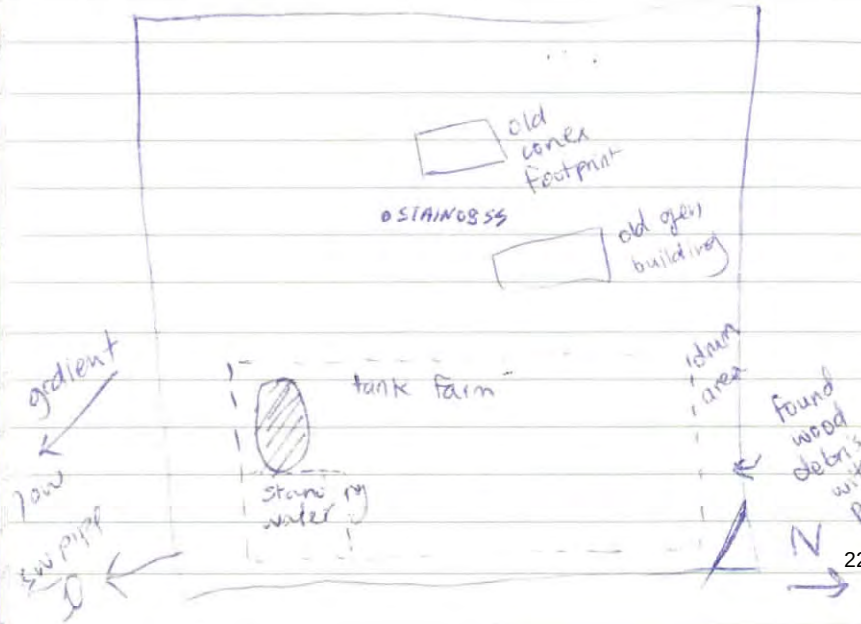
Appendix G – Field Documentation

7/18/2025 Begin Sampling Elim Tank farm

- Arrived on site at 9:15am to walk site.
  present: F. Ballard
  N. Qureshi
  S. Daniels (Elim IRA)
  Weather is overcast, light sprinkles, no wind 50° out currently.

- Checked utilities with Elim maintenance at 9:40am. Only waterline outside prop boundaries. Old fuel line SE corner of property.



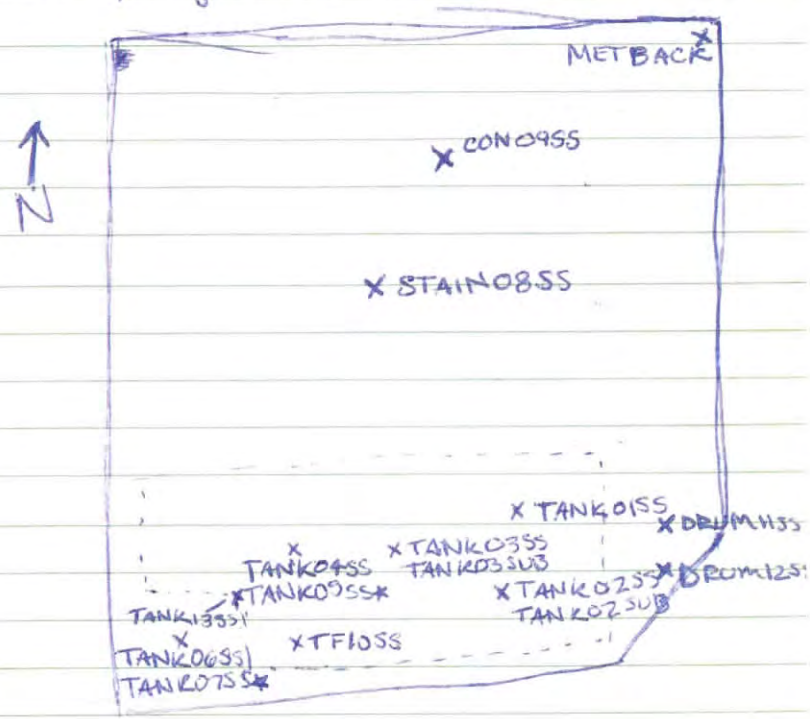
10:00am - placed flags for sample spots. Found wood debris with intact paint over by NE corner.

-FB

11:15am - prepped site for sampling, cleared vegetation

-NQ

Sampling locations



* = duplicate

7/18/2024 12:5? pm

Sample ID	AK101 BTEX	AK102/AK103	EPA 8260D	EPA 8270E	EPA 6020	EPA 8082A	Time	Depth
2407ELIM-TANK01SS	X	X	X	X	X		1:32 pm	6"
2407ELIM-TANK02SS	X	X	X	X	X		1:39 pm	7"
2407ELIM-TANK02SUB	X	X	X	X	X		1:48 pm	14"
2407ELIM-TANK03SS	X	X	X				1:56 pm	8.5"
2407ELIM-TANK03SUB	X	X	X				2:0[illegible] pm	17"
2407ELIM-TANK04SS	X	X	X	X	X	X	2:10 pm	14"
~~2407ELIM-TANK04SUB~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~ NG		
2407ELIM-TANK05SS*	X		X				2:1[illegible] pm	[illegible]
2407ELIM-TANK06SS	X	X	X	X			2:37 pm	7"
~~2407ELIM-TANK06SUB~~	~~X~~	~~X~~	X	~~X~~		NG		
2407ELIM-TANK07SS*	X						2:37 pm	7"
~~2407ELIM-TAN~~ NG								
2407ELIM-STAIN08SS	X	X	X	X	X		1:19 pm	[illegible]
2407ELIM-CON04SS	X	X			X		1:09 pm	3"
2407ELIM-DRUM11SS	X	X	X	X			3:00 pm	6"
2407ELIM-DRUM12					X		3:20 pm	3"
2407ELIM-METBACK					X		[illegible]:04 pm	6"
2407ELIM-TF10SS						X	2:30 pm	8"
2407ELIM-TANK13SS	X	X	X	X	X		2:48 pm	8"

- 3:14 pm - FB

XRF elim - 01 0.0 ppm Pb
XRF elim - 02 9.0 ppm Pb
XRF elim - 03 10.0 ppm Pb → first 3" soil

7/18/24 NG

2407ELIM-CONC7SS 1:13
lots of gravel in soil

2407ELIM-STAINS5S 1:19
strong petroleum odor

2407ELIM-TANK1SS 1:37
strong petroleum odor

2407ELIM-TANK02SUB 1:46
attempted to reach sub surface twice, met resistance both times at 14 inches suspected that tank farm footprint may be underlayed with gravel

2407ELIM-TANK03SUB 2:06
met resistance at 17"

2407ELIM-TF1SS 2:36
attempted to sample 2ft W of berm, met resistance from gravel pad went to 5ft W of berm

7/18/24 NG

2407ELIM-TANK04SUB/
2407ELIM-TANK13SS
met resistance at 04SUB, decided to conduct opportunistic sampling on south E area of Tank farm footprint. Collected ~~bottle~~ samples in bottles, ~~labeled~~ designated for 2407ELIM-TANK04SUB Created 2407ELIM-TANK1SS
- Found buried foam and soda cans

3:22 pm at 2407ELIM-TANK06. Finalizing samples, cleaning materials, Took final photos of site. Left site at 3:28pm.

-FB

7/18/24 4:21 PM

- Recalibrated XRF samples for final compliance.

Appendix H – 2024 Elim Old AVEC Tank Farm Sampling and Analysis Plan

ELIM OLD AVEC TANK FARM SAMPLING AND ANALYSIS PLAN

Elim Old AVEC Tank Farm

Hazard ID: 25432

DEC File No. 600.38.006

Nabi Qureshi

Environmental Program Specialist

Contaminated Sites Program

July 2, 2024

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

AAC – Alaska Administrative Code

DEC – Alaska Department of Environmental Conservation

ANCSA – Alaska Native Claims Settlement Act

AST – Aboveground Storage Tank

AVEC – Alaska Village Electric Cooperative

BEESC – Bristol Environmental & Engineering Services Corporation

BIA – Bureau of Indian Affairs

BTEX – Benzene, toluene, ethylbenzene, total xylenes

CS – Contaminated Sites Program

DRO – Deisel Range Organics

EPA – United States Environmental Protection Agency

FSG – Field Sampling Guidance

GRO – Gasoline Range Organics

PACP – Property Assessment and Cleanup Plan

PAH – Polycyclic aromatic hydrocarbons

PCB – Polychlorinated biphenyl

PID – Photoionization detector

QAPP – Quality Assurance Project Plan

QEP – Qualified Environmental Professional

QES – Qualified Environmental Sampler

RCRA – Resource Conservation and Recovery Act

RRO – Residual Range Organics

SAP – Sampling and Analysis Plan

SVOC – Semi-Volatile Organic Compounds

SVR – Site Visit Report

VOC – Volatile Organic Compounds

XRF – X-Ray Fluorescence Spectrometer

1 INTRODUCTION

In 2023, the Alaska Department of Environmental Conservation (DEC) conducted a review of potential and existing Contaminated Alaska Native Claims Settlement Act (ANCSA) Sites to identify sites in need of further investigation, to confirm Contaminated ANCSA Site status. The Elim Old Alaska Village Electric Co-operative (AVEC) Tank Farm (site) has been identified as a Potentially Contaminated ANCSA Site where contamination has not been confirmed. There is suspected petroleum, polychlorinated biphenyls (PCBs), and metal contamination due to historical use in the 1970s, yet contamination has not been confirmed, characterized, or delineated at this site. This Sampling and Analysis Work Plan (SAP) written by DEC details sampling activities to take place to confirm contamination at this site to be included in the Contaminated ANCSA Sites Common Operating Picture.

1.1 OBJECTIVES

The objective of this SAP is to conduct a limited investigation to confirm the presence or absence of contamination at the Elim Old AVEC Tank Farm. Upon verification of contamination presence or absence, the status of the site will be updated in both the Unites States Environmental Protection Agency's (EPA's) Contaminated ANCSA Site Common Operating Picture, as well as DEC's Contaminated Sites (CS) Database. The activities outlined in this SAP are not proposed as a full site characterization. Upon the confirmation of contamination, this site may be eligible for additional funding as a Contaminated ANCSA Site for further assessment and cleanup activities.

1.2 PROJECT SCHEDULE

The project outlined in this SAP is expected to take place on Thursday, July 18, 2024.

1.3 DISTRIBUTION LIST

This SAP will be distributed to the following individuals and organizations:

- Elim Native Corporation – Site landowner and Native Village Corporation
- Native Village of Elim – Federally recognized tribe of Elim
- City of Elim – Municipal government with historical and present interest in site
- Kawerak, Inc. – Non-profit tribal consortium
- DEC – Project manager

2 SITE INFORMATION

2.1 SITE DESCRIPTION AND BACKGROUND

The Elim Old AVEC Tank Farm is located in the City of Elim at the intersection of 2nd street and Main Street, at approximately 64.616541 North, -162.263164 West (Appendix B). The Elim Old AVEC Tank Farm is an informational site on the CS Database (Elim Old AVEC Tank Farm, File Number #600.38.006, Hazard ID 25432), and is unverified on the EPA's Contaminated ANCSA Site Common Operating Picture (EPA Site ID ANCSA00469). The Native Village of Elim received a Brownfields Award in 2009.

