexachlorocyclopentadiene	3396	ND	350	10	2.5 - 110
Hexachloroethane	3396	ND	1400	41	5.5 - 104
Hexachloropropene	3396	ND	710	21	2.5 - 127
Indeno(1,2,3-cd)pyrene	3396	290	3000	80	1.0 - 164
Isodrin	3396	ND	2400	71	2.5 - 147
Isophorone	3396	ND	2100	62	42 - 108
Isosafrole	3396	ND	2300	68	43 - 107
Methyl methanesulfonate	3396	ND	1900	56	32 - 108
N-Nitrosodiphenylamine	3396	ND	2500	74	41 - 118
N-nitroso-di-n-propylamine	3396	ND	2100	62	40 - 104
N-nitrosodimethylamine	3396	ND	1500	44	19 - 92
Naphthalene	3396	150	2200	60	19 - 117
Nitrobenzene	3396	ND	2000	59	38 - 105
Pentachlorobenzene	3396	ND	2900	85	37 - 121
Pentachloronitrobenzene	3396	ND	2800	82	37 - 132
Pentachlorophenol	3396	ND	2300	68	30 - 119
Phenacetin	3396	ND	2800	82	38 - 127
Phenanthrene	3396	1000	3900	85	2.5 - 149
Phenol	3396	ND	2100	62	39 - 112
Pyrene	3396	780	3600	83	24 - 135
Pyridine	3396	ND	990	29	5.0 - 73
Safrole	3396	ND	2400	71	39 - 110
bis(-2-Chloroethoxy)methane	3396	ND	2100	62	36 - 101

McGoldrick Paper Co - Hindsdale, NH

Laboratory Duplicate Results

Sample ID: AB87583

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
1,2,4,5-Tetrachlorobenzene	ND	ND	NC	50
1,2,4-Trichlorobenzene	ND	ND	NC	50
1,2-Dichlorobenzene	ND	ND	NC	50
1,3-Dichlorobenzene	ND	ND	NC	50
1,3-Dinitrobenzene	ND	ND	NC	50
1,4-Dichlorobenzene	ND	ND	NC	50
1,4-Naphthoquinone	ND	ND	NC	50
1-Methylnaphthalene	ND	88.0	ND	50
2,2'-oxybis(1-chloropropane)	ND	ND	NC	50
2,3,4,6-Tetrachlorophenol	ND	ND	NC	50
2,4,5-Trichlorophenol	ND	ND	NC	50
2,4,6-Trichlorophenol	ND	ND	NC	50
2,4-Dichlorophenol	ND	ND	NC	50
2,4-Dinitrophenol	ND	ND	NC	50
2,4-Dinitrotoluene	ND	ND	NC	50
2,4-dimethylphenol	ND	ND	NC	50
2,6-Dichlorophenol	ND	ND	NC	50
2,6-Dinitrotoluene	ND	ND	NC	50
2-Chloronaphthalene	ND	ND	NC	50
2-Chlorophenol	ND	ND	NC	50
2-Methylnaphthalene	140	134	3.8	50
2-Methylphenol	ND	ND	NC	50
2-Nitroaniline	ND	ND	NC	50
2-Nitrophenol	ND	ND	NC	50
3&4-Methylphenol	ND	ND	NC	50
3,3'-Dichlorobenzidine	ND	ND	NC	50
3-Methylcholanthrene	ND	ND	NC	50
3-Nitroaniline	ND	ND	NC	50
4,6-Dinitro-2-methylphenol	ND	ND	NC	50
4-Bromophenyl-phenylether	ND	ND	NC	50
4-Chloro-3-methylphenol	ND	ND	NC	50
4-Chloroaniline	ND	ND	NC	50
4-Chlorophenyl-phenylether	ND	ND	NC	50
4-Nitroaniline	ND	ND	NC	50
4-Nitrophenol	ND	ND	NC	50
4-nitroquinoline-1-oxide	ND	ND	NC	50
Acenaphthene	93.0	114	20.6	50
Acenaphthylene	120	133	10.4	50
Acetophenone	ND	ND	NC	50
Aniline	ND	ND	NC	50
Anthracene	180	226	22.8	50
Azobenzene	ND	ND	NC	50
Benzidine	ND	ND	NC	50
Benzo(a)anthracene	510	711	33.0	50
Benzo(a)pyrene	490	653	28.7	50
Benzo(b)fluoranthene	560	717	24.7	50
Benzo(g,h,i)perylene	310	398	24.9	50
Benzo(k)fluoranthene	310	593	62.7	50
Benzoic acid	ND	ND	NC	50
Benzyl alcohol	ND	ND	NC	50
Bis(2-Chloroethyl)ether	ND	ND	NC	50
Bis(2-ethylhexyl)phthalate	ND	ND	NC	50

20080026\$BNAMS

McGoldrick Paper Co - Hindsdale, NH

Laboratory Duplicate Results

Sample ID: AB87583

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
Butylbenzylphthalate	ND	ND	NC	50
Carbazole	ND	ND	NC	50
Chlorobenzilate	ND	ND	NC	50
Chrysene	630	848	29.5	50
Di-n-butylphthalate	ND	ND	NC	50
Di-n-octyl phthalate	ND	ND	NC	50
Dibenz(a,h)anthracene	92.0	150	48.3	50
Dibenzofuran	ND	ND	NC	50
Diethylphthalate	ND	ND	NC	50
Dimethyl phthalate	ND	ND	NC	50
Ethyl methanesulfonate	ND	ND	NC	52
Fluoranthene	1400	2103	40.2	50
Fluorene	100	94.0	6.3	50
Hexachlorobenzene	ND	ND	NC	50
Hexachlorobutadiene	ND	ND	NC	50
Hexachlorocyclopentadiene	ND	ND	NC	50
Hexachloroethane	ND	ND	NC	50
Hexachloropropene	ND	ND	NC	50
Indeno(1,2,3-cd)pyrene	290	376	26.0	50
Isodrin	ND	ND	NC	50
Isophorone	ND	ND	NC	50
Isosafrole	ND	ND	NC	50
Methyl methanesulfonate	ND	ND	NC	50
N-Nitrosodiphenylamine	ND	ND	NC	50
N-nitroso-di-n-propylamine	ND	ND	NC	50
N-nitrosodimethylamine	ND	ND	NC	50
Naphthalene	150	130	14.3	50
Nitrobenzene	ND	ND	NC	50
Pentachlorobenzene	ND	ND	NC	50
Pentachloronitrobenzene	ND	ND	NC	50
Pentachlorophenol	ND	ND	NC	50
Phenacetin	ND	ND	NC	50
Phenanthrene	1000	1428	35.3	50
Phenol	ND	ND	NC	50
Pyrene	780	1213	43.5	50
Pyridine	ND	ND	NC	50
Safrole	ND	ND	NC	50
bis(-2-Chloroethoxy)methane	ND	ND	NC	50

McGoldrick Paper Co - Hindsdale, NH

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
1,2,4,5-Tetrachlorobenzene	3988	2120	53	49 - 107
1,2,4-Trichlorobenzene	3988	2050	51	50 - 102
1,2-Dichlorobenzene	3988	1900	48	46 - 94
1,3-Dichlorobenzene	3988	1830	46	45 - 90
1,3-Dinitrobenzene	3988	2350	59	57 - 128
1,4-Dichlorobenzene	3988	1880	47	44 - 92
1,4-Naphthoquinone	3988	2150	54	58 - 111
1-Methylnaphthalene	3988	2100	53	54 - 105
2,2'-oxybis(1-chloropropane)	3988	1950	49	46 - 97
2,3,4,6-Tetrachlorophenol	3988	2310	58	38 - 124
2,4,5-Trichlorophenol	3988	2250	56	46 - 114
2,4,6-Trichlorophenol	3988	2240	56	48 - 108
2,4-Dichlorophenol	3988	2220	56	55 - 113
2,4-Dinitrophenol	3988	1220	31	10 - 85
2,4-Dinitrotoluene	3988	2490	62	59 - 120
2,4-dimethylphenol	3988	1980	50	41 - 118
2,6-Dichlorophenol	3988	2240	56	52 - 108
2,6-Dinitrotoluene	3988	2280	57	57 - 115
2-Chloronaphthalene	3988	2030	51	52 - 104
2-Chlorophenol	3988	2150	54	53 - 104
2-Methylnaphthalene	3988	2090	52	54 - 104
2-Methylphenol	3988	2200	55	55 - 106
2-Nitroaniline	3988	2240	56	52 - 118
2-Nitrophenol	3988	2090	52	40 - 107
3&4-Methylphenol	3988	4510	113	41 - 117
3,3'-Dichlorobenzidine	3988	2180	55	45 - 106
3-Methylcholanthrene	3988	2390	60	52 - 116
3-Nitroaniline	3988	2180	55	52 - 106
4,6-Dinitro-2-methylphenol	3988	1900	48	10 - 104
4-Bromophenyl-phenylether	3988	2360	59	52 - 118
4-Chloro-3-methylphenol	3988	2310	58	60 - 118
4-Chloroaniline	3988	1960	49	37 - 91
4-Chlorophenyl-phenylether	3988	2250	56	56 - 113
4-Nitroaniline	3988	2300	58	57 - 114
4-Nitrophenol	3988	2180	55	42 - 133
4-nitroquinoline-1-oxide	3988	2120	53	40 - 110
Acenaphthene	3988	2040	51	53 - 105
Acenaphthylene	3988	2040	51	55 - 105
Acetophenone	3988	2180	55	54 - 99
Aniline	3988	1880	47	27 - 88
Anthracene	3988	2240	56	59 - 111
Azobenzene	3988	2120	53	47 - 109
Benzidine	3988	967	24	2 - 119
Benzo(a)anthracene	3988	2270	57	56 - 112
Benzo(a)pyrene	3988	2230	56	56 - 116
Benzo(b)fluoranthene	3988	2460	62	52 - 117
Benzo(g,h,i)perylene	3988	2030	51	44 - 128
Benzo(k)fluoranthene	3988	2050	51	52 - 120
Benzoic acid	3988	ND	0	10 - 132
Benzyl alcohol	3988	2160	54	51 - 110
Bis(2-Chloroethyl)ether	3988	2050	51	47 - 97
Bis(2-ethylhexyl)phthalate	3988	2210	55	47 - 121
Butylbenzylphthalate	3988	2120	53	50 - 119
Carbazole	3988	2330	58	56 - 115



McGoldrick Paper Co - Hindsdale, NH

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
Chlorobenzilate	3988	2430	61	52 - 119
Chrysene	3988	2230	56	55 - 112
Di-n-butylphthalate	3988	2330	58	56 - 120
Di-n-octyl phthalate	3988	2280	57	40 - 128
Dibenz(a,h)anthracene	3988	2130	53	44 - 126
Dibenzofuran	3988	2130	53	57 - 106
Diethylphthalate	3988	2250	56	60 - 113
Dimethyl phthalate	3988	2250	56	57 - 115
Ethyl methanesulfonate	3988	2140	54	51 - 99
Fluoranthene	3988	2520	63	57 - 119
Fluorene	3988	2190	55	58 - 110
Hexachlorobenzene	3988	2400	60	54 - 115
Hexachlorobutadiene	3988	2140	54	43 - 111
Hexachlorocyclopentadiene	3988	1970	49	31 - 108
Hexachloroethane	3988	1890	47	46 - 90
Hexachloropropene	3988	2190	55	42 - 113
Indeno(1,2,3-cd)pyrene	3988	2110	53	46 - 126
Isodrin	3988	2340	59	54 - 113
Isophorone	3988	2120	53	55 - 105
Isosafrole	3988	2150	54	53 - 107
Methyl methanesulfonate	3988	2160	54	46 - 110
N-Nitrosodiphenylamine	3988	2170	54	55 - 117
N-nitroso-di-n-propylamine	7976	2160	27	51 - 101
N-nitrosodimethylamine	3988	1920	48	32 - 88
Naphthalene	3988	2020	51	52 - 99
Nitrobenzene	3988	2100	53	50 - 102
Pentachlorobenzene	3988	2270	57	51 - 114
Pentachloronitrobenzene	3988	2520	63	57 - 126
Pentachlorophenol	3988	1720	43	17 - 117
Phenacetin	3988	2450	61	54 - 119
Phenanthrene	3988	2210	55	57 - 109
Phenol	3988	2180	55	54 - 107
Pyrene	3988	2220	56	53 - 114
Pyridine	3988	1370	34	28 - 68
Safrole	3988	2080	52	53 - 106
bis(-2-Chloroethoxy)methane	3988	2090	52	48 - 98

Comments:

Samples in Batch: AB87579, AB87580, AB87581, AB87582, AB87583, AB87584, AB87585, AB87586, AB87587, AB87588, AB87589

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> / <i>[Organization]</i>	8/19/2020 10:15	<i>[Signature]</i> ESPT	8-19-20 10:15	2 °C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM

PN: 20080026

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0043	SS-12	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0044	SS-13	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0045	SS-14	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0046	SS-15	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0047	SS-16	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0049	SS-18	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

## SAMPLES TRANSFERRED FROM

## CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>B. W. Chau</i> / EPA	8/19/2020 10:15	<i>Wing Chau</i> / EPA	8-19-20 10:15	20C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM

## Laboratory Report

September 16, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project Number: 20080025

Project: McGoldrick Paper Co - Hindsdale, NH

Analysis: Pesticides and PCBs Medium Level in Soil

EPA Chemist: Phillip Gudgel

Date Samples Received by the Laboratory: 08/19/2020

### Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-PESTSOIL4.