Between 1970 and 2005, AVEC operated a power plant which utilized up to nine vertical aboveground storage tanks (ASTs), as well as a generator building, and a CONEX building, electrical boxes and equipment, and a generator enclosed in a 20,000 square feet fenced area. Surveys of the site also identified 55-gallon drums, 5-gallon buckets containing unknown fluids, and miscellaneous debris. Interviews indicate that a liner was placed in the 1980s under the tank farm footprint and it is suspected that the liner was subsequently removed when structures were removed. The tank farm was relocated in 2005, and by 2012, all ASTs and other infrastructure had been decommissioned and removed. Currently the area is overgrown with vegetation, and a chain-link fence around the perimeter of the property encases the site. A 2018 site visit conducted a limited field screening using a photoionization detector (PID), which indicated the presence of petroleum in the surface soil within the footprint of the tank farm. At this time the fence was noted to be collapsing in the southwest corner, the southern portion of the tank farm footprint contained approximately 3 inches of standing water, and there was an area of soil that appeared stained with no vegetation towards the center of the property. In 2022, Kawerak Inc. and Esker Associates visited Elim, and observed the fence for the tank farm to still be in place, but the site was easily accessible to community members, including school children.

2.2 Community Description

With a population just over 350 residents, Elim is a Yupik/Inupiat Eskimo community located on the northwest shore of Norton Bay on the Seward Peninsula (64.6160 N, -162.2648 W; Section 15, Township 10 South, Range 11 West, Kateel River Meridian; Appendix A). It is 460 miles northwest of Anchorage, and 96 miles east of Nome. Elim has a subarctic climate with maritime influences. Norton Sound is ice-free between approximately mid-June to mid-November. The area is characterized by tundra interspersed with boreal forest and weather patterns of shorter warm summers with longer cold winters, it is located within DEC's under 40 inch precipitation zone. The community drinking water source is from surface water upslope of this site; depth to groundwater, while variable in the community, is recorded at approximately 66 feet bgs at the old United States Bureau of Indian Affairs (BIA) school, and historical information indicates that groundwater quality is poor due to high concentrations of dissolved solids which exceed the regulatory criterion for drinking water.

2.3 Property Ownership and History

The Elim Old AVEC Tank Farm property was conveyed under ANCSA section 19(b) to Elim Native Corporation on September 14, 1979, in Patent No. 50-79-0148 (Appendix C). Elim Native Corporation was conveyed surface and subsurface rights to the land described as U.S. Survey No. 2548, comprising of the Norton Bay Reservation. Elim Native Corporation is not affiliated with any ANCSA regional corporation. Prior to 1979, this property was owned by the BIA, who had issued a temporary use permit to AVEC, active from April 1, 1970, to April 1, 2005. AVEC utilized this property to construct facilities and install electric generation equipment and associated distribution facilities, to provide electrical utility service to the Village of Elim.

2.4 Contaminated ANCSA Site Status

According to the EPA's Contaminated ANCSA Lands Assistance Program, assessment and cleanup funds are available to eligible applicants for use on sites on ANCSA conveyed lands that have been contaminated prior to conveyance (EPA 2023). Furthermore, EPA identified addressing "orphan [ANCSA]

sites" as a near-term priority, defined as sites which (1) no responsible party has been identified after reasonable effort has been made, or (2) is appropriately determined to have resulted from an act of God or act of war, or (3) is not currently in a cleanup program (state or federal).

The property of the Elim Old AVEC Tank Farm was conveyed to Elim Native Corporation in 1979. It is suspected that if contamination is present, it occurred prior to conveyance, due to the lack of a liner until possibly the 1980's.

3 Previous Environmental Assessments

3.1 Previous Investigations

In 2001, DEC tasked Bristol Environmental & Engineering Services Corporation (BEESC) to conduct a site reconnaissance at four AST sites in Elim, Alaska, including the Old AVEC Tank Farm. In 2005, the tank farm was relocated. The Native Village of Elim received a Brownfields Award in 2009 to conduct a Property Assessment and Cleanup Plan (PACP) that served to provide information to advance the property through the Brownfield process and beneficially reuse the site. By 2012, the tanks and other structures on site had been decommissioned and removed. In 2018, DEC staff conducted a site visit and submitted a Site Visit Report (SVR). Previous investigations have not been able to confirm the presence or absence of contamination.

3.1.1 2001 – Site Reconnaissance

In September 2001, a Site Reconnaissance (Appendix D) was completed to address the four AST tank farm sites in Elim, Alaska through DEC's AST Program. Three samples were taken from outside the fence surrounding the Old AVEC Tank Farm. One sample was taken from 30 feet north of the southeast corner of the tank farm, and 3 feet east of the fence, at 2 feet bgs; the other two samples were taken in a ditch on the east side of the road of the tank farm (30 feet directly east of the tank farm) at 2 feet bgs and 4 feet bgs. Only the samples taken at 2 feet bgs were sent to the lab for Deisel Range Organics (DRO) analysis. The sample from the ditch returned a non-detect result, while the sample closer to the tank farm returned a DRO concentration of 212 mg/kg (below cleanup level). The report recommended that the soil beneath the tank farm be investigated once the tank farm was decommissioned.

3.1.2 2009/2010 – Brownfields Award and Property Assessment and Cleanup Plan

In 2010 the property received a PACP under DEC's Reuse and Redevelopment program following fieldwork completed in 2009 (Appendix E). This report did not include any sample collection. The report notes that there were six areas of potential contamination on the property including:

- Debris pile
- Drum area
- Tank farm area
- Electrical boxes
- One electrical transformer (located within the tank farm)
- Stained soil

The 2010 PACP recommended removing solid waste, excavating, and managing contaminated soil, and conducting a targeted surface and subsurface soil investigation. It was not recommended in this report

to investigate groundwater due to it possibly being as deep as 66 feet bgs and located below permafrost, as well as general groundwater quality is poor in Elim.

3.1.3 2018 – Site Visit

In September 2018, DEC staff conducted a site visit to the Elim Old AVEC Tank Farm along with staff from Kawerak, Inc. During this site visit, staff collected three samples for screening from 4 different test pits, resulting in a total of 12 samples. Test pits 1, 2, and 3 were within the tank farm footprint, and test pit 4 was just outside the footprint, on the western edge. Soil samples were screened for petroleum using the heated headspace method with a PID. Samples from test pit 1 and 2 showed elevated PID readings (see Table 1). The PID gave a filter error message while reading samples from test pit 3, and the filter was replaced prior to collecting the remaining samples. Due to limited time and dense vegetation cover, an X-Ray Fluorescence (XRF) Spectrometer was not utilized for screening.

PID screening samples from the 2018 site visit are shown in Table 1.

Table 1.

Sample ID	Depth	PID (ppm)	Notes	Sample ID	Depth	PID (ppm)	Notes
TF1	12 in	136	Has strong odor	TF7	0 in	1.7*	No odor
TF2	2 ft	329	Has strong odor	TF8	2 ft	3	No odor
TF3	4 ft	401	Has strong odor	TF9	4 ft	0.6	No odor
TF4	0 in	143	Has odor	TF10	0 in	0.5	No odor
TF5	2 ft	36	Has odor	TF11	2 ft	1.1	No odor
TF6	4ft	240	Has odor	TF12	4 ft	2.1	No odor

* =PID gave filter error and filter was replaced

The full results of the Site Visit can be found in the SVR (Appendix F)

3.2 Contaminants of Potential Concern

Based upon the historical site use and previous investigations conducted, the contaminants of potential concern (COPCs) are listed in Table 2. This site is located within DEC's "Under 40-inch" precipitation zone, and while there is existing permafrost, it is likely discontinuous. DEC's Method 2 Under 40 inch cleanup levels (AAC 75, Tables B1 and B2) will be the screening levels for site verification. Groundwater cleanup levels are not referenced due to the depth to groundwater, and that it is not likely be encountered as part of this effort. If suprapermafrost groundwater is encountered, it will be noted and described in the field notes for further assessment.

Table 2.

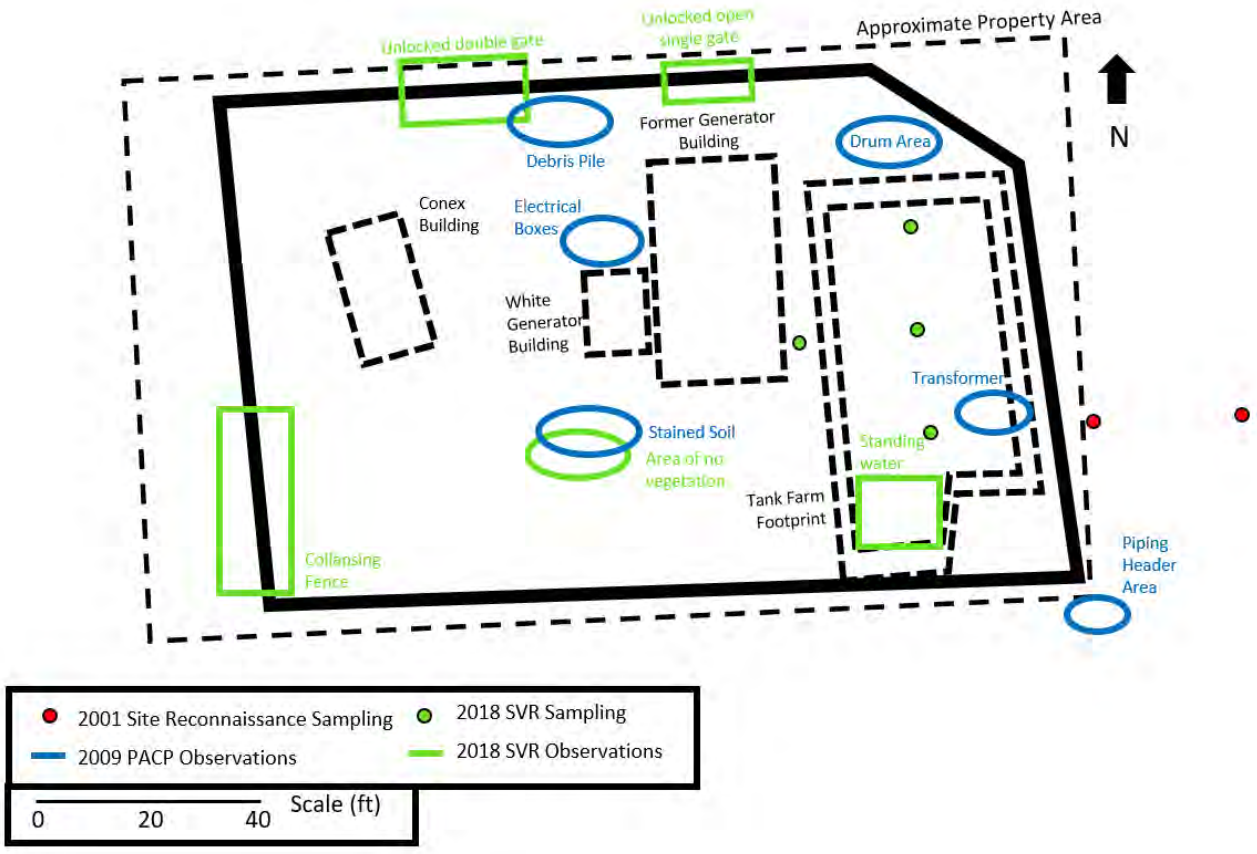
Analyte	**Human Health Cleanup level (mg/kg)**	**Migration to Groundwater Cleanup level (mg/kg)**	**Analysis Method**
GRO	1400	300	AK 101
DRO	10250	250	AK 102
RRO	10000	11000	AK 103
BTEX	See Appendix G	See Appendix G	AK 101

VOCs	See Appendix G	See Appendix G	EPA 8260D
PAH	See Appendix G	See Appendix G	EPA 8270E
PCBs	1.0	N/A	EPA 8082A
Metals	See Appendix G	See Appendix G	EPA 6020B

3.3 Areas of Interest

The areas of interest at this site are identified in the 2001 Site Reconnaissance, 2010 PACP, and 2018 SVR. Limited sampling has been done at this site and contamination has not been confirmed. Previous sampling areas, and observations are detailed in Figure 3.3-1.