The SOP is based on EPA SW-846 Method 8081A

The analysis was performed using high resolution capillary column chromatography on an Agilent 6890 gas chromatograph equipped with dual electron capture detectors. The 30 meter dual capillary column system consists of a J&W DB-5 and J&W DB-1701, both with 0.25mm ID and 0.25 micron film thickness. The results are reported on a dry weight basis.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

DANIEL

BOUDREAU

Digitally signed by  
DANIEL BOUDREAU

Date: 2020.09.16  
13:01:07 -04'00'

20080025\$PESMS

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0031  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.388 grams  
Wet Weight Prepared: 5.987 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87569  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 90%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	46	
319-85-7	Beta-BHC	ND	46	
58-89-9	Gamma-BHC	ND	46	
319-86-8	Delta-BHC	ND	46	
76-44-8	Heptachlor	ND	46	
309-00-2	Aldrin	ND	46	
1024-57-3	Heptachlor Epoxide	ND	46	
5103-74-2	Gamma Chlordane	ND	46	
959-98-8	Endosulfan I	ND	46	
5103-71-9	Alpha Chlordane	ND	46	
60-57-1	Dieldrin	ND	46	
72-55-9	4,4'-DDE	ND	46	
72-20-8	Endrin	ND	46	
33213-65-9	Endosulfan II	ND	46	
72-54-8	4,4'-DDD	ND	46	
7421-93-4	Endrin Aldehyde	ND	46	
1031-07-8	Endosulfan Sulfate	ND	46	
50-29-3	4,4'-DDT	ND	46	
53494-70-5	Endrin Ketone	ND	46	
72-43-5	Methoxychlor	ND	46	
57-74-9	Technical Chlordane	ND	93	
8001-35-2	Toxaphene	ND	93	
12674-11-2	Aroclor-1016	ND	93	
11104-28-2	Aroclor-1221	ND	93	
11141-16-5	Aroclor-1232	ND	93	
53469-21-9	Aroclor-1242	ND	93	
12672-29-6	Aroclor-1248	ND	93	
11097-69-1	Aroclor-1254	ND	93	
11096-82-5	Aroclor-1260	ND	93	
11100-14-4	Aroclor-1262	ND	93	
37324-23-5	Aroclor-1268	ND	93	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

82  
91

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0032  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/10/2020  
Dry Weight Prepared: 5.579 grams  
Wet Weight Prepared: 6.457 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87570  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 86%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	45	
319-85-7	Beta-BHC	ND	45	
58-89-9	Gamma-BHC	ND	45	
319-86-8	Delta-BHC	ND	45	
76-44-8	Heptachlor	ND	45	
309-00-2	Aldrin	ND	45	
1024-57-3	Heptachlor Epoxide	ND	45	
5103-74-2	Gamma Chlordane	ND	45	
959-98-8	Endosulfan I	ND	45	
5103-71-9	Alpha Chlordane	ND	45	
60-57-1	Dieldrin	ND	45	
72-55-9	4,4'-DDE	ND	45	
72-20-8	Endrin	ND	45	
33213-65-9	Endosulfan II	ND	45	
72-54-8	4,4'-DDD	ND	45	
7421-93-4	Endrin Aldehyde	ND	45	
1031-07-8	Endosulfan Sulfate	ND	45	
50-29-3	4,4'-DDT	ND	45	
53494-70-5	Endrin Ketone	ND	45	
72-43-5	Methoxychlor	ND	45	
57-74-9	Technical Chlordane	ND	90	
8001-35-2	Toxaphene	ND	90	
12674-11-2	Aroclor-1016	ND	90	
11104-28-2	Aroclor-1221	ND	90	
11141-16-5	Aroclor-1232	ND	90	
53469-21-9	Aroclor-1242	ND	90	
12672-29-6	Aroclor-1248	ND	90	
11097-69-1	Aroclor-1254	ND	90	
11096-82-5	Aroclor-1260	ND	90	
11100-14-4	Aroclor-1262	ND	90	
37324-23-5	Aroclor-1268	ND	90	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

92  
93

18 - 130  
64 - 122



US ENVIRONMENTAL PROTECTION AGENCY  
NEW ENGLAND LABORATORY  
McGoldrick Paper Co - Hindsdale, NH

Page 5 of 19

**Laboratory Blank**

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/09/2020	Percent Solids:	100%
Dry Weight Prepared:	5.207 grams	Extract Dilution:	1
Wet Weight Prepared:	5.209 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	4.8	
319-85-7	Beta-BHC	ND	4.8	
58-89-9	Gamma-BHC	ND	4.8	
319-86-8	Delta-BHC	ND	4.8	
76-44-8	Heptachlor	ND	4.8	
309-00-2	Aldrin	ND	4.8	
1024-57-3	Heptachlor Epoxide	ND	4.8	
5103-74-2	Gamma Chlordane	ND	4.8	
959-98-8	Endosulfan I	ND	4.8	
5103-71-9	Alpha Chlordane	ND	4.8	
60-57-1	Dieldrin	ND	4.8	
72-55-9	4,4'-DDE	ND	4.8	
72-20-8	Endrin	ND	4.8	
33213-65-9	Endosulfan II	ND	4.8	
72-54-8	4,4'-DDD	ND	4.8	
7421-93-4	Endrin Aldehyde	ND	4.8	
1031-07-8	Endosulfan Sulfate	ND	4.8	
50-29-3	4,4'-DDT	ND	4.8	
53494-70-5	Endrin Ketone	ND	4.8	
72-43-5	Methoxychlor	ND	4.8	
57-74-9	Technical Chlordane	ND	96	
8001-35-2	Toxaphene	ND	96	
12674-11-2	Aroclor-1016	ND	96	
11104-28-2	Aroclor-1221	ND	96	
11141-16-5	Aroclor-1232	ND	96	
53469-21-9	Aroclor-1242	ND	96	
12672-29-6	Aroclor-1248	ND	96	
11097-69-1	Aroclor-1254	ND	96	
11096-82-5	Aroclor-1260	ND	96	
11100-14-4	Aroclor-1262	ND	96	
37324-23-5	Aroclor-1268	ND	96	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

83  
89

18 - 130  
64 - 122



McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0033  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.356 grams  
Wet Weight Prepared: 6.915 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87571  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 77%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	47	
319-85-7	Beta-BHC	ND	47	
58-89-9	Gamma-BHC	ND	47	
319-86-8	Delta-BHC	ND	47	
76-44-8	Heptachlor	ND	47	
309-00-2	Aldrin	ND	47	
1024-57-3	Heptachlor Epoxide	ND	47	
5103-74-2	Gamma Chlordane	ND	47	
959-98-8	Endosulfan I	ND	47	
5103-71-9	Alpha Chlordane	ND	47	
60-57-1	Dieldrin	ND	47	
72-55-9	4,4'-DDE	ND	47	
72-20-8	Endrin	ND	47	
33213-65-9	Endosulfan II	ND	47	
72-54-8	4,4'-DDD	ND	47	
7421-93-4	Endrin Aldehyde	ND	47	
1031-07-8	Endosulfan Sulfate	ND	47	
50-29-3	4,4'-DDT	ND	47	
53494-70-5	Endrin Ketone	ND	47	
72-43-5	Methoxychlor	ND	47	
57-74-9	Technical Chlordane	ND	93	
8001-35-2	Toxaphene	ND	93	
12674-11-2	Aroclor-1016	ND	93	
11104-28-2	Aroclor-1221	ND	93	
11141-16-5	Aroclor-1232	ND	93	
53469-21-9	Aroclor-1242	ND	93	
12672-29-6	Aroclor-1248	ND	93	
11097-69-1	Aroclor-1254	ND	93	
11096-82-5	Aroclor-1260	ND	93	
11100-14-4	Aroclor-1262	ND	93	
37324-23-5	Aroclor-1268	ND	93	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

96  
88

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0034  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.235 grams  
Wet Weight Prepared: 6.378 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87572  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 82%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	48	
319-85-7	Beta-BHC	ND	48	
58-89-9	Gamma-BHC	ND	48	
319-86-8	Delta-BHC	ND	48	
76-44-8	Heptachlor	ND	48	
309-00-2	Aldrin	ND	48	
1024-57-3	Heptachlor Epoxide	ND	48	
5103-74-2	Gamma Chlordane	ND	48	
959-98-8	Endosulfan I	ND	48	
5103-71-9	Alpha Chlordane	ND	48	
60-57-1	Dieldrin	ND	48	
72-55-9	4,4'-DDE	ND	48	
72-20-8	Endrin	ND	48	
33213-65-9	Endosulfan II	ND	48	
72-54-8	4,4'-DDD	ND	48	
7421-93-4	Endrin Aldehyde	ND	48	
1031-07-8	Endosulfan Sulfate	ND	48	
50-29-3	4,4'-DDT	ND	48	
53494-70-5	Endrin Ketone	ND	48	
72-43-5	Methoxychlor	ND	48	
57-74-9	Technical Chlordane	ND	97	
8001-35-2	Toxaphene	ND	97	
12674-11-2	Aroclor-1016	ND	97	
11104-28-2	Aroclor-1221	ND	97	
11141-16-5	Aroclor-1232	ND	97	
53469-21-9	Aroclor-1242	ND	97	
12672-29-6	Aroclor-1248	ND	97	
11097-69-1	Aroclor-1254	ND	97	
11096-82-5	Aroclor-1260	ND	97	
11100-14-4	Aroclor-1262	ND	97	
37324-23-5	Aroclor-1268	ND	97	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

85  
89

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0035  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.292 grams  
Wet Weight Prepared: 6.242 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87573  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 85%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	47	
319-85-7	Beta-BHC	ND	47	
58-89-9	Gamma-BHC	ND	47	
319-86-8	Delta-BHC	ND	47	
76-44-8	Heptachlor	ND	47	
309-00-2	Aldrin	ND	47	
1024-57-3	Heptachlor Epoxide	ND	47	
5103-74-2	Gamma Chlordane	ND	47	
959-98-8	Endosulfan I	ND	47	
5103-71-9	Alpha Chlordane	ND	47	
60-57-1	Dieldrin	ND	47	
72-55-9	4,4'-DDE	ND	47	
72-20-8	Endrin	ND	47	
33213-65-9	Endosulfan II	ND	47	
72-54-8	4,4'-DDD	ND	47	
7421-93-4	Endrin Aldehyde	ND	47	
1031-07-8	Endosulfan Sulfate	ND	47	
50-29-3	4,4'-DDT	ND	47	
53494-70-5	Endrin Ketone	ND	47	
72-43-5	Methoxychlor	ND	47	
57-74-9	Technical Chlordane	ND	94	
8001-35-2	Toxaphene	ND	94	
12674-11-2	Aroclor-1016	ND	94	
11104-28-2	Aroclor-1221	ND	94	
11141-16-5	Aroclor-1232	ND	94	
53469-21-9	Aroclor-1242	ND	94	
12672-29-6	Aroclor-1248	ND	94	
11097-69-1	Aroclor-1254	ND	94	
11096-82-5	Aroclor-1260	ND	94	
11100-14-4	Aroclor-1262	ND	94	
37324-23-5	Aroclor-1268	ND	94	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

99  
92

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0036  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.695 grams  
Wet Weight Prepared: 6.604 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87574  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 86%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	44	
319-85-7	Beta-BHC	ND	44	
58-89-9	Gamma-BHC	ND	44	
319-86-8	Delta-BHC	ND	44	
76-44-8	Heptachlor	ND	44	
309-00-2	Aldrin	ND	44	
1024-57-3	Heptachlor Epoxide	ND	44	
5103-74-2	Gamma Chlordane	ND	44	
959-98-8	Endosulfan I	ND	44	
5103-71-9	Alpha Chlordane	ND	44	
60-57-1	Dieldrin	ND	44	
72-55-9	4,4'-DDE	ND	44	
72-20-8	Endrin	ND	44	
33213-65-9	Endosulfan II	ND	44	
72-54-8	4,4'-DDD	ND	44	
7421-93-4	Endrin Aldehyde	ND	44	
1031-07-8	Endosulfan Sulfate	ND	44	
50-29-3	4,4'-DDT	ND	44	
53494-70-5	Endrin Ketone	ND	44	
72-43-5	Methoxychlor	ND	44	
57-74-9	Technical Chlordane	ND	88	
8001-35-2	Toxaphene	ND	88	
12674-11-2	Aroclor-1016	ND	88	
11104-28-2	Aroclor-1221	ND	88	
11141-16-5	Aroclor-1232	ND	88	
53469-21-9	Aroclor-1242	ND	88	
12672-29-6	Aroclor-1248	ND	88	
11097-69-1	Aroclor-1254	ND	88	
11096-82-5	Aroclor-1260	ND	88	
11100-14-4	Aroclor-1262	ND	88	
37324-23-5	Aroclor-1268	ND	88	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

81  
85

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0037  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.424 grams  
Wet Weight Prepared: 5.691 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87575  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 95%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	46	
319-85-7	Beta-BHC	ND	46	
58-89-9	Gamma-BHC	ND	46	
319-86-8	Delta-BHC	ND	46	
76-44-8	Heptachlor	ND	46	
309-00-2	Aldrin	ND	46	
1024-57-3	Heptachlor Epoxide	ND	46	
5103-74-2	Gamma Chlordane	ND	46	
959-98-8	Endosulfan I	ND	46	
5103-71-9	Alpha Chlordane	ND	46	
60-57-1	Dieldrin	ND	46	
72-55-9	4,4'-DDE	ND	46	
72-20-8	Endrin	ND	46	
33213-65-9	Endosulfan II	ND	46	
72-54-8	4,4'-DDD	ND	46	
7421-93-4	Endrin Aldehyde	ND	46	
1031-07-8	Endosulfan Sulfate	ND	46	
50-29-3	4,4'-DDT	ND	46	
53494-70-5	Endrin Ketone	ND	46	
72-43-5	Methoxychlor	ND	46	
57-74-9	Technical Chlordane	ND	92	
8001-35-2	Toxaphene	ND	92	
12674-11-2	Aroclor-1016	ND	92	
11104-28-2	Aroclor-1221	ND	92	
11141-16-5	Aroclor-1232	ND	92	
53469-21-9	Aroclor-1242	ND	92	
12672-29-6	Aroclor-1248	ND	92	
11097-69-1	Aroclor-1254	ND	92	
11096-82-5	Aroclor-1260	ND	92	
11100-14-4	Aroclor-1262	ND	92	
37324-23-5	Aroclor-1268	ND	92	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

85  
95

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0038  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/15/2020  
Dry Weight Prepared: 5.784 grams  
Wet Weight Prepared: 6.909 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87576  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 84%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	43	
319-85-7	Beta-BHC	ND	43	
58-89-9	Gamma-BHC	ND	43	
319-86-8	Delta-BHC	ND	43	
76-44-8	Heptachlor	ND	43	
309-00-2	Aldrin	ND	43	
1024-57-3	Heptachlor Epoxide	ND	43	
5103-74-2	Gamma Chlordane	ND	43	
959-98-8	Endosulfan I	ND	43	
5103-71-9	Alpha Chlordane	ND	43	
60-57-1	Dieldrin	ND	43	
72-55-9	4,4'-DDE	ND	43	
72-20-8	Endrin	ND	43	
33213-65-9	Endosulfan II	ND	43	
72-54-8	4,4'-DDD	ND	43	
7421-93-4	Endrin Aldehyde	ND	43	
1031-07-8	Endosulfan Sulfate	ND	43	
50-29-3	4,4'-DDT	ND	43	
53494-70-5	Endrin Ketone	ND	43	
72-43-5	Methoxychlor	ND	43	
57-74-9	Technical Chlordane	ND	86	
8001-35-2	Toxaphene	ND	86	
12674-11-2	Aroclor-1016	ND	86	
11104-28-2	Aroclor-1221	ND	86	
11141-16-5	Aroclor-1232	ND	86	
53469-21-9	Aroclor-1242	ND	86	
12672-29-6	Aroclor-1248	ND	86	
11097-69-1	Aroclor-1254	1300	86	
11096-82-5	Aroclor-1260	ND	86	
11100-14-4	Aroclor-1262	ND	86	
37324-23-5	Aroclor-1268	ND	86	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

105  
95

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0039  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.498 grams  
Wet Weight Prepared: 6.475 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87577  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 85%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	46	
319-85-7	Beta-BHC	ND	46	
58-89-9	Gamma-BHC	ND	46	
319-86-8	Delta-BHC	ND	46	
76-44-8	Heptachlor	ND	46	
309-00-2	Aldrin	ND	46	
1024-57-3	Heptachlor Epoxide	ND	46	
5103-74-2	Gamma Chlordane	ND	46	
959-98-8	Endosulfan I	ND	46	
5103-71-9	Alpha Chlordane	ND	46	
60-57-1	Dieldrin	ND	46	
72-55-9	4,4'-DDE	ND	46	
72-20-8	Endrin	ND	46	
33213-65-9	Endosulfan II	ND	46	
72-54-8	4,4'-DDD	ND	46	
7421-93-4	Endrin Aldehyde	ND	46	
1031-07-8	Endosulfan Sulfate	ND	46	
50-29-3	4,4'-DDT	ND	46	
53494-70-5	Endrin Ketone	ND	46	
72-43-5	Methoxychlor	ND	46	
57-74-9	Technical Chlordane	ND	91	
8001-35-2	Toxaphene	ND	91	
12674-11-2	Aroclor-1016	ND	91	
11104-28-2	Aroclor-1221	ND	91	
11141-16-5	Aroclor-1232	ND	91	
53469-21-9	Aroclor-1242	ND	91	
12672-29-6	Aroclor-1248	ND	91	
11097-69-1	Aroclor-1254	ND	91	
11096-82-5	Aroclor-1260	ND	91	
11100-14-4	Aroclor-1262	ND	91	
37324-23-5	Aroclor-1268	ND	91	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

85  
98

18 - 130  
64 - 122

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0040  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.599 grams  
Wet Weight Prepared: 6.495 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87578  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 86%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	45	
319-85-7	Beta-BHC	ND	45	
58-89-9	Gamma-BHC	ND	45	
319-86-8	Delta-BHC	ND	45	
76-44-8	Heptachlor	ND	45	
309-00-2	Aldrin	ND	45	
1024-57-3	Heptachlor Epoxide	ND	45	
5103-74-2	Gamma Chlordane	ND	45	
959-98-8	Endosulfan I	ND	45	
5103-71-9	Alpha Chlordane	ND	45	
60-57-1	Dieldrin	ND	45	
72-55-9	4,4'-DDE	ND	45	
72-20-8	Endrin	ND	45	
33213-65-9	Endosulfan II	ND	45	
72-54-8	4,4'-DDD	ND	45	
7421-93-4	Endrin Aldehyde	ND	45	
1031-07-8	Endosulfan Sulfate	ND	45	
50-29-3	4,4'-DDT	ND	45	
53494-70-5	Endrin Ketone	ND	45	
72-43-5	Methoxychlor	ND	45	
57-74-9	Technical Chlordane	ND	89	
8001-35-2	Toxaphene	ND	89	
12674-11-2	Aroclor-1016	ND	89	
11104-28-2	Aroclor-1221	ND	89	
11141-16-5	Aroclor-1232	ND	89	
53469-21-9	Aroclor-1242	ND	89	
12672-29-6	Aroclor-1248	ND	89	
11097-69-1	Aroclor-1254	ND	89	
11096-82-5	Aroclor-1260	ND	89	
11100-14-4	Aroclor-1262	ND	89	
37324-23-5	Aroclor-1268	ND	89	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

84  
88

18 - 130  
64 - 122



**MATRIX SPIKE (MS) RECOVERY**

Sample ID: AB87570

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
4,4'-DDD	38.0	ND	38.0	101	70 - 130
4,4'-DDE	38.0	ND	32.0	85	70 - 130
4,4'-DDT	38.0	ND	58.0	152	34 - 166
Aldrin	38.0	ND	32.0	85	36 - 119
Alpha Chlordane	38.0	ND	38.0	101	70 - 130
Alpha-BHC	38.0	ND	34.0	90	70 - 130
Aroclor-1016	ND	ND	ND	ND	70 - 130
Aroclor-1254	ND	ND	ND	ND	70 - 130
Aroclor-1260	ND	ND	ND	ND	70 - 130
Beta-BHC	38.0	ND	37.0	97	70 - 130
Delta-BHC	38.0	ND	32.0	85	70 - 130
Dieldrin	38.0	ND	42.0	110	39 - 155
Endosulfan I	38.0	ND	37.0	97	70 - 130
Endosulfan II	38.0	ND	44.0	115	70 - 130
Endosulfan Sulfate	38.0	ND	40.0	105	70 - 130
Endrin	38.0	ND	37.0	97	52 - 139
Endrin Aldehyde	38.0	ND	36.0	94	70 - 130
Endrin Ketone	38.0	ND	53.0	138	70 - 130
Gamma Chlordane	38.0	ND	41.0	108	70 - 130
Gamma-BHC	38.0	ND	38.0	100	34 - 137
Heptachlor	38.0	ND	40.0	105	47 - 143
Heptachlor Epoxide	38.0	ND	34.0	91	70 - 130
Methoxychlor	38.0	ND	63.0	167	70 - 130
Technical Chlordane	ND	ND	ND	ND	70 - 130
Toxaphene	ND	ND	ND	ND	70 - 130

Comments: Compounds Methoxychlor and Endrin Ketone were above QC limits for both MS/MSD.

**MATRIX SPIKE DUPLICATE (MSD) RECOVERY**

Sample ID:AB87570

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/Kg	MSD % REC	RPD %	QC LIMITS RPD
4,4'-DDD	37.0	37.0	101	0.3	50
4,4'-DDE	37.0	32.0	86	1.4	50
4,4'-DDT	37.0	55.0	149	2.2	50
Aldrin	37.0	32.0	86	1.1	50
Alpha Chlordane	37.0	38.0	102	1.4	50
Alpha-BHC	37.0	34.0	91	1.2	50
Beta-BHC	37.0	36.0	97	0.1	50
Delta-BHC	37.0	31.0	84	1.0	50
Dieldrin	37.0	33.0	88	21.4	50
Endosulfan I	37.0	40.0	108	11.5	50
Endosulfan II	37.0	42.0	115	0.1	50
Endosulfan Sulfate	37.0	37.0	100	4.9	50
Endrin	37.0	38.0	103	6.2	50
Endrin Aldehyde	37.0	34.0	93	1.0	50
Endrin Ketone	37.0	50.0	135	2.7	50
Gamma Chlordane	37.0	40.0	108	0.0	50
Gamma-BHC	37.0	37.0	101	0.2	50
Heptachlor	37.0	39.0	107	1.4	50
Heptachlor Epoxide	37.0	34.0	91	0.3	50
Methoxychlor	37.0	58.0	156	6.8	50

**Laboratory Duplicate Results**

Sample ID: AB87572

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
4,4'-DDD	ND	ND	NC	50
4,4'-DDE	ND	ND	NC	50
4,4'-DDT	ND	ND	NC	50
Aldrin	ND	ND	NC	50
Alpha Chlordane	ND	ND	NC	50
Alpha-BHC	ND	ND	NC	50
Aroclor-1016	ND	ND	NC	50
Aroclor-1221	ND	ND	NC	50
Aroclor-1232	ND	ND	NC	50
Aroclor-1242	ND	ND	NC	50
Aroclor-1248	ND	ND	NC	50
Aroclor-1254	ND	ND	NC	50
Aroclor-1260	ND	ND	NC	50
Aroclor-1262	ND	ND	NC	50
Aroclor-1268	ND	ND	NC	50
Beta-BHC	ND	ND	NC	50
Delta-BHC	ND	ND	NC	50
Dieldrin	ND	ND	NC	50
Endosulfan I	ND	ND	NC	50
Endosulfan II	ND	ND	NC	50
Endosulfan Sulfate	ND	ND	NC	50
Endrin	ND	ND	NC	50
Endrin Aldehyde	ND	ND	NC	50
Endrin Ketone	ND	ND	NC	50
Gamma Chlordane	ND	ND	NC	50
Gamma-BHC	ND	ND	NC	50
Heptachlor	ND	ND	NC	50
Heptachlor Epoxide	ND	ND	NC	50
Methoxychlor	ND	ND	NC	50
Technical Chlordane	ND	ND	NC	50
Toxaphene	ND	ND	NC	50

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
4,4'-DDD	39.7	36.0	90	70 - 130
4,4'-DDE	39.7	36.0	92	70 - 130
4,4'-DDT	39.7	51.0	127	70 - 130
Aldrin	39.7	34.0	86	70 - 130
Alpha Chlordane	39.7	36.0	90	70 - 130
Alpha-BHC	39.7	33.0	84	70 - 130
Aroclor-1016	ND	ND	0	70 - 130
Aroclor-1254	ND	ND	0	70 - 130
Aroclor-1260	ND	ND	0	70 - 130
Beta-BHC	39.7	35.0	89	70 - 130
Delta-BHC	39.7	28.0	71	70 - 130
Dieldrin	39.7	36.0	91	70 - 130
Endosulfan I	39.7	36.0	91	70 - 130
Endosulfan II	39.7	37.0	94	70 - 130
Endosulfan Sulfate	39.7	37.0	94	70 - 130
Endrin	39.7	36.0	91	70 - 130
Endrin Aldehyde	39.7	31.0	78	70 - 130
Endrin Ketone	39.7	43.0	108	70 - 130
Gamma Chlordane	39.7	36.0	90	70 - 130
Gamma-BHC	39.7	35.0	89	70 - 130
Heptachlor	39.7	39.0	98	70 - 130
Heptachlor Epoxide	39.7	36.0	90	70 - 130
Methoxychlor	39.7	51.0	128	70 - 130
Technical Chlordane	ND	ND	0	70 - 130
Toxaphene	ND	ND	0	70 - 130

Comments:

Samples in Batch: AB87569, AB87570, AB87571, AB87572, AB87573, AB87574, AB87575, AB87576, AB87577, AB87578, AB87579, AB87580, AB87581, AB87582, AB87583, AB87584, AB87585, AB87586, AB87587, AB87588, AB87590, AB87591

PN: 20080025

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0031	SS-01	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0031	SS-01	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0031	SS-01	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0032	SS-02	SVOC	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	Pest/PCB	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	TAL Metals (Include Hg)	Soil	8/18/2020	09:15	2	4 oz Glass	4 C	Y
	S50022NH-0033	SS-03	Pest/PCB	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0033	SS-03	TAL Metals (Include Hg)	Soil	8/18/2020	09:25	1	4 oz Glass	4 C	
	S50022NH-0033	SS-03	SVOC	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0034	SS-04	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0036	SS-105	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0037	SS-06	SVOC	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i>	8/19/2020 10:15	<i>[Signature]</i> LSAT	8-19-20 10:15	20C

20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

PN: 20080025

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

 SAMPLES TRANSFERRED FROM  
 CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> / <i>[Signature]</i>	8/19/20 10:15	<i>[Signature]</i> ESAT	8-19-20 10:15	2 °C

 20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

PN: 20080026

## Laboratory Report

September 16, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project Number: 20080026

Project: McGoldrick Paper Co - Hindsdale, NH

Analysis: Pesticides and PCBs Medium Level in Soil

EPA Chemist: Phillip Gudgel

Date Samples Received by the Laboratory: 08/19/2020

### Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-PESTSOIL4.

The SOP is based on EPA SW-846 Method 8081A

The analysis was performed using high resolution capillary column chromatography on an Agilent 6890 gas chromatograph equipped with dual electron capture detectors. The 30 meter dual capillary column system consists of a J&W DB-5 and J&W DB-1701, both with 0.25mm ID and 0.25 micron film thickness. The results are reported on a dry weight basis.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

DANIEL

BOUDREAU

Digitally signed by  
DANIEL BOUDREAU

Date: 2020.09.16  
13:32:00 -04'00'

20080026\$PESMS

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.



**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID: S50022NH-0041  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.483 grams  
Wet Weight Prepared: 5.769 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87579  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 95%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	46	
319-85-7	Beta-BHC	ND	46	
58-89-9	Gamma-BHC	ND	46	
319-86-8	Delta-BHC	ND	46	
76-44-8	Heptachlor	ND	46	
309-00-2	Aldrin	ND	46	
1024-57-3	Heptachlor Epoxide	ND	46	
5103-74-2	Gamma Chlordane	ND	46	
959-98-8	Endosulfan I	ND	46	
5103-71-9	Alpha Chlordane	ND	46	
60-57-1	Dieldrin	ND	46	
72-55-9	4,4'-DDE	ND	46	
72-20-8	Endrin	ND	46	
33213-65-9	Endosulfan II	ND	46	
72-54-8	4,4'-DDD	ND	46	
7421-93-4	Endrin Aldehyde	ND	46	
1031-07-8	Endosulfan Sulfate	ND	46	
50-29-3	4,4'-DDT	ND	46	
53494-70-5	Endrin Ketone	ND	46	
72-43-5	Methoxychlor	ND	46	
57-74-9	Technical Chlordane	ND	91	
8001-35-2	Toxaphene	ND	91	
12674-11-2	Aroclor-1016	ND	91	
11104-28-2	Aroclor-1221	ND	91	
11141-16-5	Aroclor-1232	ND	91	
53469-21-9	Aroclor-1242	ND	91	
12672-29-6	Aroclor-1248	ND	91	
11097-69-1	Aroclor-1254	ND	91	
11096-82-5	Aroclor-1260	ND	91	
11100-14-4	Aroclor-1262	ND	91	
37324-23-5	Aroclor-1268	ND	91	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