Figure 3.3-1: Previous Sampling, Observations, and Areas of Interest



The areas of interest for possible contamination are as listed below:

- tank farm footprint
- drum area
- electrical boxes
- area of stained soil
- electrical transformer located within the tank farm footprint.
- piping header area

4 Potential Sources and Receptors

4.1 Sources of Potential Contamination

The sources of potential contamination have been identified in previous investigations. According to the Site Reconnaissance, this site consisted of nine vertical tanks that were reportedly used to store diesel fuel for the power plant. An aerial photo from 1972 confirms that the four northernmost tanks on the property were constructed first, and aerial photos from 1991 and 2004 confirm subsequent construction of five more tanks. While the tanks were decommissioned and demolished by 2012, it is unknown if any spills or leaks occurred prior to their decommissioning – however in a 2009 interview for the PACP, one member of the Elim community mentioned observing overfilling of the tanks, though no date was given. In the same interview, it is mentioned that no liner was installed when the tank farm was first constructed, but residents recalled a liner may have been installed in the 1980s. A liner was not observed in the 2001 Site Reconnaissance, or the 2018 Site Visit. It is suspected that the four northernmost tanks would have contributed the most to pre-conveyance contamination at this site.

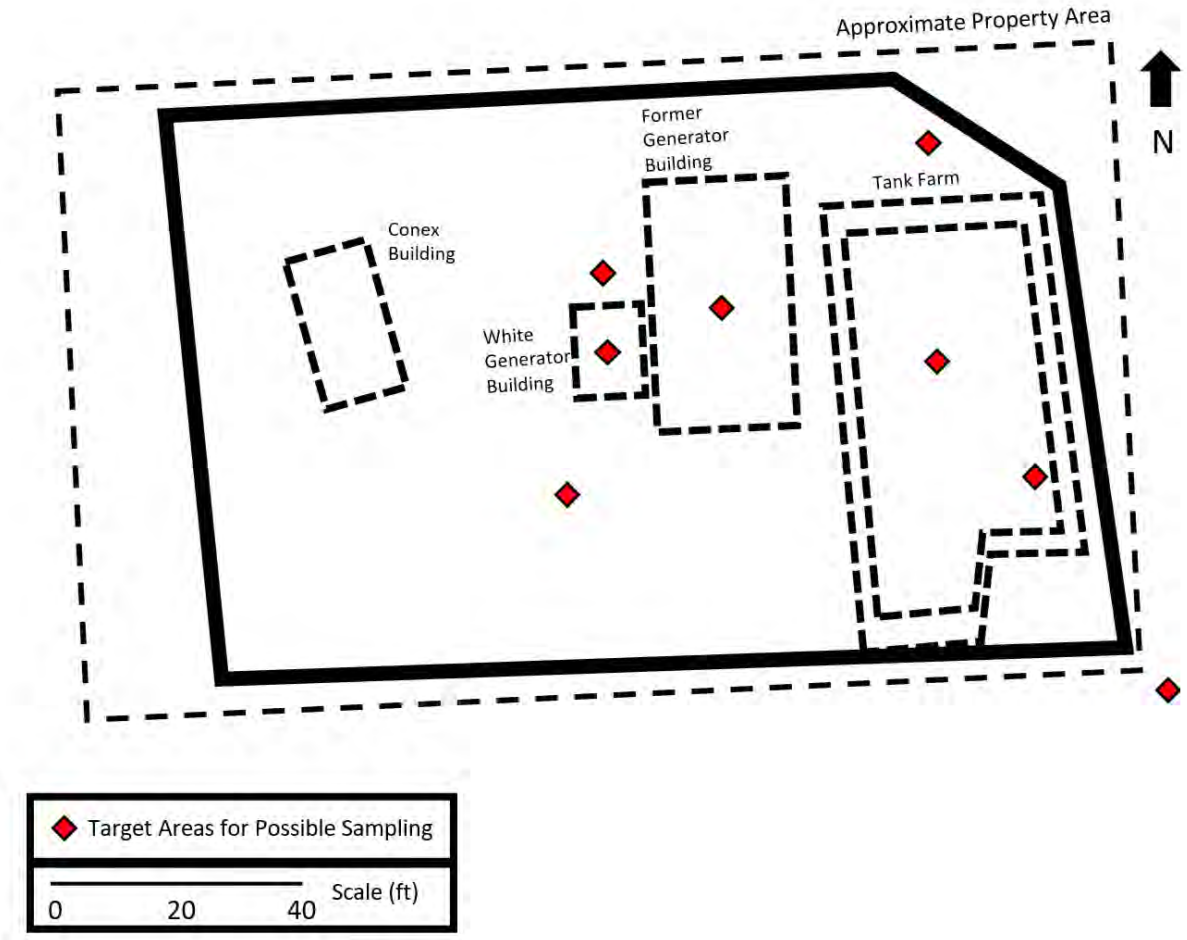
The 2010 PACP noted the existence of a possible polychlorinated biphenyl (PCB) containing transformer that was in use through around 1980, as well as fuel and lubricants for the generators, stove oil, radiator fluid (glycol), and potentially lead based paint (given the age of the buildings). There were also at least two structures (a white generator building and a CONEX building) containing old electrical equipment, paint, paint thinner, and a generator. Aside from the structures, the site also contained electrical boxes and equipment, a generator, 55-gallon barrels, 5-gallon buckets, and miscellaneous debris. Additionally, the feed line from the Old AVEC Tank Farm was still present in 2009 and contaminated soil could be encountered there.

The primary source of potential contamination is the tank farm. Secondary sources of potential contamination include the electric transformer, the (demolished) buildings, and the piping header/feed line which is outside the property.

4.2 Targets

Exact sampling locations will be determined upon commencement of field work but can be based on predetermined targets for contamination. Due to the sources of potential contamination, DEC will make a reasonable attempt to sample the tank farm footprint, the area of the electrical transformer within the footprint, the area of the demolished buildings, and the piping header if possible. Additional target areas identified in previous investigation include electrical boxes, an area of stained soil, and a drum area. See Figure 4.2-1 for a site map highlighting target areas.

Figure 4.2-1: Target Areas for Possible Sampling



5 Sampling Process Design

The anticipated matrix to be sampled at this site is soil. Sampling locations are judgement based and general areas will be determined prior to investigation but can be modified based on observations made once on-site. All field sampling will be performed by a Qualified Environmental Sampler (QES) or Qualified Environmental Professional (QEP), in accordance with 18 Alaska Administrative Code (AAC) 75.333. This section summarizes the sampling plan and approach to be conducted by DEC staff at the Elim Old AVEC Tank Farm Site. Detailed sample collection protocols are documented in the 2022 DEC Field Sampling Guidance (FSG).

5.1 Sampling Locations

The exact location of test pits for sampling will be determined upon commencement of field activities. Test pits will be based on visual and olfactory evidence, screening results, and previously identified target areas. DEC staff will identify 5 to 10 sampling locations. Examples of test pit locations could include the tank farm footprint, building footprints, drum area, electrical boxes, electrical transformer located within the tank farm area, piping header area, and the area of stained soil all identified in the

2010 PACP, as well as the previous test pit areas or area with no vegetation identified in the 2018 site visit.

5.2 Screening Activities

Prior to exposing soil for test pits, DEC will identify locations for screening potential areas of metal contamination and will clear vegetation for use of an XRF to screen for metals. Identified test pit locations with elevated XRF readings will be analyzed for Metals (EPA 6020B).

DEC will use a backhoe or hand auger with an extension to expose soil in test pits up to 10ft bgs if possible. Test pits will be screened for organic vapors using heated headspace with a PID to determine if elevated levels of petroleum contamination are present in the soil, and sample collection depth will be determined based on PID readings. If field screening indicates an absence of elevated PID readings, then one parent soil sample will be collected based on field observations.

5.3 Sample Collection

Soil samples will be collected from eight (8) test pits. From each test pit, DEC will collect one surface soil sample (less than 2 feet bgs) and one subsurface soil sample (more than 2 feet bgs). Excavated soil will be stockpiled on a clean tarp or plastic sheet on site and will be returned to the depth from which they were removed and compacted to grade.

5.4 Quality Assurance/Quality Control (QA/QC) Samples

QA/QC procedures are outlined in detail in DEC's 2023 QAPP. One field duplicate sample will be collected per each set of 10 samples, for each COPC. Additional quality control samples will include VOC trip blanks (1 per analysis per cooler), and temperature blanks (1 per cooler). SGS North America Inc. (SGS), a DEC approved lab, will follow standard QA/QC procedures, as stated in the QAPP and individual analytical method. DEC staff will complete laboratory data checklist for each sample batch.

5.5 Sample Handling and Custody

The basic labeling strategy will use a prefix to indicate the test pit locations designated TP1, TP2, TP3, and so on, followed by the sample depth in feet.

The samples will remain in the custody of the sample team until they are transferred to another person, under proper chain of custody protocol. A chain of custody record will be completed for each batch of samples and included in the lab-provided sample container to be sent to the laboratory. A duplicate copy of the chain of custody will be maintained for DEC records.

The samples will be transported to SGS in Anchorage, a DEC approved lab via DEC staff. The samples will be wrapped in bubble wrap with gel ice packs inside lab-provided storage containers.

SGS North America Inc.

200 West Potter Dr.

99518 – Anchorage

Phone: 907-562-2343

5.6 Sampling Protocol and Equipment

A fresh pair of gloves will be worn and changed before each sample is taken. A clean, metal trowel or disposable plastic spoon will be used to collect soil samples. Sample collection jars and protocols will be dictated by the COPC and media (soil), as specified in the FSG and by the analytical lab. A duplicate sample will be collected for every 10 samples per analyte and matrix and for each site sampled.

Sampling equipment and supplies may include the items listed below and any additional equipment will be specified in the logbook.

- Field logbooks
- Re-sealable plastic bags (Ziploc), gallon and quart size
- Black sharpie markers, pencils, pens
- Sterile/clean nitrile gloves
- Plastic spoons, or clean stainless-steel spoons
- Disposable plastic bowls
- Paper towels
- Simple Green
- Measuring tape
- Bubble wrap
- Trash bags
- Coolers, with gel ice
- Watch
- Camera
- GPS unit, if available
- Packing tape
- First Aid Kit
- Maps
- Chain of custody forms
- Bucket for cleaning equipment
- Stiff brush
- Appropriate sample containers
- Sample labels
- Sample shipment forms
- XRF spectrometer
- PID
- Workplan
- DEC's *Field Sampling Guidance*
- PPE: Safety glasses, safety vest, hard hats, steel-toed boots

5.7 Sample Analysis

All samples collected by DEC from the Elim Old AVEC Tank Farm will be analyzed for:

- Gasoline Range Organics (GRO) analyzed using method AK 101
- Diesel Range Organics (DRO) analyzed using method AK 102
- Residual Range Organics (RRO) analyzed using method AK 103
- Volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and total xylenes (BTEX) analyzed using method EPA 8260D
- Semi-volatile organic compounds (SVOCs) including Polycyclic aromatic hydrocarbons (PAHs) analyzed using method EPA 8270E

Test pit locations with elevated XRF screening results will be analyzed for all the above contaminants, as well as:

- Metals analyzed using method EPA 6020B

Only test pit locations in the vicinity of the transformer, on the eastern edge of the tank farm footprint, about 30 feet from the SE corner, will be tested for the following:

- PCBs analyzed using method EPA 8082A

All sampling results will be compared to DEC Method 2 Cleanup criteria, under 40-inch precipitation zone, listed in 18 AAC 75.341, Table B1 and Table B2. All samples will be hand delivered to SGS by DEC staff, following the completion of fieldwork.

5.8 Investigative Derived Waste (IDW)

Investigation-derived waste (IDW) consists of soil excavated from the test pits. IDW generated during test pit excavation will be managed onsite by temporarily stockpiling soil on a clean liner near the test pit and returning excavated soils to the pit immediately after sampling. Excavated soils will be segregated by depth to avoid mixing of contaminated and uncontaminated soils and returned to the depth from which they were removed and compacted to grade.