85  
91

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0042	Lab Sample ID:	AB87580
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/11/2020	Percent Solids:	82%
Dry Weight Prepared:	5.290 grams	Extract Dilution:	10
Wet Weight Prepared:	6.481 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	47	
319-85-7	Beta-BHC	ND	47	
58-89-9	Gamma-BHC	ND	47	
319-86-8	Delta-BHC	ND	47	
76-44-8	Heptachlor	ND	47	
309-00-2	Aldrin	ND	47	
1024-57-3	Heptachlor Epoxide	ND	47	
5103-74-2	Gamma Chlordane	ND	47	
959-98-8	Endosulfan I	ND	47	
5103-71-9	Alpha Chlordane	ND	47	
60-57-1	Dieldrin	ND	47	
72-55-9	4,4'-DDE	ND	47	
72-20-8	Endrin	ND	47	
33213-65-9	Endosulfan II	ND	47	
72-54-8	4,4'-DDD	ND	47	
7421-93-4	Endrin Aldehyde	ND	47	
1031-07-8	Endosulfan Sulfate	ND	47	
50-29-3	4,4'-DDT	ND	47	
53494-70-5	Endrin Ketone	ND	47	
72-43-5	Methoxychlor	ND	47	
57-74-9	Technical Chlordane	ND	96	
8001-35-2	Toxaphene	ND	96	
12674-11-2	Aroclor-1016	ND	96	
11104-28-2	Aroclor-1221	ND	96	
11141-16-5	Aroclor-1232	ND	96	
53469-21-9	Aroclor-1242	ND	96	
12672-29-6	Aroclor-1248	ND	96	
11097-69-1	Aroclor-1254	ND	96	
11096-82-5	Aroclor-1260	ND	96	
11100-14-4	Aroclor-1262	ND	96	
37324-23-5	Aroclor-1268	ND	96	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

114  
96

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0043	Lab Sample ID:	AB87581
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/11/2020	Percent Solids:	91%
Dry Weight Prepared:	5.055 grams	Extract Dilution:	10
Wet Weight Prepared:	5.585 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	49	
319-85-7	Beta-BHC	ND	49	
58-89-9	Gamma-BHC	ND	49	
319-86-8	Delta-BHC	ND	49	
76-44-8	Heptachlor	ND	49	
309-00-2	Aldrin	ND	49	
1024-57-3	Heptachlor Epoxide	ND	49	
5103-74-2	Gamma Chlordane	ND	49	
959-98-8	Endosulfan I	ND	49	
5103-71-9	Alpha Chlordane	ND	49	
60-57-1	Dieldrin	ND	49	
72-55-9	4,4'-DDE	ND	49	
72-20-8	Endrin	ND	49	
33213-65-9	Endosulfan II	ND	49	
72-54-8	4,4'-DDD	ND	49	
7421-93-4	Endrin Aldehyde	ND	49	
1031-07-8	Endosulfan Sulfate	ND	49	
50-29-3	4,4'-DDT	ND	49	
53494-70-5	Endrin Ketone	ND	49	
72-43-5	Methoxychlor	ND	49	
57-74-9	Technical Chlordane	ND	99	
8001-35-2	Toxaphene	ND	99	
12674-11-2	Aroclor-1016	ND	99	
11104-28-2	Aroclor-1221	ND	99	
11141-16-5	Aroclor-1232	ND	99	
53469-21-9	Aroclor-1242	ND	99	
12672-29-6	Aroclor-1248	ND	99	
11097-69-1	Aroclor-1254	ND	99	
11096-82-5	Aroclor-1260	ND	99	
11100-14-4	Aroclor-1262	ND	99	
37324-23-5	Aroclor-1268	ND	99	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

84  
94

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID: S50022NH-0044  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.386 grams  
Wet Weight Prepared: 6.323 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87582  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 85%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	46	
319-85-7	Beta-BHC	ND	46	
58-89-9	Gamma-BHC	ND	46	
319-86-8	Delta-BHC	ND	46	
76-44-8	Heptachlor	ND	46	
309-00-2	Aldrin	ND	46	
1024-57-3	Heptachlor Epoxide	ND	46	
5103-74-2	Gamma Chlordane	ND	46	
959-98-8	Endosulfan I	ND	46	
5103-71-9	Alpha Chlordane	ND	46	
60-57-1	Dieldrin	ND	46	
72-55-9	4,4'-DDE	ND	46	
72-20-8	Endrin	ND	46	
33213-65-9	Endosulfan II	ND	46	
72-54-8	4,4'-DDD	ND	46	
7421-93-4	Endrin Aldehyde	ND	46	
1031-07-8	Endosulfan Sulfate	ND	46	
50-29-3	4,4'-DDT	ND	46	
53494-70-5	Endrin Ketone	ND	46	
72-43-5	Methoxychlor	ND	46	
57-74-9	Technical Chlordane	ND	93	
8001-35-2	Toxaphene	ND	93	
12674-11-2	Aroclor-1016	ND	93	
11104-28-2	Aroclor-1221	ND	93	
11141-16-5	Aroclor-1232	ND	93	
53469-21-9	Aroclor-1242	ND	93	
12672-29-6	Aroclor-1248	ND	93	
11097-69-1	Aroclor-1254	ND	93	
11096-82-5	Aroclor-1260	ND	93	
11100-14-4	Aroclor-1262	ND	93	
37324-23-5	Aroclor-1268	ND	93	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

103  
97

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0045	Lab Sample ID:	AB87583
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/11/2020	Percent Solids:	91%
Dry Weight Prepared:	5.627 grams	Extract Dilution:	10
Wet Weight Prepared:	6.208 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	44	
319-85-7	Beta-BHC	ND	44	
58-89-9	Gamma-BHC	ND	44	
319-86-8	Delta-BHC	ND	44	
76-44-8	Heptachlor	ND	44	
309-00-2	Aldrin	ND	44	
1024-57-3	Heptachlor Epoxide	ND	44	
5103-74-2	Gamma Chlordane	ND	44	
959-98-8	Endosulfan I	ND	44	
5103-71-9	Alpha Chlordane	ND	44	
60-57-1	Dieldrin	ND	44	
72-55-9	4,4'-DDE	ND	44	
72-20-8	Endrin	ND	44	
33213-65-9	Endosulfan II	ND	44	
72-54-8	4,4'-DDD	ND	44	
7421-93-4	Endrin Aldehyde	ND	44	
1031-07-8	Endosulfan Sulfate	ND	44	
50-29-3	4,4'-DDT	ND	44	
53494-70-5	Endrin Ketone	ND	44	
72-43-5	Methoxychlor	ND	44	
57-74-9	Technical Chlordane	ND	89	
8001-35-2	Toxaphene	ND	89	
12674-11-2	Aroclor-1016	ND	89	
11104-28-2	Aroclor-1221	ND	89	
11141-16-5	Aroclor-1232	ND	89	
53469-21-9	Aroclor-1242	ND	89	
12672-29-6	Aroclor-1248	ND	89	
11097-69-1	Aroclor-1254	ND	89	
11096-82-5	Aroclor-1260	ND	89	
11100-14-4	Aroclor-1262	ND	89	
37324-23-5	Aroclor-1268	ND	89	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	92	18 - 130
Decachlorobiphenyl	88	64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0046	Lab Sample ID:	AB87584
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/11/2020	Percent Solids:	80%
Dry Weight Prepared:	5.240 grams	Extract Dilution:	10
Wet Weight Prepared:	6.551 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	48	
319-85-7	Beta-BHC	ND	48	
58-89-9	Gamma-BHC	ND	48	
319-86-8	Delta-BHC	ND	48	
76-44-8	Heptachlor	ND	48	
309-00-2	Aldrin	ND	48	
1024-57-3	Heptachlor Epoxide	ND	48	
5103-74-2	Gamma Chlordane	ND	48	
959-98-8	Endosulfan I	ND	48	
5103-71-9	Alpha Chlordane	ND	48	
60-57-1	Dieldrin	ND	48	
72-55-9	4,4'-DDE	ND	48	
72-20-8	Endrin	ND	48	
33213-65-9	Endosulfan II	ND	48	
72-54-8	4,4'-DDD	ND	48	
7421-93-4	Endrin Aldehyde	ND	48	
1031-07-8	Endosulfan Sulfate	ND	48	
50-29-3	4,4'-DDT	ND	48	
53494-70-5	Endrin Ketone	ND	48	
72-43-5	Methoxychlor	ND	48	
57-74-9	Technical Chlordane	ND	95	
8001-35-2	Toxaphene	ND	95	
12674-11-2	Aroclor-1016	ND	95	
11104-28-2	Aroclor-1221	ND	95	
11141-16-5	Aroclor-1232	ND	95	
53469-21-9	Aroclor-1242	ND	95	
12672-29-6	Aroclor-1248	ND	95	
11097-69-1	Aroclor-1254	ND	95	
11096-82-5	Aroclor-1260	ND	95	
11100-14-4	Aroclor-1262	ND	95	
37324-23-5	Aroclor-1268	ND	95	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

91  
94

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID: S50022NH-0047  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/11/2020  
Dry Weight Prepared: 5.386 grams  
Wet Weight Prepared: 6.388 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87585  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 84%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	46	
319-85-7	Beta-BHC	ND	46	
58-89-9	Gamma-BHC	ND	46	
319-86-8	Delta-BHC	ND	46	
76-44-8	Heptachlor	ND	46	
309-00-2	Aldrin	ND	46	
1024-57-3	Heptachlor Epoxide	ND	46	
5103-74-2	Gamma Chlordane	ND	46	
959-98-8	Endosulfan I	ND	46	
5103-71-9	Alpha Chlordane	ND	46	
60-57-1	Dieldrin	ND	46	
72-55-9	4,4'-DDE	ND	46	
72-20-8	Endrin	ND	46	
33213-65-9	Endosulfan II	ND	46	
72-54-8	4,4'-DDD	ND	46	
7421-93-4	Endrin Aldehyde	ND	46	
1031-07-8	Endosulfan Sulfate	ND	46	
50-29-3	4,4'-DDT	ND	46	
53494-70-5	Endrin Ketone	ND	46	
72-43-5	Methoxychlor	ND	46	
57-74-9	Technical Chlordane	ND	93	
8001-35-2	Toxaphene	ND	93	
12674-11-2	Aroclor-1016	ND	93	
11104-28-2	Aroclor-1221	ND	93	
11141-16-5	Aroclor-1232	ND	93	
53469-21-9	Aroclor-1242	ND	93	
12672-29-6	Aroclor-1248	ND	93	
11097-69-1	Aroclor-1254	ND	93	
11096-82-5	Aroclor-1260	ND	93	
11100-14-4	Aroclor-1262	ND	93	
37324-23-5	Aroclor-1268	ND	93	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

85  
96

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0048	Lab Sample ID:	AB87586
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/11/2020	Percent Solids:	87%
Dry Weight Prepared:	5.209 grams	Extract Dilution:	10
Wet Weight Prepared:	5.979 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	48	
319-85-7	Beta-BHC	ND	48	
58-89-9	Gamma-BHC	ND	48	
319-86-8	Delta-BHC	ND	48	
76-44-8	Heptachlor	ND	48	
309-00-2	Aldrin	ND	48	
1024-57-3	Heptachlor Epoxide	ND	48	
5103-74-2	Gamma Chlordane	ND	48	
959-98-8	Endosulfan I	ND	48	
5103-71-9	Alpha Chlordane	ND	48	
60-57-1	Dieldrin	ND	48	
72-55-9	4,4'-DDE	ND	48	
72-20-8	Endrin	ND	48	
33213-65-9	Endosulfan II	ND	48	
72-54-8	4,4'-DDD	ND	48	
7421-93-4	Endrin Aldehyde	ND	48	
1031-07-8	Endosulfan Sulfate	ND	48	
50-29-3	4,4'-DDT	ND	48	
53494-70-5	Endrin Ketone	ND	48	
72-43-5	Methoxychlor	ND	48	
57-74-9	Technical Chlordane	ND	96	
8001-35-2	Toxaphene	ND	96	
12674-11-2	Aroclor-1016	ND	96	
11104-28-2	Aroclor-1221	ND	96	
11141-16-5	Aroclor-1232	ND	96	
53469-21-9	Aroclor-1242	ND	96	
12672-29-6	Aroclor-1248	ND	96	
11097-69-1	Aroclor-1254	ND	96	
11096-82-5	Aroclor-1260	ND	96	
11100-14-4	Aroclor-1262	ND	96	
37324-23-5	Aroclor-1268	ND	96	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

83  
88

18 - 130  
64 - 122



**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0049	Lab Sample ID:	AB87587
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/11/2020	Percent Solids:	96%
Dry Weight Prepared:	5.427 grams	Extract Dilution:	10
Wet Weight Prepared:	5.674 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	46	
319-85-7	Beta-BHC	ND	46	
58-89-9	Gamma-BHC	ND	46	
319-86-8	Delta-BHC	ND	46	
76-44-8	Heptachlor	ND	46	
309-00-2	Aldrin	ND	46	
1024-57-3	Heptachlor Epoxide	ND	46	
5103-74-2	Gamma Chlordane	ND	46	
959-98-8	Endosulfan I	ND	46	
5103-71-9	Alpha Chlordane	ND	46	
60-57-1	Dieldrin	ND	46	
72-55-9	4,4'-DDE	ND	46	
72-20-8	Endrin	ND	46	
33213-65-9	Endosulfan II	ND	46	
72-54-8	4,4'-DDD	ND	46	
7421-93-4	Endrin Aldehyde	ND	46	
1031-07-8	Endosulfan Sulfate	ND	46	
50-29-3	4,4'-DDT	ND	46	
53494-70-5	Endrin Ketone	ND	46	
72-43-5	Methoxychlor	ND	46	
57-74-9	Technical Chlordane	ND	92	
8001-35-2	Toxaphene	ND	92	
12674-11-2	Aroclor-1016	ND	92	
11104-28-2	Aroclor-1221	ND	92	
11141-16-5	Aroclor-1232	ND	92	
53469-21-9	Aroclor-1242	ND	92	
12672-29-6	Aroclor-1248	ND	92	
11097-69-1	Aroclor-1254	ND	92	
11096-82-5	Aroclor-1260	ND	92	
11100-14-4	Aroclor-1262	ND	92	
37324-23-5	Aroclor-1268	ND	92	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

78  
82

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0050	Lab Sample ID:	AB87588
Date of Collection:	8/18/2020	Matrix:	Soil
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/11/2020	Percent Solids:	94%
Dry Weight Prepared:	6.079 grams	Extract Dilution:	10
Wet Weight Prepared:	6.472 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	41	
319-85-7	Beta-BHC	ND	41	
58-89-9	Gamma-BHC	ND	41	
319-86-8	Delta-BHC	ND	41	
76-44-8	Heptachlor	ND	41	
309-00-2	Aldrin	ND	41	
1024-57-3	Heptachlor Epoxide	ND	41	
5103-74-2	Gamma Chlordane	ND	41	
959-98-8	Endosulfan I	ND	41	
5103-71-9	Alpha Chlordane	ND	41	
60-57-1	Dieldrin	ND	41	
72-55-9	4,4'-DDE	ND	41	
72-20-8	Endrin	ND	41	
33213-65-9	Endosulfan II	ND	41	
72-54-8	4,4'-DDD	ND	41	
7421-93-4	Endrin Aldehyde	ND	41	
1031-07-8	Endosulfan Sulfate	ND	41	
50-29-3	4,4'-DDT	ND	41	
53494-70-5	Endrin Ketone	ND	41	
72-43-5	Methoxychlor	ND	41	
57-74-9	Technical Chlordane	ND	82	
8001-35-2	Toxaphene	ND	82	
12674-11-2	Aroclor-1016	ND	82	
11104-28-2	Aroclor-1221	ND	82	
11141-16-5	Aroclor-1232	ND	82	
53469-21-9	Aroclor-1242	ND	82	
12672-29-6	Aroclor-1248	ND	82	
11097-69-1	Aroclor-1254	ND	82	
11096-82-5	Aroclor-1260	ND	82	
11100-14-4	Aroclor-1262	ND	82	
37324-23-5	Aroclor-1268	ND	82	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

84  
92

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID:	S50022NH-0053	Lab Sample ID:	AB87590
Date of Collection:	8/19/2020	Matrix:	Lab Sand
Date of Preparation:	8/26/2020	Amount Prepared:	N/A
Date of Analysis:	9/09/2020	Percent Solids:	N/A
Dry Weight Prepared:	5.026 grams	Extract Dilution:	2
Wet Weight Prepared:	N/A	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	5 mL		

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	20	4.9	
319-85-7	Beta-BHC	11	4.9	
58-89-9	Gamma-BHC	21	4.9	
319-86-8	Delta-BHC	ND	4.9	
76-44-8	Heptachlor	ND	4.9	
309-00-2	Aldrin	16	4.9	
1024-57-3	Heptachlor Epoxide	11	4.9	
5103-74-2	Gamma Chlordane	11	4.9	
959-98-8	Endosulfan I	ND	4.9	
5103-71-9	Alpha Chlordane	ND	4.9	
60-57-1	Dieldrin	37	4.9	
72-55-9	4,4'-DDE	55	4.9	
72-20-8	Endrin	ND	4.9	
33213-65-9	Endosulfan II	ND	4.9	
72-54-8	4,4'-DDD	21	4.9	
7421-93-4	Endrin Aldehyde	ND	4.9	
1031-07-8	Endosulfan Sulfate	ND	4.9	
50-29-3	4,4'-DDT	43	4.9	
53494-70-5	Endrin Ketone	25	4.9	
72-43-5	Methoxychlor	120	9.8	
57-74-9	Technical Chlordane	ND	99	
8001-35-2	Toxaphene	ND	99	
12674-11-2	Aroclor-1016	ND	99	
11104-28-2	Aroclor-1221	ND	99	
11141-16-5	Aroclor-1232	ND	99	
53469-21-9	Aroclor-1242	ND	99	
12672-29-6	Aroclor-1248	ND	99	
11097-69-1	Aroclor-1254	ND	99	
11096-82-5	Aroclor-1260	ND	99	
11100-14-4	Aroclor-1262	ND	99	
37324-23-5	Aroclor-1268	ND	99	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

82  
88

18 - 130  
64 - 122

**McGoldrick Paper Co - Hindsdale, NH**  
**Pesticides and PCBs Medium Level in Soil**

Client Sample ID: S50022NH-0054  
Date of Collection: 8/19/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/09/2020  
Dry Weight Prepared: 5.067 grams  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87591  
Matrix: Lab Sand  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	4.9	
319-85-7	Beta-BHC	ND	4.9	
58-89-9	Gamma-BHC	ND	4.9	
319-86-8	Delta-BHC	ND	4.9	
76-44-8	Heptachlor	ND	4.9	
309-00-2	Aldrin	ND	4.9	
1024-57-3	Heptachlor Epoxide	ND	4.9	
5103-74-2	Gamma Chlordane	ND	4.9	
959-98-8	Endosulfan I	ND	4.9	
5103-71-9	Alpha Chlordane	ND	4.9	
60-57-1	Dieldrin	ND	4.9	
72-55-9	4,4'-DDE	ND	4.9	
72-20-8	Endrin	ND	4.9	
33213-65-9	Endosulfan II	ND	4.9	
72-54-8	4,4'-DDD	ND	4.9	
7421-93-4	Endrin Aldehyde	ND	4.9	
1031-07-8	Endosulfan Sulfate	ND	4.9	
50-29-3	4,4'-DDT	ND	4.9	
53494-70-5	Endrin Ketone	ND	4.9	
72-43-5	Methoxychlor	ND	4.9	
57-74-9	Technical Chlordane	ND	99	
8001-35-2	Toxaphene	ND	99	
12674-11-2	Aroclor-1016	ND	99	
11104-28-2	Aroclor-1221	ND	99	
11141-16-5	Aroclor-1232	ND	99	
53469-21-9	Aroclor-1242	ND	99	
12672-29-6	Aroclor-1248	ND	99	
11097-69-1	Aroclor-1254	960	99	
11096-82-5	Aroclor-1260	ND	99	
11100-14-4	Aroclor-1262	ND	99	
37324-23-5	Aroclor-1268	ND	99	

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

81  
82

18 - 130  
64 - 122

US ENVIRONMENTAL PROTECTION AGENCY  
NEW ENGLAND LABORATORY  
**McGoldrick Paper Co - Hindsdale, NH**

Page 15 of 22

Comments: Compounds Methoxychlor and Endrin Ketone were above QC limits for both MS/MSD.

McGoldrick Paper Co - Hindsdale, NH

Pesticides and PCBs Medium Level in Soil

Client Sample ID: S50022NH-0032  
Date of Collection: 8/18/2020  
Date of Preparation: 8/26/2020  
Date of Analysis: 9/10/2020  
Dry Weight Prepared: 5.579 grams  
Wet Weight Prepared: 6.457 grams  
Volume Extracted: N/A  
Final Volume: 5 mL

Lab Sample ID: AB87570  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: 86%  
Extract Dilution: 10  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
319-84-6	Alpha-BHC	ND	45	
319-85-7	Beta-BHC	ND	45	
58-89-9	Gamma-BHC	ND	45	
319-86-8	Delta-BHC	ND	45	
76-44-8	Heptachlor	ND	45	
309-00-2	Aldrin	ND	45	
1024-57-3	Heptachlor Epoxide	ND	45	
5103-74-2	Gamma Chlordane	ND	45	
959-98-8	Endosulfan I	ND	45	
5103-71-9	Alpha Chlordane	ND	45	
60-57-1	Dieldrin	ND	45	
72-55-9	4,4'-DDE	ND	45	
72-20-8	Endrin	ND	45	
33213-65-9	Endosulfan II	ND	45	
72-54-8	4,4'-DDD	ND	45	
7421-93-4	Endrin Aldehyde	ND	45	
1031-07-8	Endosulfan Sulfate	ND	45	
50-29-3	4,4'-DDT	ND	45	
53494-70-5	Endrin Ketone	ND	45	
72-43-5	Methoxychlor	ND	45	
57-74-9	Technical Chlordane	ND	90	
8001-35-2	Toxaphene	ND	90	
12674-11-2	Aroclor-1016	ND	90	
11104-28-2	Aroclor-1221	ND	90	
11141-16-5	Aroclor-1232	ND	90	
53469-21-9	Aroclor-1242	ND	90	
12672-29-6	Aroclor-1248	ND	90	
11097-69-1	Aroclor-1254	ND	90	
11096-82-5	Aroclor-1260	ND	90	
11100-14-4	Aroclor-1262	ND	90	
37324-23-5	Aroclor-1268	ND	90	

Surrogate Compounds

Recoveries (%)

QC Ranges

2,4,5,6-Tetrachloro-m-xylene  
Decachlorobiphenyl

92  
93

18 - 130  
64 - 122

**MATRIX SPIKE (MS) RECOVERY**

Sample ID: AB87570

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
4,4'-DDD	38.0	ND	38.0	101	70 - 130
4,4'-DDE	38.0	ND	32.0	85	70 - 130
4,4'-DDT	38.0	ND	58.0	152	34 - 166
Aldrin	38.0	ND	32.0	85	36 - 119
Alpha Chlordane	38.0	ND	38.0	101	70 - 130
Alpha-BHC	38.0	ND	34.0	90	70 - 130
Aroclor-1016	ND	ND	ND	ND	70 - 130
Aroclor-1254	ND	ND	ND	ND	70 - 130
Aroclor-1260	ND	ND	ND	ND	70 - 130
Beta-BHC	38.0	ND	37.0	97	70 - 130
Delta-BHC	38.0	ND	32.0	85	70 - 130
Dieldrin	38.0	ND	42.0	110	39 - 155
Endosulfan I	38.0	ND	37.0	97	70 - 130
Endosulfan II	38.0	ND	44.0	115	70 - 130
Endosulfan Sulfate	38.0	ND	40.0	105	70 - 130
Endrin	38.0	ND	37.0	97	52 - 139
Endrin Aldehyde	38.0	ND	36.0	94	70 - 130
Endrin Ketone	38.0	ND	53.0	138	70 - 130
Gamma Chlordane	38.0	ND	41.0	108	70 - 130
Gamma-BHC	38.0	ND	38.0	100	34 - 137
Heptachlor	38.0	ND	40.0	105	47 - 143
Heptachlor Epoxide	38.0	ND	34.0	91	70 - 130
Methoxychlor	38.0	ND	63.0	167	70 - 130
Technical Chlordane	ND	ND	ND	ND	70 - 130
Toxaphene	ND	ND	ND	ND	70 - 130

Comments: Compounds Methoxychlor and Endrin Ketone were above QC limits for both MS/MSD.

**MATRIX SPIKE DUPLICATE (MSD) RECOVERY**

Sample ID:AB87570

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/Kg	MSD % REC	RPD %	QC LIMITS RPD
4,4'-DDD	37.0	37.0	101	0.3	50
4,4'-DDE	37.0	32.0	86	1.4	50
4,4'-DDT	37.0	55.0	149	2.2	50
Aldrin	37.0	32.0	86	1.1	50
Alpha Chlordane	37.0	38.0	102	1.4	50
Alpha-BHC	37.0	34.0	91	1.2	50
Beta-BHC	37.0	36.0	97	0.1	50
Delta-BHC	37.0	31.0	84	1.0	50
Dieldrin	37.0	33.0	88	21.4	50
Endosulfan I	37.0	40.0	108	11.5	50
Endosulfan II	37.0	42.0	115	0.1	50
Endosulfan Sulfate	37.0	37.0	100	4.9	50
Endrin	37.0	38.0	103	6.2	50
Endrin Aldehyde	37.0	34.0	93	1.0	50
Endrin Ketone	37.0	50.0	135	2.7	50
Gamma Chlordane	37.0	40.0	108	0.0	50
Gamma-BHC	37.0	37.0	101	0.2	50
Heptachlor	37.0	39.0	107	1.4	50
Heptachlor Epoxide	37.0	34.0	91	0.3	50
Methoxychlor	37.0	58.0	156	6.8	50



**Laboratory Duplicate Results**

Sample ID: AB87572

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
4,4'-DDD	ND	ND	NC	50
4,4'-DDE	ND	ND	NC	50
4,4'-DDT	ND	ND	NC	50
Aldrin	ND	ND	NC	50
Alpha Chlordane	ND	ND	NC	50
Alpha-BHC	ND	ND	NC	50
Aroclor-1016	ND	ND	NC	50
Aroclor-1221	ND	ND	NC	50
Aroclor-1232	ND	ND	NC	50
Aroclor-1242	ND	ND	NC	50
Aroclor-1248	ND	ND	NC	50
Aroclor-1254	ND	ND	NC	50
Aroclor-1260	ND	ND	NC	50
Aroclor-1262	ND	ND	NC	50
Aroclor-1268	ND	ND	NC	50
Beta-BHC	ND	ND	NC	50
Delta-BHC	ND	ND	NC	50
Dieldrin	ND	ND	NC	50
Endosulfan I	ND	ND	NC	50
Endosulfan II	ND	ND	NC	50
Endosulfan Sulfate	ND	ND	NC	50
Endrin	ND	ND	NC	50
Endrin Aldehyde	ND	ND	NC	50
Endrin Ketone	ND	ND	NC	50
Gamma Chlordane	ND	ND	NC	50
Gamma-BHC	ND	ND	NC	50
Heptachlor	ND	ND	NC	50
Heptachlor Epoxide	ND	ND	NC	50
Methoxychlor	ND	ND	NC	50
Technical Chlordane	ND	ND	NC	50
Toxaphene	ND	ND	NC	50

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
4,4'-DDD	39.7	36.0	90	70 - 130
4,4'-DDE	39.7	36.0	92	70 - 130
4,4'-DDT	39.7	51.0	127	70 - 130
Aldrin	39.7	34.0	86	70 - 130
Alpha Chlordane	39.7	36.0	90	70 - 130
Alpha-BHC	39.7	33.0	84	70 - 130
Aroclor-1016	ND	ND	0	70 - 130
Aroclor-1254	ND	ND	0	70 - 130
Aroclor-1260	ND	ND	0	70 - 130
Beta-BHC	39.7	35.0	89	70 - 130
Delta-BHC	39.7	28.0	71	70 - 130
Dieldrin	39.7	36.0	91	70 - 130
Endosulfan I	39.7	36.0	91	70 - 130
Endosulfan II	39.7	37.0	94	70 - 130
Endosulfan Sulfate	39.7	37.0	94	70 - 130
Endrin	39.7	36.0	91	70 - 130
Endrin Aldehyde	39.7	31.0	78	70 - 130
Endrin Ketone	39.7	43.0	108	70 - 130
Gamma Chlordane	39.7	36.0	90	70 - 130
Gamma-BHC	39.7	35.0	89	70 - 130
Heptachlor	39.7	39.0	98	70 - 130
Heptachlor Epoxide	39.7	36.0	90	70 - 130
Methoxychlor	39.7	51.0	128	70 - 130
Technical Chlordane	ND	ND	0	70 - 130
Toxaphene	ND	ND	0	70 - 130

Comments:

Samples in Batch: AB87569, AB87570, AB87571, AB87572, AB87573, AB87574, AB87575, AB87576, AB87577, AB87578, AB87579, AB87580, AB87581, AB87582, AB87583, AB87584, AB87585, AB87586, AB87587, AB87588, AB87590, AB87591

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> / <i>[Organization]</i>	8/19/2020 10:15	<i>[Signature]</i> ESPT	8-19-20 10:15	2 °C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM

PN: 20080026

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0043	SS-12	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0044	SS-13	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0045	SS-14	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0046	SS-15	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0047	SS-16	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0049	SS-18	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

## SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>Benjamin Weston</i>	8/19/2020 10:15	<i>Wing Chau</i> ES&T	8-19-20 10:15	20C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM

## Laboratory Report

September 21, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project Number: 20080025

Project: McGoldrick Paper Co - Hindsdale, NH

Analysis: Metals in Soil by ICP-OES

EPA Chemist: Michael Dowling

Date Samples Received by the Laboratory: 08/19/2020

## Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-OPTIMAS0.