6 Data Quality Objectives (DQO)

Sampling data is required to determine if contamination exists at this site and if so, does the contamination pose a risk or potential risk to human health and the environment. If contamination exists and poses a risk or potential risk to human health and the environment, this site will assume an “Active” status in the CS Database, and DEC will recommend the EPA change the Site Verification Status on the Contaminated ANCSA Sites Common Operating Picture from “unverified” to “verified”.

Sampling staff will adhere to the guidelines established in the FSG for collection of duplicates and blanks. SGS will provide DEC with analysis specific measurements of quality control such as precision, spike recovery, etc., and will follow standard QA/QC procedures, as stated in the QAPP and individual analytical method.

6.1 Screening Levels

The screening levels for soil will be compared to DEC Method 2 cleanup levels for human health and groundwater protection in the under 40 inch precipitation zone, as specified in 18 AAC 75.341(c), tables B1 and B2.

6.2 Field Quality Control Measures

The PID and XRF will be calibrated prior to use in the field. DEC staff will inspect laboratory provided sampling containers (and any other items) for defects prior to their use in the field. Field quality control samples will consist of field duplicates, trip blanks, and temperature blanks.

All sampling activities that occur during fieldwork will be recorded in a field logbook, including but not limited to:

- Identification of all sampling team members
- General observations
- Field screening values
- Location, depth, and description/ID of each sampling point
- Types, numbers, and volumes of samples
- Date and time of sample collection
- Date and time of sample shipping or transfer of sample custody
- Any deviation from the standard or expected procedure
- Date of entry in logbook and initials of person entering it

6.3 Data Management

After receipt of analytical results from the laboratory, DEC will use the DEC Laboratory Data Review Checklist to ensure that all data quality parameters have been satisfied and any potential problems have been identified. Laboratory corrective actions will be achieved internally by the laboratory and documented as part of the laboratory's report. Field procedures may be modified as a corrective action if needed and these corrective actions will be documented.

6.4 Quality Assurance Objectives (QAOs)

The goal of QAOs is to ensure that data quality standards are achieved to support decisions regarding the determination of whether the hazardous substances at the site poses a threat to human health and the environment, and if they do pose a threat, the acceptability of the proposed plan for each area. The laboratory staff and their experience will be relied upon, in conjunction with DEC staff to make the best decision for analyses when deviations may arise. The laboratory will flag nonconforming data and notify DEC staff as appropriate and as required in the analytical laboratory SOW. QAOs include precision, accuracy, detection limits, completeness, comparability, and representativeness as described in the 2023 DEC Quality Assurance Project Plan (QAPP).

7 REFERENCES

Bristol Environmental & Engineering Services Corporation (BEESC), 2001. Site Reconnaissance Report. Elim, Alaska.

Department of Environmental Conservation (DEC), 2018. ADEC Site Visit Report (SVR). Elim Old AVEC Tank Farm.

DEC, 2022. Field Sampling Guidance.

DEC, 2023. 18 AAC 75. Oil and Other Hazardous Substances Pollution Control.

DEC, 2023. Quality Assurance Project Plan (QAPP). State Directed Site Discovery and Investigation Programs.

SLR International Corp, 2010. Property Assessment and Cleanup Plan (PACP). Old AVEC Tank Farm.

U.S. Environmental Protection Agency (EPA), 2023. Contaminated Alaska Native Claims Settlement Act (ANCSA) Lands Assistance Program.

APPENDICES

APPENDIX A: COMMUNITY LOCATION

APPENDIX B: SITE LOCATION

APPENDIX C: PATENT NO. 50-79-0148

APPENDIX D: 2001 SITE RECONNAISSANCE

APPENDIX E: 2010 PROPERTY ASSESSMENT AND CLEANUP PLAN

APPENDIX F: 2018 SITE VISIT REPORT

APPENDIX G: TABLE B1. METHOD TWO – SOIL CLEANUP LEVELS TABLES

Appendix I – Lab Data Packet

Laboratory Report of Analysis

To: ADEC Contaminated Sites

,
907-465-5270

Report Number: **1243787**

Client Project: **Norton Sound**

Dear Nick Waldo,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Curtis at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

_____

Curtis Whisman Date
Project Manager
curtis.whisman@sgs.com

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Case Narrative

SGS Client: **ADEC Contaminated Sites**
SGS Project: **1243787**
Project Name/Site: **Norton Sound**
Project Contact: **Nick Waldo**

Refer to sample receipt form for information on sample condition.

2407GOL-TP3 (1243787003) PS

AK101 - Surrogate recovery for 4-bromofluorobenzene does not meet QC criteria. Sample was analyzed twice and results confirm.

2407GOL-TP4 (1243787004) PS

AK101 - Surrogate recovery for 4-bromofluorobenzene does not meet QC criteria. Sample was analyzed twice and results confirm.

2407ELIM-TANK02SS (1243787013) PS

8260D - Surrogate recovery for 4-bromofluorobenzene does not meet QC criteria. Sample was analyzed twice and results confirm.
8270E - The LOQs are elevated due to sample dilution. The sample was analyzed at a dilution due to the high concentration of non-target compounds.

2407ELIM-TANK02SUB (1243787014) PS

8270E - The LOQs are elevated due to sample dilution. The sample was analyzed at a dilution due to the high concentration of non-target compounds.

LCS for HBN 1895554 [MXX/36810 (1776280) LCS

6020B - Metals LCS recovery for Thallium does not meet QC criteria (biased low).

1243789002(1776281MS) (1776282) MS

6020B - Metals MS recoveries for Thallium, Barium, Antimony, Calcium, and Manganese do not meet QC criteria. The post digestion spike was successful.
6020B - Metals MS recovery for Aluminum does not meet QC criteria. Sample is non-homogenous.

1243789002(1776281MSD) (1776283) MSD

6020B - Metals MSD recoveries for Thallium, Barium, Antimony, Calcium, Magnesium, Manganese, and Potassium do not meet QC criteria. The post digestion spike was successful.
6020B - Metals MSD recovery for Aluminum does not meet QC criteria. Sample is non-homogenous.

1243789002MS (1776944) MS

8270E - MS recovery for 4-nitroaniline does not meet QC criteria. Refer to the LCS for accuracy requirements.

1243789002MSD (1776945) MSD

8270E - MS/MSD RPDs for several analytes do not meet QC criteria. These analytes are not reported above the LOQ in the associated parent sample.

LCS for HBN 1896175 [VXX/41551 (1777315) LCS

8260D - LCS recovery for trichlorofluoromethane does not meet QC criteria. This analyte was not reported above the LOQ in the associated samples.

1243787011(1777313MS) (1777316) MS

8260D - MS recovery for trichlorofluoromethane does not meet QC criteria. This analyte was not reported above the LOQ in the parent sample.

1243787011(1777313MSD) (1777317) MSD

8260D - MSD recovery for trichlorofluoromethane does not meet QC criteria. This analyte was not reported above the LOQ in the parent sample.

1243822001(1778401MS) (1778402) MS

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Case Narrative

SGS Client: **ADEC Contaminated Sites**
SGS Project: **1243787**
Project Name/Site: **Norton Sound**
Project Contact: **Nick Waldo**

6020B - Metals MS recoveries for Aluminum, Antimony, Iron, Manganese, Calcium, Magnesium, and Vanadium do not meet QC criteria. The bench spike digested was successful.

1243822001(1778401MSD) (1778403) MSD

6020B - Metals MS recoveries for Aluminum, Antimony, Iron, Manganese, and Calcium do not meet QC criteria. The bench spike digested was successful.

1243859014MS (1784831) MS

8270E - MS recoveries for hexachlorocyclopentadiene and 4-nitroaniline do not meet QC criteria. Refer to the LCS for accuracy requirements.

1243859014MSD (1784832) MSD

8270E - MSD recovery for hexachlorocyclopentadiene does not meet QC criteria. Refer to the LCS for accuracy requirements.
8270E - MS/MSD RPDs for several analytes do not meet QC criteria. These analytes are not reported above the LOQ in the associated parent sample.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 08/30/2024 5:13:58PM

Report of Manual Integrations

Laboratory ID	Client Sample ID	Analytical Batch	Analyte	Reason
SW8270E				
1243787019	2407ELIM-TANK06SS	XMS14457	Benzo[b]Fluoranthene	SP
1243787019	2407ELIM-TANK06SS	XMS14457	Benzo[k]fluoranthene	SP

Manual Integration Reason Code Descriptions

Code	Description
O	Original Chromatogram
M	Modified Chromatogram
SS	Skimmed surrogate
BLG	Closed baseline gap
RP	Reassign peak name
PIR	Pattern integration required
IT	Included tail
SP	Split peak
RSP	Removed split peak
FPS	Forced peak start/stop
BLC	Baseline correction
PNF	Peak not found by software

All DRO/RRO analysis are integrated per SOP.

Print Date: 08/30/2024 5:13:59PM

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270E, 8270E-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 3/4 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

Print Date: 08/30/2024 5:14:03PM

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
2407GOL-TP1	1243787001	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407GOL-TP2	1243787002	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407GOL-TP3	1243787003	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407GOL-TP4	1243787004	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407GOL-TP5	1243787005	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407GOL-BACKG	1243787006	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407GOL-MET01	1243787007	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407GOL-MET02	1243787008	07/17/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-METBACK	1243787009	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-CON09SS	1243787010	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-STAIN08SS	1243787011	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK01SS	1243787012	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK02SS	1243787013	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK02SUB	1243787014	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK03SS	1243787015	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK03SUB	1243787016	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK04SS	1243787017	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK05SS	1243787018	07/18/2024	07/19/2024	Solid/Soil (Wet Weight)
2407ELIM-TANK06SS	1243787019	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK07SS	1243787020	07/18/2024	07/19/2024	Solid/Soil (Wet Weight)
2407ELIM-TF10SS	1243787021	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-DRUM11SS	1243787022	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-DRUM12SS	1243787023	07/18/2024	07/19/2024	Soil/Solid (dry weight)
2407ELIM-TANK13SS	1243787024	07/18/2024	07/19/2024	Soil/Solid (dry weight)
Trip Blank	1243787025	07/17/2024	07/19/2024	Soil/Solid (dry weight)

Method	Method Description
SW8260D	VOC 8260 (S) Field Extracted
SW8270E	SW846 8270 Semi-Volatiles by GC/MS (S)
AK101	AK101/8021 Combo. (S)
AK103	Diesel/Residual Range Organics
AK102	Diesel/Residual Range Organics
SW6020B	Metals by ICP-MS (S)
SW8021B	AK101/8021 Combo. (S)
SM21 2540G	Percent Solids SM2540G
SW8082A	SW8082 PCB's

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Detectable Results Summary

Client Sample ID: **2407GOL-TP1**
Lab Sample ID: 1243787001

Semivolatile Organic Fuels

Parameter	Result	Units
Diesel Range Organics	36.3	mg/kg
Residual Range Organics	252	mg/kg

Client Sample ID: **2407GOL-TP2**
Lab Sample ID: 1243787002

Semivolatile Organic Fuels

Parameter	Result	Units
Diesel Range Organics	354	mg/kg
Residual Range Organics	3220	mg/kg

Client Sample ID: **2407GOL-TP3**
Lab Sample ID: 1243787003

Semivolatile Organic Fuels

Parameter	Result	Units
Diesel Range Organics	2900	mg/kg
Residual Range Organics	5640	mg/kg

Client Sample ID: **2407GOL-TP4**
Lab Sample ID: 1243787004

Semivolatile Organic Fuels

Parameter	Result	Units
Diesel Range Organics	149	mg/kg
Residual Range Organics	1270	mg/kg

Client Sample ID: **2407GOL-TP5**
Lab Sample ID: 1243787005

Semivolatile Organic Fuels

Parameter	Result	Units
Diesel Range Organics	50.9	mg/kg
Residual Range Organics	376	mg/kg

Client Sample ID: **2407GOL-BACKG**
Lab Sample ID: 1243787006

Metals by ICP/MS

Parameter	Result	Units
Aluminum	5010J	mg/kg
Arsenic	2.11	mg/kg
Barium	24.4	mg/kg
Beryllium	0.164	mg/kg
Cadmium	0.0709J	mg/kg
Calcium	1410	mg/kg
Chromium	3.88	mg/kg
Cobalt	1.45	mg/kg
Copper	1.56	mg/kg
Iron	5260	mg/kg
Lead	2.97	mg/kg
Magnesium	1140	mg/kg
Manganese	57.4	mg/kg
Nickel	2.43	mg/kg
Potassium	661	mg/kg
Sodium	236	mg/kg
Vanadium	7.55	mg/kg
Zinc	11.6	mg/kg

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Detectable Results Summary

Client Sample ID: **2407GOL-MET01**
Lab Sample ID: 1243787007

Metals by ICP/MS

Parameter	Result	Units
Arsenic	8.69	mg/kg
Barium	22.4	mg/kg
Beryllium	0.115	mg/kg
Cadmium	0.0961J	mg/kg
Calcium	1270	mg/kg
Chromium	6.89	mg/kg
Cobalt	3.74	mg/kg
Copper	4.76	mg/kg
Iron	19000	mg/kg
Lead	13.4	mg/kg
Magnesium	1010	mg/kg
Manganese	149	mg/kg
Nickel	8.03	mg/kg
Potassium	441	mg/kg
Sodium	115	mg/kg
Vanadium	7.48	mg/kg
Zinc	20.4	mg/kg

Client Sample ID: **2407GOL-MET02**
Lab Sample ID: 1243787008

Metals by ICP/MS

Parameter	Result	Units
Aluminum	4280J	mg/kg
Arsenic	2.92	mg/kg
Barium	21.9	mg/kg
Beryllium	0.109	mg/kg
Cadmium	0.258	mg/kg
Calcium	1290	mg/kg
Chromium	5.24	mg/kg
Cobalt	4.83	mg/kg
Copper	7.60	mg/kg
Iron	25500	mg/kg
Lead	47.9	mg/kg
Magnesium	1160	mg/kg
Manganese	261	mg/kg
Nickel	4.08	mg/kg
Potassium	441	mg/kg
Sodium	132	mg/kg
Vanadium	9.20	mg/kg
Zinc	121	mg/kg

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Detectable Results Summary

Client Sample ID: **2407ELIM-METBACK**
Lab Sample ID: 1243787009

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	16700J	mg/kg
	Arsenic	5.70	mg/kg
	Barium	115	mg/kg
	Beryllium	0.380	mg/kg
	Cadmium	0.676	mg/kg
	Calcium	39600	mg/kg
	Chromium	18.4	mg/kg
	Cobalt	9.71	mg/kg
	Copper	26.5	mg/kg
	Iron	25900	mg/kg
	Lead	20.2	mg/kg
	Magnesium	18700	mg/kg
	Manganese	760	mg/kg
	Molybdenum	0.671J	mg/kg
	Nickel	21.1	mg/kg
	Potassium	1110	mg/kg
	Sodium	111J	mg/kg
	Vanadium	35.5	mg/kg
	Zinc	138	mg/kg

Client Sample ID: **2407ELIM-CON09SS**
Lab Sample ID: 1243787010

	Parameter	Result	Units
Metals by ICP/MS	Arsenic	2.94	mg/kg
	Barium	16.8	mg/kg
	Beryllium	0.116	mg/kg
	Cadmium	0.247	mg/kg
	Calcium	194000	mg/kg
	Chromium	4.99	mg/kg
	Cobalt	2.73	mg/kg
	Copper	6.34	mg/kg
	Iron	9860	mg/kg
	Lead	4.62	mg/kg
	Magnesium	109000	mg/kg
	Manganese	118	mg/kg
	Molybdenum	1.55	mg/kg
	Nickel	10.2	mg/kg
	Potassium	253	mg/kg
	Sodium	60.6J	mg/kg
	Thallium	0.125J	mg/kg
	Vanadium	10.2	mg/kg
	Zinc	55.1	mg/kg
Semivolatile Organic Fuels	Diesel Range Organics	42.7	mg/kg
	Residual Range Organics	237	mg/kg

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Detectable Results Summary

Client Sample ID: **2407ELIM-STAIN08SS**
Lab Sample ID: 1243787011

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	20100	mg/kg
	Arsenic	34.1	mg/kg
	Barium	129	mg/kg
	Beryllium	0.480	mg/kg
	Cadmium	0.603	mg/kg
	Calcium	32300	mg/kg
	Chromium	30.4	mg/kg
	Cobalt	13.5	mg/kg
	Copper	43.8	mg/kg
	Iron	36500	mg/kg
	Lead	20.3	mg/kg
	Magnesium	8110	mg/kg
	Manganese	948	mg/kg
	Molybdenum	24.1	mg/kg
	Nickel	24.9	mg/kg
	Potassium	1200	mg/kg
	Sodium	164	mg/kg
	Thallium	0.0978J	mg/kg
	Vanadium	52.4	mg/kg
	Zinc	254	mg/kg
Semivolatile Organic Fuels	Diesel Range Organics	202	mg/kg
	Residual Range Organics	560	mg/kg
Volatile GC/MS	Benzene	14.7J	ug/kg

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Detectable Results Summary

Client Sample ID: **2407ELIM-TANK01SS**
Lab Sample ID: 1243787012

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	29100	mg/kg
	Arsenic	8.29	mg/kg
	Barium	169	mg/kg
	Beryllium	0.645	mg/kg
	Cadmium	0.262J	mg/kg
	Calcium	5280	mg/kg
	Chromium	28.2	mg/kg
	Cobalt	14.8	mg/kg
	Copper	21.9	mg/kg
	Iron	39000	mg/kg
	Lead	13.3	mg/kg
	Magnesium	5450	mg/kg
	Manganese	603	mg/kg
	Molybdenum	0.781J	mg/kg
	Nickel	27.5	mg/kg
	Potassium	1000	mg/kg
	Selenium	0.970J	mg/kg
	Sodium	134J	mg/kg
	Thallium	0.110J	mg/kg
	Vanadium	60.4	mg/kg
	Zinc	74.5	mg/kg
Semivolatile Organic Fuels	Diesel Range Organics	957	mg/kg
	Residual Range Organics	801	mg/kg
Semivolatile Organics GC/MS	Pentachlorophenol	1.58J	mg/kg

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Detectable Results Summary

Client Sample ID: **2407ELIM-TANK02SS**
Lab Sample ID: 1243787013

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	24900	mg/kg
	Arsenic	9.00	mg/kg
	Barium	160	mg/kg
	Beryllium	0.573	mg/kg
	Cadmium	0.308	mg/kg
	Calcium	5480	mg/kg
	Chromium	28.2	mg/kg
	Cobalt	15.4	mg/kg
	Copper	29.9	mg/kg
	Iron	45600	mg/kg
	Lead	13.9	mg/kg
	Magnesium	5680	mg/kg
	Manganese	853	mg/kg
	Molybdenum	0.582J	mg/kg
	Nickel	28.9	mg/kg
	Potassium	863	mg/kg
	Selenium	0.863J	mg/kg
	Sodium	116J	mg/kg
	Thallium	0.118J	mg/kg
	Vanadium	62.6	mg/kg
	Zinc	68.9	mg/kg
Semivolatile Organic Fuels	Diesel Range Organics	7910	mg/kg
	Residual Range Organics	1200	mg/kg
Semivolatile Organics GC/MS	Pentachlorophenol	24.6J	mg/kg
Volatile Fuels	Gasoline Range Organics	1.53J	mg/kg

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Detectable Results Summary

Client Sample ID: **2407ELIM-TANK02SUB**
Lab Sample ID: 1243787014

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	29200	mg/kg
	Arsenic	8.69	mg/kg
	Barium	190	mg/kg
	Beryllium	0.683	mg/kg
	Cadmium	1.02	mg/kg
	Calcium	6000	mg/kg
	Chromium	33.1	mg/kg
	Cobalt	19.1	mg/kg
	Copper	36.8	mg/kg
	Iron	49900	mg/kg
	Lead	13.7	mg/kg
	Magnesium	7580	mg/kg
	Manganese	996	mg/kg
	Molybdenum	1.32J	mg/kg
	Nickel	32.2	mg/kg
	Potassium	1330	mg/kg
	Sodium	153	mg/kg
	Thallium	0.127J	mg/kg
	Vanadium	85.6	mg/kg
	Zinc	84.2	mg/kg
Semivolatile Organic Fuels	Diesel Range Organics	5170	mg/kg
	Residual Range Organics	872	mg/kg

Client Sample ID: **2407ELIM-TANK03SS**
Lab Sample ID: 1243787015

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	168	mg/kg
	Residual Range Organics	430	mg/kg

Client Sample ID: **2407ELIM-TANK03SUB**
Lab Sample ID: 1243787016

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	406	mg/kg
	Residual Range Organics	1080	mg/kg
Volatile Fuels	Gasoline Range Organics	4.93J	mg/kg

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Detectable Results Summary

Client Sample ID: **2407ELIM-TANK04SS**
Lab Sample ID: 1243787017

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	25700	mg/kg
	Arsenic	38.3	mg/kg
	Barium	153	mg/kg
	Beryllium	0.598	mg/kg
	Cadmium	0.383	mg/kg
	Calcium	7180	mg/kg
	Chromium	33.0	mg/kg
	Cobalt	14.6	mg/kg
	Copper	42.2	mg/kg
	Iron	35800	mg/kg
	Lead	15.8	mg/kg
	Magnesium	5190	mg/kg
	Manganese	118	mg/kg
	Molybdenum	0.754J	mg/kg
	Nickel	25.7	mg/kg
	Potassium	839	mg/kg
	Sodium	192	mg/kg
	Thallium	0.120J	mg/kg
	Vanadium	53.1	mg/kg
	Zinc	84.6	mg/kg
Semivolatile Organic Fuels	Diesel Range Organics	145	mg/kg
	Residual Range Organics	537	mg/kg
Volatile Fuels	Toluene	41.8J	ug/kg

Client Sample ID: **2407ELIM-TANK06SS**
Lab Sample ID: 1243787019

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	22.1J	mg/kg
	Residual Range Organics	128	mg/kg
Semivolatile Organics GC/MS	Benzo[b]Fluoranthene	0.216J	mg/kg
	Chrysene	0.204J	mg/kg
	Fluoranthene	0.464	mg/kg
	Phenanthrene	0.121J	mg/kg
	Pyrene	0.281J	mg/kg

Client Sample ID: **2407ELIM-DRUM11SS**
Lab Sample ID: 1243787022

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	24.3	mg/kg
	Residual Range Organics	116	mg/kg
Volatile GC/MS	Benzene	13.0J	ug/kg
	Toluene	13.6J	ug/kg

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Detectable Results Summary

Client Sample ID: **2407ELIM-DRUM12SS**
Lab Sample ID: 1243787023

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	3770	mg/kg
	Arsenic	3.48	mg/kg
	Barium	13.7	mg/kg
	Beryllium	0.102	mg/kg
	Cadmium	0.147J	mg/kg
	Calcium	106000	mg/kg
	Chromium	4.16	mg/kg
	Cobalt	2.75	mg/kg
	Copper	5.76	mg/kg
	Iron	6810	mg/kg
	Lead	3.60	mg/kg
	Magnesium	21500	mg/kg
	Manganese	161	mg/kg
	Molybdenum	0.393J	mg/kg
	Nickel	6.25	mg/kg
	Potassium	241	mg/kg
	Sodium	145	mg/kg
	Vanadium	7.85	mg/kg
	Zinc	35.0	mg/kg