Samples were prepared following the EPA Region I SOP, EIASOP-INGMETALSPREP8

Preparation and analysis SOP's are based on "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, Revision 2, Final Update III, Methods 3050B and 6010B," respectively. Samples were analyzed for Total Recoverable Metals using a Perkin Elmer Dual View Inductively Coupled Plasma - Optical Emission Spectrometer.

Samples were prepared and analyzed by ESAT contractors working at the USEPA New England Laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

DANIEL

BOUDREAU

Digitally signed by  
DANIEL BOUDREAUDate: 2020.09.21  
15:40:55 -04'00'

20080025\$METMS\_PE

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.

McGoldrick Paper Co - Hindsdale, NH

Metals in Soil by ICP-OES

Client Sample ID: S50022NH-0031  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87569  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	0.98	
7429-90-5	Aluminum	7900	11	
7440-38-2	Arsenic	27	2.0	
7440-39-3	Barium	100	2.0	
7440-41-7	Beryllium	ND	0.78	
7440-70-2	Calcium	3800	9.8	
7440-43-9	Cadmium	ND	0.98	
7440-48-4	Cobalt	6.8	2.0	
7440-47-3	Chromium	15	2.0	
7440-50-8	Copper	380	2.0	J1
7439-89-6	Iron	20000	3.9	
7439-95-4	Magnesium	2300	9.8	
7439-96-5	Manganese	230	2.0	
7440-02-0	Nickel	17	2.0	
7439-92-1	Lead	97	2.0	
7440-36-0	Antimony	ND	2.0	J1
7782-49-2	Selenium	ND	3.9	
7440-28-0	Thallium	ND	3.9	
7440-62-2	Vanadium	25	2.0	
7440-66-6	Zinc	190	2.0	

Comments: Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0032  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87570  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	7600	11	
7440-38-2	Arsenic	27	2.0	
7440-39-3	Barium	96	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	2500	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	8.9	2.0	
7440-47-3	Chromium	16	2.0	
7440-50-8	Copper	52	2.0	
7439-89-6	Iron	20000	4.0	
7439-95-4	Magnesium	2200	10	
7439-96-5	Manganese	270	2.0	
7440-02-0	Nickel	20	2.0	
7439-92-1	Lead	74	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	24	2.0	
7440-66-6	Zinc	170	2.0	

**Comments:** Results reported mg/kg, dry weight units.



**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0033  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87571  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	9900	11	
7440-38-2	Arsenic	7.2	2.0	
7440-39-3	Barium	43	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	13000	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	5.0	2.0	
7440-47-3	Chromium	23	2.0	
7440-50-8	Copper	86	2.0	
7439-89-6	Iron	12000	4.0	
7439-95-4	Magnesium	2200	10	
7439-96-5	Manganese	310	2.0	
7440-02-0	Nickel	13	2.0	
7439-92-1	Lead	21	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	18	2.0	
7440-66-6	Zinc	91	2.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0034  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87572  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	9600	11	
7440-38-2	Arsenic	23	2.0	
7440-39-3	Barium	91	2.0	
7440-41-7	Beryllium	0.85	0.82	
7440-70-2	Calcium	2800	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	8.7	2.0	
7440-47-3	Chromium	17	2.0	
7440-50-8	Copper	56	2.0	
7439-89-6	Iron	19000	4.1	
7439-95-4	Magnesium	2700	10	
7439-96-5	Manganese	240	2.0	
7440-02-0	Nickel	22	2.0	
7439-92-1	Lead	49	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.1	
7440-28-0	Thallium	ND	4.1	
7440-62-2	Vanadium	29	2.0	
7440-66-6	Zinc	130	2.0	

**Comments:** Results reported mg/kg, dry weight units.

McGoldrick Paper Co - Hindsdale, NH

Metals in Soil by ICP-OES

Client Sample ID: S50022NH-0035  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87573  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	9600	11	
7440-38-2	Arsenic	26	2.0	
7440-39-3	Barium	92	2.0	
7440-41-7	Beryllium	0.82	0.80	
7440-70-2	Calcium	2500	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	11	2.0	
7440-47-3	Chromium	17	2.0	
7440-50-8	Copper	64	2.0	
7439-89-6	Iron	21000	4.0	
7439-95-4	Magnesium	2500	10	
7439-96-5	Manganese	310	2.0	
7440-02-0	Nickel	21	2.0	
7439-92-1	Lead	74	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	27	2.0	
7440-66-6	Zinc	150	2.0	

Comments: Results reported mg/kg, dry weight units.

McGoldrick Paper Co - Hindsdale, NH

Metals in Soil by ICP-OES

Client Sample ID: S50022NH-0036  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87574  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	9000	11	
7440-38-2	Arsenic	21	2.0	
7440-39-3	Barium	77	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	2300	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	9.9	2.0	
7440-47-3	Chromium	17	2.0	
7440-50-8	Copper	54	2.0	
7439-89-6	Iron	20000	4.0	
7439-95-4	Magnesium	2600	10	
7439-96-5	Manganese	280	2.0	
7440-02-0	Nickel	19	2.0	
7439-92-1	Lead	64	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	25	2.0	
7440-66-6	Zinc	130	2.0	

Comments: Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0037  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87575  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	10000	11	
7440-38-2	Arsenic	10	2.0	
7440-39-3	Barium	52	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	1900	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	7.2	2.0	
7440-47-3	Chromium	16	2.0	
7440-50-8	Copper	45	2.0	
7439-89-6	Iron	16000	4.0	
7439-95-4	Magnesium	3000	10	
7439-96-5	Manganese	410	2.0	
7440-02-0	Nickel	16	2.0	
7439-92-1	Lead	27	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	25	2.0	
7440-66-6	Zinc	100	2.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0038  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87576  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	0.98	
7429-90-5	Aluminum	10000	11	
7440-38-2	Arsenic	25	2.0	
7440-39-3	Barium	110	2.0	
7440-41-7	Beryllium	ND	0.78	
7440-70-2	Calcium	3600	9.8	
7440-43-9	Cadmium	ND	0.98	
7440-48-4	Cobalt	9.3	2.0	
7440-47-3	Chromium	20	2.0	
7440-50-8	Copper	73	2.0	
7439-89-6	Iron	20000	3.9	
7439-95-4	Magnesium	2900	9.8	
7439-96-5	Manganese	330	2.0	
7440-02-0	Nickel	24	2.0	
7439-92-1	Lead	63	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	3.9	
7440-28-0	Thallium	ND	3.9	
7440-62-2	Vanadium	33	2.0	
7440-66-6	Zinc	150	2.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0039  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87577  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	12000	11	
7440-38-2	Arsenic	36	2.0	
7440-39-3	Barium	130	2.0	
7440-41-7	Beryllium	0.93	0.82	
7440-70-2	Calcium	4600	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	10	2.0	
7440-47-3	Chromium	30	2.0	
7440-50-8	Copper	99	2.0	
7439-89-6	Iron	24000	4.1	
7439-95-4	Magnesium	3900	10	
7439-96-5	Manganese	370	2.0	
7440-02-0	Nickel	26	2.0	
7439-92-1	Lead	81	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.1	
7440-28-0	Thallium	ND	4.1	
7440-62-2	Vanadium	33	2.0	
7440-66-6	Zinc	170	2.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0040  
Date of Collection: 8/18/2020  
Date of Preparation: 8/21/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87578  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	12000	11	
7440-38-2	Arsenic	48	2.0	
7440-39-3	Barium	200	2.0	
7440-41-7	Beryllium	0.99	0.80	
7440-70-2	Calcium	7300	10	
7440-43-9	Cadmium	1.4	1.0	
7440-48-4	Cobalt	9.2	2.0	
7440-47-3	Chromium	41	2.0	
7440-50-8	Copper	250	2.0	
7439-89-6	Iron	25000	4.0	
7439-95-4	Magnesium	2900	10	
7439-96-5	Manganese	350	2.0	
7440-02-0	Nickel	29	2.0	
7439-92-1	Lead	120	2.0	
7440-36-0	Antimony	2.3	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	31	2.0	
7440-66-6	Zinc	370	2.0	

**Comments:** Results reported mg/kg, dry weight units.



McGoldrick Paper Co - Hindsdale, NH

Laboratory Reagent Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Soil
Date of Preparation:	8/21/2020	Amount Prepared:	N/A
Date of Analysis:	9/14/2020	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	N/A	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	50 mL		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
7440-22-4	Silver	ND	10	
7429-90-5	Aluminum	ND	110	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	ND	20	
7440-41-7	Beryllium	ND	8.0	
7440-70-2	Calcium	ND	100	
7440-43-9	Cadmium	ND	10	
7440-48-4	Cobalt	ND	20	
7440-47-3	Chromium	ND	20	
7440-50-8	Copper	ND	20	
7439-89-6	Iron	ND	40	
7439-95-4	Magnesium	ND	100	
7439-96-5	Manganese	ND	20	
7440-02-0	Nickel	ND	20	
7439-92-1	Lead	ND	20	
7440-36-0	Antimony	ND	20	
7782-49-2	Selenium	ND	40	
7440-28-0	Thallium	ND	40	
7440-62-2	Vanadium	ND	20	
7440-66-6	Zinc	ND	20	

**McGoldrick Paper Co - Hindsdale, NH**

**MATRIX SPIKE (MS) RECOVERY**

Sample ID: AB87569

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Antimony	100	ND	38.0	38	75 - 125
Arsenic	100	27.0	127	100	75 - 125
Barium	100	100	207	107	75 - 125
Beryllium	40.0	ND	41.0	101	75 - 125
Cadmium	50.0	ND	49.0	98	75 - 125
Chromium	100	15.0	113	98	75 - 125
Cobalt	100	6.8	105	98	75 - 125
Copper	100	380	190	0	75 - 125
Lead	100	97.0	180	83	75 - 125
Manganese	100	230	355	125	75 - 125
Nickel	100	17.0	117	100	75 - 125
Selenium	100	ND	103	103	75 - 125
Silver	20.0	ND	20.0	99	75 - 125
Thallium	100	ND	92.0	92	75 - 125
Vanadium	100	25.0	123	98	75 - 125
Zinc	100	190	281	91	75 - 125

**McGoldrick Paper Co - Hindsdale, NH**

**Laboratory Duplicate Results**

Sample ID: AB87570

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aluminum	7600	7400	2.7	30
Antimony	ND	ND	NC	30
Arsenic	27.0	24.0	12	30
Barium	96.0	95.0	1.0	30
Beryllium	ND	ND	NC	30
Cadmium	ND	ND	NC	30
Calcium	2500	2400	4.1	30
Chromium	16.0	16.0	0	30
Cobalt	8.9	8.4	5.8	30
Copper	52.0	47.0	10	30
Iron	20000	19000	5.1	30
Lead	74.0	74.0	0	30
Magnesium	2200	2200	0	30
Manganese	270	250	7.7	30
Nickel	20.0	19.0	5.1	30
Selenium	ND	ND	NC	30
Silver	ND	ND	NC	30
Thallium	ND	ND	NC	30
Vanadium	24.0	24.0	0	30
Zinc	170	150	12	30

**McGoldrick Paper Co - Hindsdale, NH**

**Laboratory Fortified Blank (LFB) Results**

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Aluminum	1000	1040	104	85 - 115
Antimony	1000	1030	103	85 - 115
Arsenic	1000	993	99	85 - 115
Barium	1000	975	98	85 - 115
Beryllium	400	396	99	85 - 115
Cadmium	500	491	98	85 - 115
Calcium	10000	10000	100	85 - 115
Chromium	1000	995	100	85 - 115
Cobalt	1000	987	99	85 - 115
Copper	1000	1030	103	85 - 115
Iron	1000	1020	102	85 - 115
Lead	1000	984	98	85 - 115
Magnesium	10000	9970	100	85 - 115
Manganese	1000	1000	100	85 - 115
Nickel	1000	991	99	85 - 115
Selenium	1000	984	98	85 - 115
Silver	200	194	97	85 - 115
Thallium	1000	990	99	85 - 115
Vanadium	1000	1010	101	85 - 115
Zinc	1000	985	99	85 - 115

**Comments:**

**McGoldrick Paper Co - Hindsdale, NH**

**Solid Laboratory Control Sample (LCS) Results**

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Aluminum	9760	4280 - 12700
Antimony	59.5	20.6 - 255
Arsenic	95.8	68.3 - 127
Barium	313	240 - 400
Beryllium	42.1	31.1 - 51.8
Cadmium	114	85.5 - 143
Calcium	4660	3430 - 6020
Chromium	147	103 - 191
Cobalt	46.2	35.1 - 58.4
Copper	98.9	73.3 - 122
Iron	15200	4910 - 23200
Lead	96.5	74.0 - 135
Magnesium	2420	1430 - 3190
Manganese	282	206 - 351
Nickel	120	83.2 - 155
Selenium	93.6	60.1 - 126
Silver	30.4	21.9 - 42.1
Thallium	104	70.0 - 137
Vanadium	176	128 - 220
Zinc	208	148 - 275

Comments:

**Samples in Batch:** AB87569, AB87570, AB87571, AB87572, AB87573, AB87574, AB87575, AB87576, AB87577, AB87578

PN: 20080025

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0031	SS-01	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0031	SS-01	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0031	SS-01	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0032	SS-02	SVOC	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	Pest/PCB	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	TAL Metals (Include Hg)	Soil	8/18/2020	09:15	2	4 oz Glass	4 C	Y
	S50022NH-0033	SS-03	Pest/PCB	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0033	SS-03	TAL Metals (Include Hg)	Soil	8/18/2020	09:25	1	4 oz Glass	4 C	
	S50022NH-0033	SS-03	SVOC	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0034	SS-04	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0036	SS-105	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0037	SS-06	SVOC	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i>	8/19/2020 10:15	<i>[Signature]</i> LSAT	8-19-20 10:15	20C

20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

PN: 20080025

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

 SAMPLES TRANSFERRED FROM  
 CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> LSASD	8/19/20 10:15	<i>[Signature]</i> ESAT	8-19-20 10:15	2 °C

 20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

PN: 20080026

## Laboratory Report

September 21, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project Number: 20080026

Project: McGoldrick Paper Co - Hindsdale, NH

Analysis: Metals in Soil by ICP-OES

EPA Chemist: Michael Dowling

Date Samples Received by the Laboratory: 08/19/2020

### Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-OPTIMAS0.