Client Sample ID: **2407ELIM-TANK13SS**
Lab Sample ID: 1243787024

	Parameter	Result	Units
Metals by ICP/MS	Aluminum	20600	mg/kg
	Arsenic	54.4	mg/kg
	Barium	139	mg/kg
	Beryllium	0.474	mg/kg
	Cadmium	0.413	mg/kg
	Calcium	9650	mg/kg
	Chromium	38.1	mg/kg
	Cobalt	12.2	mg/kg
	Copper	35.6	mg/kg
	Iron	32800	mg/kg
	Lead	28.3	mg/kg
	Magnesium	5230	mg/kg
	Manganese	851	mg/kg
	Molybdenum	0.711J	mg/kg
	Nickel	22.9	mg/kg
	Potassium	793	mg/kg
	Sodium	160J	mg/kg
	Thallium	0.124J	mg/kg
	Vanadium	51.7	mg/kg
	Zinc	90.5	mg/kg
Semivolatile Organic Fuels	Diesel Range Organics	275	mg/kg
	Residual Range Organics	1050	mg/kg

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Results of **2407GOL-TP1**

Client Sample ID: **2407GOL-TP1**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787001
Lab Project ID: 1243787

Collection Date: 07/17/24 12:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):92.9
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	36.3		21.4	9.64	16.0	mg/kg	1		07/26/24 10:40
Surrogates									
5a Androstane (surr)	91		50-150			%	1		07/26/24 10:40

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 10:40
Container ID: 1243787001-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.628 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	252		107	46.0	80.3	mg/kg	1		07/26/24 10:40
Surrogates									
n-Triacontane-d62 (surr)	85.1		50-150			%	1		07/26/24 10:40

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 10:40
Container ID: 1243787001-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.628 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

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Results of **2407GOL-TP1**

Client Sample ID: **2407GOL-TP1**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787001
Lab Project ID: 1243787

Collection Date: 07/17/24 12:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):92.9
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.58	U	2.10	0.629	1.58	mg/kg	1		07/29/24 19:49
Surrogates									
4-Bromofluorobenzene (surr)	103		50-150			%	1		07/29/24 19:49

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 19:49
Container ID: 1243787001-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 12:48
Prep Initial Wt./Vol.: 78.621 g
Prep Extract Vol: 30.6099 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	7.88	U	10.5	3.35	7.88	ug/kg	1		07/29/24 19:49
Ethylbenzene	15.8	U	21.0	7.55	15.8	ug/kg	1		07/29/24 19:49
o-Xylene	15.8	U	21.0	7.63	15.8	ug/kg	1		07/29/24 19:49
P & M -Xylene	31.4	U	41.9	12.6	31.4	ug/kg	1		07/29/24 19:49
Toluene	15.8	U	21.0	6.54	15.8	ug/kg	1		07/29/24 19:49
Xylenes (total)	47.2	U	62.9	21.0	47.2	ug/kg	1		07/29/24 19:49
Surrogates									
1,4-Difluorobenzene (surr)	95.4		72-119			%	1		07/29/24 19:49

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 19:49
Container ID: 1243787001-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 12:48
Prep Initial Wt./Vol.: 78.621 g
Prep Extract Vol: 30.6099 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-TP2**

Client Sample ID: **2407GOL-TP2**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787002
Lab Project ID: 1243787

Collection Date: 07/17/24 12:50
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):47.5
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	354		41.9	18.8	31.4	mg/kg	1		07/26/24 11:00
Surrogates									
5a Androstane (surr)	77.7		50-150			%	1		07/26/24 11:00

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 11:00
Container ID: 1243787002-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.606 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	3220		209	90.0	157	mg/kg	1		07/26/24 11:00
Surrogates									
n-Triacontane-d62 (surr)	60.9		50-150			%	1		07/26/24 11:00

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 11:00
Container ID: 1243787002-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.606 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-TP2**

Client Sample ID: **2407GOL-TP2**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787002
Lab Project ID: 1243787

Collection Date: 07/17/24 12:50
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):47.5
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	6.86	U	9.14	2.74	6.86	mg/kg	1		07/29/24 20:08
Surrogates									
4-Bromofluorobenzene (surr)	59.1		50-150			%	1		07/29/24 20:08

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 20:08
Container ID: 1243787002-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 12:50
Prep Initial Wt./Vol.: 72.565 g
Prep Extract Vol: 63.0727 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	34.3	U	45.7	14.6	34.3	ug/kg	1		07/29/24 20:08
Ethylbenzene	68.6	U	91.4	32.9	68.6	ug/kg	1		07/29/24 20:08
o-Xylene	68.6	U	91.4	33.3	68.6	ug/kg	1		07/29/24 20:08
P & M -Xylene	137	U	183	54.9	137	ug/kg	1		07/29/24 20:08
Toluene	68.6	U	91.4	28.5	68.6	ug/kg	1		07/29/24 20:08
Xylenes (total)	206	U	274	91.4	206	ug/kg	1		07/29/24 20:08
Surrogates									
1,4-Difluorobenzene (surr)	94.4		72-119			%	1		07/29/24 20:08

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 20:08
Container ID: 1243787002-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 12:50
Prep Initial Wt./Vol.: 72.565 g
Prep Extract Vol: 63.0727 mL

Print Date: 08/30/2024 5:14:09PM

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Results of **2407GOL-TP3**

Client Sample ID: **2407GOL-TP3**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787003
Lab Project ID: 1243787

Collection Date: 07/17/24 13:01
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):58.4
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	2900		34.2	15.4	25.7	mg/kg	1		07/26/24 11:10
Surrogates									
5a Androstane (surr)	101		50-150			%	1		07/26/24 11:10

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 11:10
Container ID: 1243787003-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.565 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	5640		171	73.4	128	mg/kg	1		07/26/24 11:10
Surrogates									
n-Triacontane-d62 (surr)	68.6		50-150			%	1		07/26/24 11:10

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 11:10
Container ID: 1243787003-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.565 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-TP3**

Client Sample ID: **2407GOL-TP3**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787003
Lab Project ID: 1243787

Collection Date: 07/17/24 13:01
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):58.4
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	4.94	U	6.59	1.98	4.94	mg/kg	1		07/29/24 20:26
Surrogates									
4-Bromofluorobenzene (surr)	28	*	50-150			%	1		07/29/24 20:26

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 20:26
Container ID: 1243787003-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 13:01
Prep Initial Wt./Vol.: 70.894 g
Prep Extract Vol: 54.507 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	24.7	U	32.9	10.5	24.7	ug/kg	1		07/29/24 20:26
Ethylbenzene	49.4	U	65.9	23.7	49.4	ug/kg	1		07/29/24 20:26
o-Xylene	49.4	U	65.9	24.0	49.4	ug/kg	1		07/29/24 20:26
P & M -Xylene	99.0	U	132	39.5	99.0	ug/kg	1		07/29/24 20:26
Toluene	49.4	U	65.9	20.5	49.4	ug/kg	1		07/29/24 20:26
Xylenes (total)	149	U	198	65.9	149	ug/kg	1		07/29/24 20:26
Surrogates									
1,4-Difluorobenzene (surr)	94.3		72-119			%	1		07/29/24 20:26

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 20:26
Container ID: 1243787003-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 13:01
Prep Initial Wt./Vol.: 70.894 g
Prep Extract Vol: 54.507 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-TP4**

Client Sample ID: **2407GOL-TP4**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787004
Lab Project ID: 1243787

Collection Date: 07/17/24 13:08
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):77.4
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	149		25.4	11.4	19.0	mg/kg	1		07/26/24 11:29
Surrogates									
5a Androstane (surr)	94.3		50-150			%	1		07/26/24 11:29

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 11:29
Container ID: 1243787004-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.862 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	1270		127	54.7	95.3	mg/kg	1		07/26/24 11:29
Surrogates									
n-Triacontane-d62 (surr)	82.1		50-150			%	1		07/26/24 11:29

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 11:29
Container ID: 1243787004-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.862 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-TP4**

Client Sample ID: **2407GOL-TP4**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787004
Lab Project ID: 1243787

Collection Date: 07/17/24 13:08
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):77.4
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	2.89	U	3.85	1.16	2.89	mg/kg	1		07/29/24 20:44
Surrogates									
4-Bromofluorobenzene (surr)	47.3	*	50-150			%	1		07/29/24 20:44

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 20:44
Container ID: 1243787004-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 13:08
Prep Initial Wt./Vol.: 67.436 g
Prep Extract Vol: 40.2273 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	14.5	U	19.3	6.16	14.5	ug/kg	1		07/29/24 20:44
Ethylbenzene	28.9	U	38.5	13.9	28.9	ug/kg	1		07/29/24 20:44
o-Xylene	28.9	U	38.5	14.0	28.9	ug/kg	1		07/29/24 20:44
P & M -Xylene	57.8	U	77.1	23.1	57.8	ug/kg	1		07/29/24 20:44
Toluene	28.9	U	38.5	12.0	28.9	ug/kg	1		07/29/24 20:44
Xylenes (total)	87.0	U	116	38.5	87.0	ug/kg	1		07/29/24 20:44
Surrogates									
1,4-Difluorobenzene (surr)	93.7		72-119			%	1		07/29/24 20:44

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 20:44
Container ID: 1243787004-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 13:08
Prep Initial Wt./Vol.: 67.436 g
Prep Extract Vol: 40.2273 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-TP5**

Client Sample ID: **2407GOL-TP5**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787005
Lab Project ID: 1243787

Collection Date: 07/17/24 13:13
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):92.7
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	50.9		42.7	19.2	32.0	mg/kg	2		07/26/24 12:16
Surrogates									
5a Androstane (surr)	104		50-150			%	2		07/26/24 12:16

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 12:16
Container ID: 1243787005-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.738 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	376		214	91.8	161	mg/kg	2		07/26/24 12:16
Surrogates									
n-Triacontane-d62 (surr)	107		50-150			%	2		07/26/24 12:16

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 12:16
Container ID: 1243787005-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.738 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-TP5**

Client Sample ID: **2407GOL-TP5**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787005
Lab Project ID: 1243787

Collection Date: 07/17/24 13:13
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):92.7
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.81	U	2.41	0.722	1.81	mg/kg	1		07/29/24 21:03
Surrogates									
4-Bromofluorobenzene (surr)	84.3		50-150			%	1		07/29/24 21:03

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 21:03
Container ID: 1243787005-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 13:13
Prep Initial Wt./Vol.: 67.086 g
Prep Extract Vol: 29.9206 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	9.00	U	12.0	3.85	9.00	ug/kg	1		07/29/24 21:03
Ethylbenzene	18.1	U	24.1	8.66	18.1	ug/kg	1		07/29/24 21:03
o-Xylene	18.1	U	24.1	8.76	18.1	ug/kg	1		07/29/24 21:03
P & M -Xylene	36.1	U	48.1	14.4	36.1	ug/kg	1		07/29/24 21:03
Toluene	18.1	U	24.1	7.51	18.1	ug/kg	1		07/29/24 21:03
Xylenes (total)	54.2	U	72.2	24.1	54.2	ug/kg	1		07/29/24 21:03
Surrogates									
1,4-Difluorobenzene (surr)	93.2		72-119			%	1		07/29/24 21:03

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 21:03
Container ID: 1243787005-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 13:13
Prep Initial Wt./Vol.: 67.086 g
Prep Extract Vol: 29.9206 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-BACKG**

Client Sample ID: **2407GOL-BACKG**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787006
Lab Project ID: 1243787