Samples were prepared following the EPA Region I SOP, EIASOP-INGMETALSPREP8

Preparation and analysis SOP's are based on "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, Revision 2, Final Update III, Methods 3050B and 6010B," respectively. Samples were analyzed for Total Recoverable Metals using a Perkin Elmer Dual View Inductively Coupled Plasma - Optical Emission Spectrometer.

Samples were prepared and analyzed by ESAT contractors working at the USEPA New England Laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

**DANIEL**

**BOUDREAU**

Digitally signed by  
DANIEL BOUDREAU

Date: 2020.09.21  
15:38:31 -04'00'

20080026\$METMS\_PE



**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.

McGoldrick Paper Co - Hindsdale, NH

Metals in Soil by ICP-OES

Client Sample ID: S50022NH-0041  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87579  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	9300	11	
7440-38-2	Arsenic	16	2.0	
7440-39-3	Barium	83	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	2600	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	7.5	2.0	
7440-47-3	Chromium	16	2.0	
7440-50-8	Copper	78	2.0	
7439-89-6	Iron	18000	4.0	
7439-95-4	Magnesium	3000	10	
7439-96-5	Manganese	270	2.0	J1
7440-02-0	Nickel	19	2.0	
7439-92-1	Lead	47	2.0	
7440-36-0	Antimony	ND	2.0	J1
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	34	2.0	
7440-66-6	Zinc	110	2.0	

Comments: Results reported mg/kg, dry weight units.

McGoldrick Paper Co - Hindsdale, NH

Metals in Soil by ICP-OES

Client Sample ID: S50022NH-0042  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87580  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	11000	11	
7440-38-2	Arsenic	83	2.0	
7440-39-3	Barium	260	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	5300	10	
7440-43-9	Cadmium	15	1.0	
7440-48-4	Cobalt	8.3	2.0	
7440-47-3	Chromium	76	2.0	
7440-50-8	Copper	700	2.0	J3
7439-89-6	Iron	23000	4.0	
7439-95-4	Magnesium	3400	10	
7439-96-5	Manganese	590	2.0	
7440-02-0	Nickel	25	2.0	
7439-92-1	Lead	2500	2.0	J3
7440-36-0	Antimony	670	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	30	2.0	
7440-66-6	Zinc	630	2.0	

Comments: Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0043  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87581  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	0.98	
7429-90-5	Aluminum	9000	11	
7440-38-2	Arsenic	31	2.0	
7440-39-3	Barium	240	2.0	
7440-41-7	Beryllium	ND	0.78	
7440-70-2	Calcium	11000	9.8	
7440-43-9	Cadmium	ND	0.98	
7440-48-4	Cobalt	7.5	2.0	
7440-47-3	Chromium	27	2.0	
7440-50-8	Copper	88	2.0	
7439-89-6	Iron	26000	3.9	
7439-95-4	Magnesium	3100	9.8	
7439-96-5	Manganese	910	2.0	
7440-02-0	Nickel	27	2.0	
7439-92-1	Lead	80	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	3.9	
7440-28-0	Thallium	ND	3.9	
7440-62-2	Vanadium	32	2.0	
7440-66-6	Zinc	250	2.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0044  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87582  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	11000	11	
7440-38-2	Arsenic	8.8	2.0	
7440-39-3	Barium	92	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	2300	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	8.6	2.0	
7440-47-3	Chromium	21	2.0	
7440-50-8	Copper	32	2.0	
7439-89-6	Iron	19000	4.0	
7439-95-4	Magnesium	5100	10	
7439-96-5	Manganese	410	2.0	
7440-02-0	Nickel	21	2.0	
7439-92-1	Lead	25	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	33	2.0	
7440-66-6	Zinc	69	2.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0045  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87583  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	8000	11	
7440-38-2	Arsenic	13	2.0	
7440-39-3	Barium	88	2.0	
7440-41-7	Beryllium	ND	0.80	
7440-70-2	Calcium	2300	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	5.7	2.0	
7440-47-3	Chromium	15	2.0	
7440-50-8	Copper	42	2.0	
7439-89-6	Iron	15000	4.0	
7439-95-4	Magnesium	2500	10	
7439-96-5	Manganese	290	2.0	
7440-02-0	Nickel	15	2.0	
7439-92-1	Lead	98	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	27	2.0	
7440-66-6	Zinc	160	2.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0046  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87584  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 2  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	2.0	
7429-90-5	Aluminum	12000	22	
7440-38-2	Arsenic	13	4.0	
7440-39-3	Barium	87	4.0	
7440-41-7	Beryllium	ND	1.6	
7440-70-2	Calcium	2900	20	
7440-43-9	Cadmium	ND	2.0	
7440-48-4	Cobalt	10	4.0	
7440-47-3	Chromium	50	4.0	
7440-50-8	Copper	130	4.0	
7439-89-6	Iron	37000	8.0	
7439-95-4	Magnesium	4600	20	
7439-96-5	Manganese	490	4.0	
7440-02-0	Nickel	47	4.0	
7439-92-1	Lead	88	4.0	
7440-36-0	Antimony	ND	4.0	
7782-49-2	Selenium	ND	8.0	
7440-28-0	Thallium	ND	8.0	
7440-62-2	Vanadium	30	4.0	
7440-66-6	Zinc	130	4.0	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0047  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87585  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	1.0	
7429-90-5	Aluminum	11000	11	
7440-38-2	Arsenic	52	2.0	
7440-39-3	Barium	210	2.0	
7440-41-7	Beryllium	1.4	0.80	
7440-70-2	Calcium	3700	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	8.5	2.0	
7440-47-3	Chromium	17	2.0	
7440-50-8	Copper	51	2.0	
7439-89-6	Iron	23000	4.0	
7439-95-4	Magnesium	2700	10	
7439-96-5	Manganese	210	2.0	
7440-02-0	Nickel	22	2.0	
7439-92-1	Lead	75	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	4.0	
7440-28-0	Thallium	ND	2.0	
7440-62-2	Vanadium	32	2.0	
7440-66-6	Zinc	130	2.0	

**Comments:** Results reported mg/kg, dry weight units.



**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0048  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87586  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	ND	0.98	
7429-90-5	Aluminum	6600	11	
7440-38-2	Arsenic	21	2.0	
7440-39-3	Barium	120	2.0	
7440-41-7	Beryllium	ND	0.78	
7440-70-2	Calcium	4000	9.8	
7440-43-9	Cadmium	ND	0.98	
7440-48-4	Cobalt	6.3	2.0	
7440-47-3	Chromium	16	2.0	
7440-50-8	Copper	92	2.0	
7439-89-6	Iron	18000	3.9	
7439-95-4	Magnesium	1700	9.8	
7439-96-5	Manganese	230	2.0	
7440-02-0	Nickel	16	2.0	
7439-92-1	Lead	230	2.0	
7440-36-0	Antimony	3.7	2.0	
7782-49-2	Selenium	ND	3.9	
7440-28-0	Thallium	ND	3.9	
7440-62-2	Vanadium	24	2.0	
7440-66-6	Zinc	330	2.0	

**Comments:** Results reported mg/kg, dry weight units.

McGoldrick Paper Co - Hindsdale, NH

Metals in Soil by ICP-OES

Client Sample ID: S50022NH-0049  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87587  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	0.98	
7429-90-5	Aluminum	3800	11	
7440-38-2	Arsenic	15	2.0	
7440-39-3	Barium	39	2.0	
7440-41-7	Beryllium	ND	0.78	
7440-70-2	Calcium	610	9.8	
7440-43-9	Cadmium	ND	0.98	
7440-48-4	Cobalt	ND	2.0	
7440-47-3	Chromium	5.9	2.0	
7440-50-8	Copper	14	2.0	
7439-89-6	Iron	9200	3.9	
7439-95-4	Magnesium	990	9.8	
7439-96-5	Manganese	100	2.0	
7440-02-0	Nickel	4.7	2.0	
7439-92-1	Lead	54	2.0	
7440-36-0	Antimony	ND	2.0	
7782-49-2	Selenium	ND	3.9	
7440-28-0	Thallium	ND	3.9	
7440-62-2	Vanadium	17	2.0	
7440-66-6	Zinc	24	2.0	

Comments: Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0050  
Date of Collection: 8/18/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87588  
Matrix: Soil  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-22-4	Silver	ND	0.96	
7429-90-5	Aluminum	7200	11	
7440-38-2	Arsenic	3.6	1.9	
7440-39-3	Barium	24	1.9	
7440-41-7	Beryllium	ND	0.77	
7440-70-2	Calcium	530	9.6	
7440-43-9	Cadmium	ND	0.96	
7440-48-4	Cobalt	5.3	1.9	
7440-47-3	Chromium	11	1.9	
7440-50-8	Copper	13	1.9	
7439-89-6	Iron	14000	3.8	
7439-95-4	Magnesium	3200	9.6	
7439-96-5	Manganese	240	1.9	
7440-02-0	Nickel	13	1.9	
7439-92-1	Lead	9.3	1.9	
7440-36-0	Antimony	ND	1.9	
7782-49-2	Selenium	ND	3.8	
7440-28-0	Thallium	ND	3.8	
7440-62-2	Vanadium	17	1.9	
7440-66-6	Zinc	62	1.9	

**Comments:** Results reported mg/kg, dry weight units.

**McGoldrick Paper Co - Hindsdale, NH**

**Metals in Soil by ICP-OES**

Client Sample ID: S50022NH-0055  
Date of Collection: 8/19/2020  
Date of Preparation: 8/31/2020  
Date of Analysis: 9/14/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A  
Volume Extracted: N/A  
Final Volume: 50 mL

Lab Sample ID: AB87592  
Matrix: Lab Sand  
Amount Prepared: N/A  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A  
GPC Factor: N/A

<b>CAS Number</b>	<b>Compound</b>	<b>Concentration mg/Kg</b>	<b>RL mg/Kg</b>	<b>Qualifier</b>
7440-22-4	Silver	6.7	1.0	
7429-90-5	Aluminum	2200	11	
7440-38-2	Arsenic	44	2.0	
7440-39-3	Barium	6.6	2.0	
7440-41-7	Beryllium	14	0.80	
7440-70-2	Calcium	5100	10	
7440-43-9	Cadmium	ND	1.0	
7440-48-4	Cobalt	20	2.0	
7440-47-3	Chromium	20	2.0	
7440-50-8	Copper	17	2.0	
7439-89-6	Iron	4600	4.0	
7439-95-4	Magnesium	390	10	
7439-96-5	Manganese	32	2.0	
7440-02-0	Nickel	ND	2.0	
7439-92-1	Lead	5.8	2.0	
7440-36-0	Antimony	17	2.0	
7782-49-2	Selenium	14	4.0	
7440-28-0	Thallium	ND	4.0	
7440-62-2	Vanadium	45	2.0	
7440-66-6	Zinc	4.3	2.0	

**Comments:** Results reported mg/kg, as received.

McGoldrick Paper Co - Hindsdale, NH

Laboratory Reagent Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Lab Sand
Date of Preparation:	8/31/2020	Amount Prepared:	N/A
Date of Analysis:	9/14/2020	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	N/A	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	50 mL		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
7440-22-4	Silver	ND	10	
7429-90-5	Aluminum	ND	110	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	ND	20	
7440-41-7	Beryllium	ND	8.0	
7440-70-2	Calcium	ND	100	
7440-43-9	Cadmium	ND	10	
7440-48-4	Cobalt	ND	20	
7440-47-3	Chromium	ND	20	
7440-50-8	Copper	ND	20	
7439-89-6	Iron	52	40	
7439-95-4	Magnesium	ND	100	
7439-96-5	Manganese	ND	20	
7440-02-0	Nickel	ND	20	
7439-92-1	Lead	ND	20	
7440-36-0	Antimony	ND	20	
7782-49-2	Selenium	ND	40	
7440-28-0	Thallium	ND	40	
7440-62-2	Vanadium	ND	20	
7440-66-6	Zinc	ND	20	

McGoldrick Paper Co - Hindsdale, NH

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB87579

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Antimony	100	ND	28.0	28	75 - 125
Arsenic	100	16.0	116	100	75 - 125
Barium	100	83.0	178	95	75 - 125
Beryllium	40.0	ND	41.0	103	75 - 125
Cadmium	50.0	ND	50.0	99	75 - 125
Chromium	100	16.0	117	101	75 - 125
Cobalt	100	7.5	106	99	75 - 125
Copper	100	78.0	176	98	75 - 125
Lead	100	47.0	139	92	75 - 125
Manganese	100	270	336	66	75 - 125
Nickel	100	19.0	118	99	75 - 125
Selenium	100	ND	101	101	75 - 125
Silver	20.0	ND	20.0	100	75 - 125
Thallium	100	ND	92.0	92	75 - 125
Vanadium	100	34.0	134	100	75 - 125
Zinc	100	110	198	88	75 - 125

**McGoldrick Paper Co - Hindsdale, NH**

**Laboratory Duplicate Results**

Sample ID: AB87580

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aluminum	11000	11000	0	30
Antimony	670	ND	NC	30
Arsenic	83.0	72.0	14	30
Barium	260	230	12	30
Beryllium	ND	ND	NC	30
Cadmium	15.0	14.0	6.9	30
Calcium	5300	5400	1.9	30
Chromium	76.0	79.0	3.9	30
Cobalt	8.3	7.9	4.9	30
Copper	700	400	55	30
Iron	23000	29000	23	30
Lead	2500	1000	86	30
Magnesium	3400	3300	3.0	30
Manganese	590	580	1.7	30
Nickel	25.0	27.0	7.7	30
Selenium	ND	ND	NC	30
Silver	ND	ND	NC	30
Thallium	ND	ND	NC	30
Vanadium	30.0	28.0	6.9	30
Zinc	630	590	6.6	30

**McGoldrick Paper Co - Hindsdale, NH**

**Laboratory Fortified Blank (LFB) Results**

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Aluminum	1000	1020	102	85 - 115
Antimony	1000	1050	105	85 - 115
Arsenic	1000	984	98	85 - 115
Barium	1000	976	98	85 - 115
Beryllium	400	391	98	85 - 115
Cadmium	500	493	99	85 - 115
Calcium	10000	10000	100	85 - 115
Chromium	1000	1010	101	85 - 115
Cobalt	1000	991	99	85 - 115
Copper	1000	1040	104	85 - 115
Iron	1000	1010	101	85 - 115
Lead	1000	987	99	85 - 115
Magnesium	10000	9990	100	85 - 115
Manganese	1000	993	99	85 - 115
Nickel	1000	998	100	85 - 115
Selenium	1000	973	97	85 - 115
Silver	200	196	98	85 - 115
Thallium	1000	971	97	85 - 115
Vanadium	1000	1020	102	85 - 115
Zinc	1000	985	99	85 - 115

**Comments:**



**McGoldrick Paper Co - Hindsdale, NH**

**Solid Laboratory Control Sample (LCS) Results**

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Aluminum	9210	4280 - 12700
Antimony	41.4	20.6 - 255
Arsenic	96.5	68.3 - 127
Barium	331	240 - 400
Beryllium	46.8	31.1 - 51.8
Cadmium	124	85.5 - 143
Calcium	4760	3430 - 6020
Chromium	156	103 - 191
Cobalt	46.9	35.1 - 58.4
Copper	104	73.3 - 122
Iron	11500	4910 - 23200
Lead	97.3	74.0 - 135
Magnesium	2350	1430 - 3190
Manganese	271	206 - 351
Nickel	124	83.2 - 155
Selenium	98.8	60.1 - 126
Silver	32.2	21.9 - 42.1
Thallium	107	70.0 - 137
Vanadium	176	128 - 220
Zinc	207	148 - 275

Comments:

**Samples in Batch:** AB87579, AB87580, AB87581, AB87582, AB87583, AB87584, AB87585, AB87586, AB87587, AB87588, AB87592

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> / <i>[Organization]</i>	8/19/2020 10:15	<i>[Signature]</i> ESAT	8-19-20 10:15	2 °C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM

PN: 20080026

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0043	SS-12	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0044	SS-13	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0045	SS-14	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0046	SS-15	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0047	SS-16	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0049	SS-18	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

## SAMPLES TRANSFERRED FROM

## CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>B. W. Chau</i> / EPA	8/19/2020 10:15	<i>Wing Chau</i> / EPA	8-19-20 10:15	20C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM

## Laboratory Results

September 21, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project No: 20080025  
Project: McGoldrick Paper Co - Hindsdale, NH  
Analysis: Direct Mercury Analysis in Soil  
EPA Chemist: Janet Paquin

Date Samples Received by the Laboratory: 08/19/2020

### Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-INGDMA1.