Collection Date: 07/17/24 12:28
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):93.4
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	5010	J	10100	3530	7575	mg/kg	5000		08/30/24 10:09
Antimony	0.758	U	1.01	0.313	0.758	mg/kg	10		08/26/24 18:44
Arsenic	2.11		1.01	0.313	0.758	mg/kg	10		08/26/24 18:44
Barium	24.4		0.303	0.0949	0.227	mg/kg	10		08/26/24 18:44
Beryllium	0.164		0.101	0.0313	0.0758	mg/kg	10		08/26/24 18:44
Boron	15.1	U	20.2	6.26	15.1	mg/kg	10		08/26/24 18:44
Cadmium	0.0709	J	0.202	0.0626	0.152	mg/kg	10		08/26/24 18:44
Calcium	1410		50.5	15.1	37.9	mg/kg	10		08/26/24 18:44
Chromium	3.88		1.01	0.313	0.758	mg/kg	10		08/26/24 18:44
Cobalt	1.45		0.505	0.151	0.379	mg/kg	10		08/26/24 18:44
Copper	1.56		0.605	0.182	0.454	mg/kg	10		08/26/24 18:44
Iron	5260		50.5	15.1	37.9	mg/kg	10		08/26/24 18:44
Lead	2.97		0.202	0.0626	0.152	mg/kg	10		08/26/24 18:44
Magnesium	1140		50.5	15.1	37.9	mg/kg	10		08/26/24 18:44
Manganese	57.4		0.202	0.0626	0.152	mg/kg	10		08/26/24 18:44
Molybdenum	0.758	U	1.01	0.313	0.758	mg/kg	10		08/26/24 18:44
Nickel	2.43		0.202	0.0626	0.152	mg/kg	10		08/26/24 18:44
Potassium	661		101	31.3	75.8	mg/kg	10		08/26/24 18:44
Selenium	1.52	U	2.02	0.626	1.52	mg/kg	10		08/26/24 18:44
Silver	0.379	U	0.505	0.151	0.379	mg/kg	10		08/26/24 18:44
Sodium	236		101	31.3	75.8	mg/kg	10		08/26/24 18:44
Thallium	0.152	U	0.202	0.0626	0.152	mg/kg	10		08/26/24 18:44
Vanadium	7.55		5.05	1.51	3.79	mg/kg	10		08/26/24 18:44
Zinc	11.6		2.52	0.787	1.89	mg/kg	10		08/26/24 18:44

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:09
Container ID: 1243787006-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.061 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 18:44
Container ID: 1243787006-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.061 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-MET01**

Client Sample ID: **2407GOL-MET01**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787007
Lab Project ID: 1243787

Collection Date: 07/17/24 12:29
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	7800	U	10400	3650	7800	mg/kg	5000		08/30/24 10:12
Antimony	0.780	U	1.04	0.323	0.780	mg/kg	10		08/26/24 18:47
Arsenic	8.69		1.04	0.323	0.780	mg/kg	10		08/26/24 18:47
Barium	22.4		0.312	0.0979	0.234	mg/kg	10		08/26/24 18:47
Beryllium	0.115		0.104	0.0323	0.0780	mg/kg	10		08/26/24 18:47
Boron	15.6	U	20.8	6.46	15.6	mg/kg	10		08/26/24 18:47
Cadmium	0.0961	J	0.208	0.0646	0.156	mg/kg	10		08/26/24 18:47
Calcium	1270		52.1	15.6	39.1	mg/kg	10		08/26/24 18:47
Chromium	6.89		1.04	0.323	0.780	mg/kg	10		08/26/24 18:47
Cobalt	3.74		0.521	0.156	0.391	mg/kg	10		08/26/24 18:47
Copper	4.76		0.625	0.187	0.469	mg/kg	10		08/26/24 18:47
Iron	19000		52.1	15.6	39.1	mg/kg	10		08/26/24 18:47
Lead	13.4		0.208	0.0646	0.156	mg/kg	10		08/26/24 18:47
Magnesium	1010		52.1	15.6	39.1	mg/kg	10		08/26/24 18:47
Manganese	149		0.208	0.0646	0.156	mg/kg	10		08/26/24 18:47
Molybdenum	0.780	U	1.04	0.323	0.780	mg/kg	10		08/26/24 18:47
Nickel	8.03		0.208	0.0646	0.156	mg/kg	10		08/26/24 18:47
Potassium	441		104	32.3	78.0	mg/kg	10		08/26/24 18:47
Selenium	1.56	U	2.08	0.646	1.56	mg/kg	10		08/26/24 18:47
Silver	0.391	U	0.521	0.156	0.391	mg/kg	10		08/26/24 18:47
Sodium	115		104	32.3	78.0	mg/kg	10		08/26/24 18:47
Thallium	0.156	U	0.208	0.0646	0.156	mg/kg	10		08/26/24 18:47
Vanadium	7.48		5.21	1.56	3.91	mg/kg	10		08/26/24 18:47
Zinc	20.4		2.60	0.812	1.95	mg/kg	10		08/26/24 18:47

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:12
Container ID: 1243787007-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.012 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 18:47
Container ID: 1243787007-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.012 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407GOL-MET02**

Client Sample ID: **2407GOL-MET02**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787008
Lab Project ID: 1243787

Collection Date: 07/17/24 12:31
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.6
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	4280	J	10900	3820	8175	mg/kg	5000		08/30/24 10:14
Antimony	0.818	U	1.09	0.338	0.818	mg/kg	10		08/26/24 18:49
Arsenic	2.92		1.09	0.338	0.818	mg/kg	10		08/26/24 18:49
Barium	21.9		0.327	0.103	0.245	mg/kg	10		08/26/24 18:49
Beryllium	0.109		0.109	0.0338	0.0818	mg/kg	10		08/26/24 18:49
Boron	16.4	U	21.8	6.76	16.4	mg/kg	10		08/26/24 18:49
Cadmium	0.258		0.218	0.0676	0.164	mg/kg	10		08/26/24 18:49
Calcium	1290		54.5	16.4	40.9	mg/kg	10		08/26/24 18:49
Chromium	5.24		1.09	0.338	0.818	mg/kg	10		08/26/24 18:49
Cobalt	4.83		0.545	0.164	0.409	mg/kg	10		08/26/24 18:49
Copper	7.60		0.654	0.196	0.491	mg/kg	10		08/26/24 18:49
Iron	25500		54.5	16.4	40.9	mg/kg	10		08/26/24 18:49
Lead	47.9		0.218	0.0676	0.164	mg/kg	10		08/26/24 18:49
Magnesium	1160		54.5	16.4	40.9	mg/kg	10		08/26/24 18:49
Manganese	261		0.218	0.0676	0.164	mg/kg	10		08/26/24 18:49
Molybdenum	0.818	U	1.09	0.338	0.818	mg/kg	10		08/26/24 18:49
Nickel	4.08		0.218	0.0676	0.164	mg/kg	10		08/26/24 18:49
Potassium	441		109	33.8	81.8	mg/kg	10		08/26/24 18:49
Selenium	1.64	U	2.18	0.676	1.64	mg/kg	10		08/26/24 18:49
Silver	0.409	U	0.545	0.164	0.409	mg/kg	10		08/26/24 18:49
Sodium	132		109	33.8	81.8	mg/kg	10		08/26/24 18:49
Thallium	0.164	U	0.218	0.0676	0.164	mg/kg	10		08/26/24 18:49
Vanadium	9.20		5.45	1.64	4.09	mg/kg	10		08/26/24 18:49
Zinc	121		2.73	0.851	2.05	mg/kg	10		08/26/24 18:49

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:14
Container ID: 1243787008-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.001 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 18:49
Container ID: 1243787008-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.001 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-METBACK**

Client Sample ID: **2407ELIM-METBACK**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787009
Lab Project ID: 1243787

Collection Date: 07/18/24 13:04
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.6
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	16700	J	18300	6410	13725	mg/kg	5000		08/30/24 10:30
Antimony	1.37	U	1.83	0.568	1.37	mg/kg	10		08/26/24 18:51
Arsenic	5.70		1.83	0.568	1.37	mg/kg	10		08/26/24 18:51
Barium	115		0.549	0.172	0.412	mg/kg	10		08/26/24 18:51
Beryllium	0.380		0.183	0.0568	0.137	mg/kg	10		08/26/24 18:51
Boron	27.5	U	36.6	11.4	27.5	mg/kg	10		08/26/24 18:51
Cadmium	0.676		0.366	0.114	0.274	mg/kg	10		08/26/24 18:51
Calcium	39600		91.6	27.5	68.7	mg/kg	10		08/26/24 18:51
Chromium	18.4		1.83	0.568	1.37	mg/kg	10		08/26/24 18:51
Cobalt	9.71		0.916	0.275	0.687	mg/kg	10		08/26/24 18:51
Copper	26.5		1.10	0.330	0.825	mg/kg	10		08/26/24 18:51
Iron	25900		91.6	27.5	68.7	mg/kg	10		08/26/24 18:51
Lead	20.2		0.366	0.114	0.274	mg/kg	10		08/26/24 18:51
Magnesium	18700		91.6	27.5	68.7	mg/kg	10		08/26/24 18:51
Manganese	760		183	56.8	137	mg/kg	5000		08/30/24 10:30
Molybdenum	0.671	J	1.83	0.568	1.37	mg/kg	10		08/26/24 18:51
Nickel	21.1		0.366	0.114	0.274	mg/kg	10		08/26/24 18:51
Potassium	1110		183	56.8	137	mg/kg	10		08/26/24 18:51
Selenium	2.75	U	3.66	1.14	2.75	mg/kg	10		08/26/24 18:51
Silver	0.687	U	0.916	0.275	0.687	mg/kg	10		08/26/24 18:51
Sodium	111	J	183	56.8	137	mg/kg	10		08/26/24 18:51
Thallium	0.274	U	0.366	0.114	0.274	mg/kg	10		08/26/24 18:51
Vanadium	35.5		9.16	2.75	6.87	mg/kg	10		08/26/24 18:51
Zinc	138		4.58	1.43	3.44	mg/kg	10		08/26/24 18:51

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:30
Container ID: 1243787009-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.018 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 18:51
Container ID: 1243787009-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.018 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-CON09SS**

Client Sample ID: **2407ELIM-CON09SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787010
Lab Project ID: 1243787

Collection Date: 07/18/24 13:09
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):89.6
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	8025	U	10700	3760	8025	mg/kg	5000		08/30/24 10:33
Antimony	0.802	U	1.07	0.333	0.802	mg/kg	10		08/26/24 18:54
Arsenic	2.94		1.07	0.333	0.802	mg/kg	10		08/26/24 18:54
Barium	16.8		0.322	0.101	0.241	mg/kg	10		08/26/24 18:54
Beryllium	0.116		0.107	0.0333	0.0803	mg/kg	10		08/26/24 18:54
Boron	16.1	U	21.5	6.66	16.1	mg/kg	10		08/26/24 18:54
Cadmium	0.247		0.215	0.0666	0.161	mg/kg	10		08/26/24 18:54
Calcium	194000		26900	8060	20175	mg/kg	5000		08/30/24 10:33
Chromium	4.99		1.07	0.333	0.802	mg/kg	10		08/26/24 18:54
Cobalt	2.73		0.537	0.161	0.403	mg/kg	10		08/26/24 18:54
Copper	6.34		0.645	0.193	0.484	mg/kg	10		08/26/24 18:54
Iron	9860		53.7	16.1	40.3	mg/kg	10		08/26/24 18:54
Lead	4.62		0.215	0.0666	0.161	mg/kg	10		08/26/24 18:54
Magnesium	109000		26900	8060	20175	mg/kg	5000		08/30/24 10:33
Manganese	118		0.215	0.0666	0.161	mg/kg	10		08/26/24 18:54
Molybdenum	1.55		1.07	0.333	0.802	mg/kg	10		08/26/24 18:54
Nickel	10.2		0.215	0.0666	0.161	mg/kg	10		08/26/24 18:54
Potassium	253		107	33.3	80.3	mg/kg	10		08/26/24 18:54
Selenium	1.61	U	2.15	0.666	1.61	mg/kg	10		08/26/24 18:54
Silver	0.403	U	0.537	0.161	0.403	mg/kg	10		08/26/24 18:54
Sodium	60.6	J	107	33.3	80.3	mg/kg	10		08/26/24 18:54
Thallium	0.125	J	0.215	0.0666	0.161	mg/kg	10		08/26/24 18:54
Vanadium	10.2		5.37	1.61	4.03	mg/kg	10		08/26/24 18:54
Zinc	55.1		2.69	0.838	2.02	mg/kg	10		08/26/24 18:54