Method 7473, Mercury in Solids and Solutions by Thermal Decomposition Amalgamation and Atomic Absorption Spectrophotometry Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846", Revision 0, 01/98.

Samples were prepared and analyzed by ESAT contractors working at the USEPA New England Laboratory.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

If you have any questions please call me at 617-918-8340.

Sincerely,

DANIEL

BOUDREAU

Digitally signed by  
DANIEL BOUDREAU

Date: 2020.09.21  
14:27:40 -04'00'

20080025DMAS\_CHEM

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.

McGoldrick Paper Co - Hindsdale, NH

Direct Mercury Analysis in Soil

Matrix: Soil

Sample Number	Lab ID	Collected	Analysis	Concentration ug/g	RL ug/g	Qualifier
S50022NH-0031	AB87569	08/18/2020 0	09/10/2020 13	0.21	0.031	J1
Comments: Result reported ug/g, dry weight units.						
S50022NH-0032	AB87570	08/18/2020 0	09/10/2020 13	0.11	0.032	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0033	AB87571	08/18/2020 0	09/10/2020 13	0.050	0.031	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0034	AB87572	08/18/2020 0	09/10/2020 13	0.094	0.030	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0035	AB87573	08/18/2020 0	09/10/2020 13	0.25	0.032	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0036	AB87574	08/18/2020 0	09/10/2020 13	0.12	0.031	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0037	AB87575	08/18/2020 0	09/10/2020 13	0.033	0.031	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0038	AB87576	08/18/2020 0	09/10/2020 13	0.086	0.031	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0039	AB87577	08/18/2020 0	09/10/2020 13	0.078	0.031	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0040	AB87578	08/18/2020 0	09/10/2020 13	0.12	0.032	
Comments: Result reported ug/g, dry weight units.						
Blank			09/10/2020 13	ND	0.0079	
Comments: Result reported ug/g, dry weight units.						

**US ENVIRONMENTAL PROTECTION AGENCY  
NEW ENGLAND LABORATORY**

Page 4 of 9

**McGoldrick Paper Co - Hindsdale, NH**

McGoldrick Paper Co - Hindsdale, NH

MATRIX SPIKE (MS) Results

SAMPLE ID	PARAMETER	SPIKE ADDED ug/g	SAMPLE CONCENTRATION ug/g	MS CONCENTRATION ug/g	MS % REC	QC LIMITS (% REC)
AB87569	Direct Mercury Analysis in Soil	0.059	0.21	0.31	169	80 - 120

Comments:

Laboratory Duplicate Results

SAMPLE ID	PARAMETER	SAMPLE RESULT ug/g	SAMPLE DUP RESULT ug/g	PRECISION RPD %	QC LIMITS (%RPD)
AB87570	Direct Mercury Analysis in Soil	0.11	0.11	0	20



McGoldrick Paper Co - Hindsdale, NH

Low/High Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ng	LFB RESULT ng	LFB RECOVERY %	QC LIMITS %
-----------	----------------------------	---------------------	----------------------	-------------------

**High Level**

Direct Mercury Analysis in Soil	75	80	107	80 - 120
---------------------------------	----	----	-----	----------

**Low Level**

Direct Mercury Analysis in Soil	15	16	107	80 - 120
---------------------------------	----	----	-----	----------

Comments:

McGoldrick Paper Co - Hindsdale, NH

Solid Laboratory Control Sample (LCS) Results

McGoldrick Paper Co - Hindsdale, NH

PARAMETER	LCS RESULTS ug/g	CERTIFIED VALUE ug/g	CONTROL LIMITS ug/g
Direct Mercury Analysis in Soil	2.9	2.98	2.62 - 3.34

Comments:

PN: 20080025

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0031	SS-01	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0031	SS-01	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0031	SS-01	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0032	SS-02	SVOC	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	Pest/PCB	Soil	8/18/2020	09:15	2	8 oz Glass	4 C	Y
	S50022NH-0032	SS-02	TAL Metals (Include Hg)	Soil	8/18/2020	09:15	2	4 oz Glass	4 C	Y
	S50022NH-0033	SS-03	Pest/PCB	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0033	SS-03	TAL Metals (Include Hg)	Soil	8/18/2020	09:25	1	4 oz Glass	4 C	
	S50022NH-0033	SS-03	SVOC	Soil	8/18/2020	09:25	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0034	SS-04	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	
	S50022NH-0034	SS-04	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0035	SS-05	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0036	SS-105	SVOC	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	Pest/PCB	Soil	8/18/2020	09:10	1	8 oz Glass	4 C	
	S50022NH-0036	SS-105	TAL Metals (Include Hg)	Soil	8/18/2020	09:10	1	4 oz Glass	4 C	
	S50022NH-0037	SS-06	SVOC	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i>	8/19/2020 10:15	<i>[Signature]</i> LSAT	8-19-20 10:15	20C

20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

 SAMPLES TRANSFERRED FROM  
 CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> / <i>[Signature]</i>	8/19/20 10:15	<i>[Signature]</i> ESAT	8-19-20 10:15	2 °C

 20080025 \$PESMS  
 20080025 \$BNA<S  
 20080025 DMAS\_CHEM  
 20080025 \$METMS\_PE

 PN: 20080026  
 1-2

## Laboratory Results

September 21, 2020

Wing Chau - Mail Code 02-2

US EPA New England R1

Project No: 20080026  
Project: McGoldrick Paper Co - Hindsdale, NH  
Analysis: Direct Mercury Analysis in Soil  
EPA Chemist: Janet Paquin

Date Samples Received by the Laboratory: 08/19/2020

### Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-INGDMA1.

Method 7473, Mercury in Solids and Solutions by Thermal Decomposition Amalgamation and Atomic Absorption Spectrophotometry Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846", Revision 0, 01/98.

Samples were prepared and analyzed by ESAT contractors working at the USEPA New England Laboratory.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

If you have any questions please call me at 617-918-8340.

Sincerely,

DANIEL  
BOUDREAU

Digitally signed by  
DANIEL BOUDREAU  
Date: 2020.09.21  
14:29:58 -04'00'

20080026DMAS\_CHEM

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.

McGoldrick Paper Co - Hindsdale, NH

Direct Mercury Analysis in Soil

Matrix: Soil

Sample Number	Lab ID	Collected	Analysis	Concentration ug/g	RL ug/g	Qualifier
S50022NH-0041	AB87579	08/18/2020 0	09/11/2020 8	0.10	0.040	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0042	AB87580	08/18/2020 0	09/11/2020 8	0.061	0.032	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0043	AB87581	08/18/2020 0	09/11/2020 8	0.11	0.030	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0044	AB87582	08/18/2020 0	09/11/2020 8	0.040	0.032	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0045	AB87583	08/18/2020 0	09/11/2020 8	0.22	0.033	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0046	AB87584	08/18/2020 0	09/11/2020 8	0.080	0.034	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0047	AB87585	08/18/2020 0	09/11/2020 8	0.24	0.032	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0048	AB87586	08/18/2020 0	09/11/2020 8	0.43	0.031	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0049	AB87587	08/18/2020 0	09/11/2020 8	0.073	0.031	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0050	AB87588	08/18/2020 0	09/11/2020 8	ND	0.029	
Comments: Result reported ug/g, dry weight units.						
S50022NH-0055	AB87592	08/19/2020 0	09/11/2020 8	0.83	0.066	
Comments: Result reported ug/g, as received.						

McGoldrick Paper Co - Hindsdale, NH

Direct Mercury Analysis in Soil

Matrix: Lab Sand

Sample Number	Lab ID	Collected	Analysis	Concentration ug/g	RL ug/g	Qualifier
Blank			09/11/2020 8	ND	0.0077	

Comments: Result reported ug/g, dry weight units.



McGoldrick Paper Co - Hindsdale, NH

MATRIX SPIKE (MS) Results

SAMPLE ID	PARAMETER	SPIKE ADDED ug/g	SAMPLE CONCENTRATION ug/g	MS CONCENTRATION ug/g	MS % REC	QC LIMITS (% REC)
AB87579	Direct Mercury Analysis in Soil	0.074	0.10	0.18	108	80 - 120

Comments:

Laboratory Duplicate Results

SAMPLE ID	PARAMETER	SAMPLE RESULT ug/g	SAMPLE DUP RESULT ug/g	PRECISION RPD %	QC LIMITS (%RPD)
AB87580	Direct Mercury Analysis in Soil	0.061	0.061	0	20

McGoldrick Paper Co - Hindsdale, NH

Low/High Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ng	LFB RESULT ng	LFB RECOVERY %	QC LIMITS %
-----------	----------------------------	---------------------	----------------------	-------------------

**High Level**

Direct Mercury Analysis in Soil	75	77	103	80 - 120
---------------------------------	----	----	-----	----------

**Low Level**

Direct Mercury Analysis in Soil	15	16	107	80 - 120
---------------------------------	----	----	-----	----------

Comments:

McGoldrick Paper Co - Hindsdale, NH

Solid Laboratory Control Sample (LCS) Results

McGoldrick Paper Co - Hindsdale, NH

PARAMETER	LCS RESULTS ug/g	CERTIFIED VALUE ug/g	CONTROL LIMITS ug/g
-----------	------------------------	----------------------------	---------------------------

Direct Mercury Analysis in Soil	3.1	2.98	2.62 - 3.34
---------------------------------	-----	------	-------------

Comments:

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0037	SS-06	Pest/PCB	Soil	8/18/2020	09:40	1	8 oz Glass	4 C	
	S50022NH-0037	SS-06	TAL Metals (Include Hg)	Soil	8/18/2020	09:40	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0038	SS-07	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0038	SS-07	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	TAL Metals (Include Hg)	Soil	8/18/2020	09:20	1	4 oz Glass	4 C	
	S50022NH-0039	SS-08	SVOC	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0039	SS-08	Pest/PCB	Soil	8/18/2020	09:20	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	SVOC	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	Pest/PCB	Soil	8/18/2020	09:30	1	8 oz Glass	4 C	
	S50022NH-0040	SS-09	TAL Metals (Include Hg)	Soil	8/18/2020	09:30	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0041	SS-10	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0041	SS-10	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0042	SS-11	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0043	SS-12	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0043	SS-12	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>[Signature]</i> / <i>[Signature]</i>	8/19/2020 10:15	<i>[Signature]</i> ESAT	8-19-20 10:15	2 °C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM

PN: 20080026

## USEPA

Date Shipped: 8/19/2020

McGoldrick Paper Company

## CHAIN OF CUSTODY RECORD

Site #: S50022NH

Contact Name: Wing Chau

Contact Phone: 617-694-7056

No: S5-0022NH-01QJ-02

Lab: LSASD/NERL

Lab Phone: 617-918-8490

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	S50022NH-0043	SS-12	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0044	SS-13	SVOC	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	Pest/PCB	Soil	8/18/2020	09:50	1	8 oz Glass	4 C	
	S50022NH-0044	SS-13	TAL Metals (Include Hg)	Soil	8/18/2020	09:50	1	4 oz Glass	4 C	
	S50022NH-0045	SS-14	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0045	SS-14	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	TAL Metals (Include Hg)	Soil	8/18/2020	10:00	1	4 oz Glass	4 C	
	S50022NH-0046	SS-15	SVOC	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0046	SS-15	Pest/PCB	Soil	8/18/2020	10:00	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	TAL Metals (Include Hg)	Soil	8/18/2020	09:55	1	4 oz Glass	4 C	
	S50022NH-0047	SS-16	SVOC	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0047	SS-16	Pest/PCB	Soil	8/18/2020	09:55	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	SVOC	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	Pest/PCB	Soil	8/18/2020	09:45	1	8 oz Glass	4 C	
	S50022NH-0048	SS-17	TAL Metals (Include Hg)	Soil	8/18/2020	09:45	1	4 oz Glass	4 C	
	S50022NH-0049	SS-18	SVOC	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	Pest/PCB	Soil	8/18/2020	09:00	1	8 oz Glass	4 C	
	S50022NH-0049	SS-18	TAL Metals (Include Hg)	Soil	8/18/2020	09:00	1	4 oz Glass	4 C	

Special Instructions: Please email results to chau.wing@epa.gov

## SAMPLES TRANSFERRED FROM

## CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
LSASD	<i>B. W. Chau</i> / EPA	8/19/2020 10:15	<i>Wing Chau</i> / EPA	8-19-20 10:15	20C

20080026 \$METMS\_PE  
 50080026 \$BNAMS  
 20080026 \$PESMS  
 20080026DMAS\_CHEM