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:33
Container ID: 1243787010-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.038 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 18:54
Container ID: 1243787010-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.038 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-CON09SS**

Client Sample ID: **2407ELIM-CON09SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787010
Lab Project ID: 1243787

Collection Date: 07/18/24 13:09
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):89.6
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	42.7		22.2	9.99	16.6	mg/kg	1		07/26/24 12:35
Surrogates									
5a Androstane (surr)	91.7		50-150			%	1		07/26/24 12:35

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 12:35
Container ID: 1243787010-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.611 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	237		111	47.7	83.3	mg/kg	1		07/26/24 12:35
Surrogates									
n-Triacontane-d62 (surr)	88.4		50-150			%	1		07/26/24 12:35

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 12:35
Container ID: 1243787010-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.611 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-CON09SS**

Client Sample ID: **2407ELIM-CON09SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787010
Lab Project ID: 1243787

Collection Date: 07/18/24 13:09
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):89.6
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	2.56	U	3.42	1.03	2.56	mg/kg	1		07/29/24 21:21
Surrogates									
4-Bromofluorobenzene (surr)	99		50-150			%	1		07/29/24 21:21

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 21:21
Container ID: 1243787010-C

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:09
Prep Initial Wt./Vol.: 49.097 g
Prep Extract Vol: 30.0948 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	12.8	U	17.1	5.47	12.8	ug/kg	1		07/29/24 21:21
Ethylbenzene	25.7	U	34.2	12.3	25.7	ug/kg	1		07/29/24 21:21
o-Xylene	25.7	U	34.2	12.4	25.7	ug/kg	1		07/29/24 21:21
P & M -Xylene	51.3	U	68.4	20.5	51.3	ug/kg	1		07/29/24 21:21
Toluene	25.7	U	34.2	10.7	25.7	ug/kg	1		07/29/24 21:21
Xylenes (total)	77.3	U	103	34.2	77.3	ug/kg	1		07/29/24 21:21
Surrogates									
1,4-Difluorobenzene (surr)	93.9		72-119			%	1		07/29/24 21:21

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 21:21
Container ID: 1243787010-C

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:09
Prep Initial Wt./Vol.: 49.097 g
Prep Extract Vol: 30.0948 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	20100		2940	1030	2205	mg/kg	1000		08/30/24 10:46
Antimony	1.10	U	1.47	0.456	1.10	mg/kg	10		08/26/24 18:56
Arsenic	34.1		1.47	0.456	1.10	mg/kg	10		08/26/24 18:56
Barium	129		0.441	0.138	0.331	mg/kg	10		08/26/24 18:56
Beryllium	0.480		0.147	0.0456	0.110	mg/kg	10		08/26/24 18:56
Boron	22.0	U	29.4	9.12	22.0	mg/kg	10		08/26/24 18:56
Cadmium	0.603		0.294	0.0912	0.220	mg/kg	10		08/26/24 18:56
Calcium	32300		73.5	22.1	55.1	mg/kg	10		08/26/24 18:56
Chromium	30.4		1.47	0.456	1.10	mg/kg	10		08/26/24 18:56
Cobalt	13.5		0.735	0.221	0.551	mg/kg	10		08/26/24 18:56
Copper	43.8		0.883	0.265	0.662	mg/kg	10		08/26/24 18:56
Iron	36500		73.5	22.1	55.1	mg/kg	10		08/26/24 18:56
Lead	20.3		0.294	0.0912	0.220	mg/kg	10		08/26/24 18:56
Magnesium	8110		73.5	22.1	55.1	mg/kg	10		08/26/24 18:56
Manganese	948		29.4	9.12	22.0	mg/kg	1000		08/30/24 10:46
Molybdenum	24.1		1.47	0.456	1.10	mg/kg	10		08/26/24 18:56
Nickel	24.9		0.294	0.0912	0.220	mg/kg	10		08/26/24 18:56
Potassium	1200		147	45.6	110	mg/kg	10		08/26/24 18:56
Selenium	2.21	U	2.94	0.912	2.21	mg/kg	10		08/26/24 18:56
Silver	0.551	U	0.735	0.221	0.551	mg/kg	10		08/26/24 18:56
Sodium	164		147	45.6	110	mg/kg	10		08/26/24 18:56
Thallium	0.0978	J	0.294	0.0912	0.220	mg/kg	10		08/26/24 18:56
Vanadium	52.4		7.35	2.21	5.51	mg/kg	10		08/26/24 18:56
Zinc	254		3.68	1.15	2.76	mg/kg	10		08/26/24 18:56

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:46
Container ID: 1243787011-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.016 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 18:56
Container ID: 1243787011-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.016 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	202		29.8	13.4	22.4	mg/kg	1		07/26/24 12:45
Surrogates									
5a Androstane (surr)	97.3		50-150			%	1		07/26/24 12:45

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 12:45
Container ID: 1243787011-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.576 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	560		149	64.0	112	mg/kg	1		07/26/24 12:45
Surrogates									
n-Triacontane-d62 (surr)	85.1		50-150			%	1		07/26/24 12:45

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 12:45
Container ID: 1243787011-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.576 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
1,2-Dichlorobenzene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
1,3-Dichlorobenzene	1.11	U	1.48	0.443	1.11	mg/kg	1		08/28/24 18:51
1,4-Dichlorobenzene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
1-Chloronaphthalene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
1-Methylnaphthalene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2,4,5-Trichlorophenol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2,4,6-Trichlorophenol	1.11	U	1.48	0.443	1.11	mg/kg	1		08/28/24 18:51
2,4-Dichlorophenol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2,4-Dimethylphenol	0.553	U	0.738	0.184	0.553	mg/kg	1		08/28/24 18:51
2,4-Dinitrophenol	5.54	U	7.38	2.21	5.54	mg/kg	1		08/28/24 18:51
2,4-Dinitrotoluene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2,6-Dichlorophenol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2,6-Dinitrotoluene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2-Chloronaphthalene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2-Chlorophenol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2-Methyl-4,6-dinitrophenol	2.21	U	2.95	0.915	2.21	mg/kg	1		08/28/24 18:51
2-Methylnaphthalene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2-Methylphenol (o-Cresol)	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2-Nitroaniline	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
2-Nitrophenol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
3&4-Methylphenol (p&m-Cresol)	1.11	U	1.48	0.458	1.11	mg/kg	1		08/28/24 18:51
3,3-Dichlorobenzidine	1.11	U	1.48	0.443	1.11	mg/kg	1		08/28/24 18:51
3-Nitroaniline	0.553	U	0.738	0.221	0.553	mg/kg	1		08/28/24 18:51
4-Bromophenyl-phenylether	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
4-Chloro-3-methylphenol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
4-Chloroaniline	1.11	U	1.48	0.458	1.11	mg/kg	1		08/28/24 18:51
4-Chlorophenyl-phenylether	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
4-Nitroaniline	3.32	U	4.43	1.39	3.32	mg/kg	1		08/28/24 18:51
4-Nitrophenol	2.21	U	2.95	0.915	2.21	mg/kg	1		08/28/24 18:51
Acenaphthene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Acenaphthylene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Aniline	4.43	U	5.90	1.48	4.43	mg/kg	1		08/28/24 18:51
Anthracene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Azobenzene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Benzo(a)Anthracene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Benzo[a]pyrene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Benzo[g,h,i]perylene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Benzo[k]fluoranthene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Benzoic acid	1.66	U	2.21	0.694	1.66	mg/kg	1		08/28/24 18:51
Benzyl alcohol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Bis(2chloro1methylethyl)Ether	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Bis(2-Chloroethoxy)methane	2.21	U	2.95	0.886	2.21	mg/kg	1		08/28/24 18:51
Bis(2-Chloroethyl)ether	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
bis(2-Ethylhexyl)phthalate	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Butylbenzylphthalate	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Carbazole	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Chrysene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Dibenzo[a,h]anthracene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Dibenzofuran	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Diethylphthalate	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Dimethylphthalate	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Di-n-butylphthalate	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
di-n-Octylphthalate	0.553	U	0.738	0.221	0.553	mg/kg	1		08/28/24 18:51
Fluoranthene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Fluorene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Hexachlorobenzene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Hexachlorobutadiene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Hexachlorocyclopentadiene	0.772	U	1.03	0.295	0.772	mg/kg	1		08/28/24 18:51
Hexachloroethane	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Indeno[1,2,3-c,d] pyrene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Isophorone	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Naphthalene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Nitrobenzene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
N-Nitrosodimethylamine	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
N-Nitroso-di-n-propylamine	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
N-Nitrosodiphenylamine	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Pentachlorophenol	4.43	U	5.90	1.48	4.43	mg/kg	1		08/28/24 18:51
Phenanthrene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Phenol	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51
Pyrene	0.277	U	0.369	0.115	0.277	mg/kg	1		08/28/24 18:51

Surrogates

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	58.2		35-125			%	1		08/28/24 18:51
2-Fluorobiphenyl (surr)	53.4		44-115			%	1		08/28/24 18:51
2-Fluorophenol (surr)	38.2		35-115			%	1		08/28/24 18:51
Nitrobenzene-d5 (surr)	45.2		37-122			%	1		08/28/24 18:51
Phenol-d6 (surr)	45.8		33-122			%	1		08/28/24 18:51
Terphenyl-d14 (surr)	61.4		54-127			%	1		08/28/24 18:51

Batch Information

Analytical Batch: XMS14454
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/28/24 18:51
Container ID: 1243787011-A

Prep Batch: XXX49918
Prep Method: SW3550C
Prep Date/Time: 07/26/24 16:19
Prep Initial Wt./Vol.: 22.783 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	4.49	U	5.98	1.79	4.49	mg/kg	1		07/29/24 21:40
Surrogates									
4-Bromofluorobenzene (surr)	67.3		50-150			%	1		07/29/24 21:40

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 21:40
Container ID: 1243787011-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:19
Prep Initial Wt./Vol.: 53.305 g
Prep Extract Vol: 42.6368 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	22.4	U	29.9	9.56	22.4	ug/kg	1		07/29/24 21:40
Ethylbenzene	44.8	U	59.8	21.5	44.8	ug/kg	1		07/29/24 21:40
o-Xylene	44.8	U	59.8	21.8	44.8	ug/kg	1		07/29/24 21:40
P & M -Xylene	90.0	U	120	35.9	90.0	ug/kg	1		07/29/24 21:40
Toluene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/29/24 21:40
Xylenes (total)	134	U	179	59.8	134	ug/kg	1		07/29/24 21:40
Surrogates									
1,4-Difluorobenzene (surr)	94.6		72-119			%	1		07/29/24 21:40

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 21:40
Container ID: 1243787011-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:19
Prep Initial Wt./Vol.: 53.305 g
Prep Extract Vol: 42.6368 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	35.8	U	47.8	14.8	35.8	ug/kg	1		07/26/24 16:39
1,1,1-Trichloroethane	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,1,2,2-Tetrachloroethane	3.59	U	4.78	1.48	3.59	ug/kg	1		07/26/24 16:39
1,1,2-Trichloroethane	1.79	U	2.39	1.20	1.79	ug/kg	1		07/26/24 16:39
1,1-Dichloroethane	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,1-Dichloroethene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,1-Dichloropropene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,2,3-Trichlorobenzene	179	U	239	71.7	179	ug/kg	1		07/26/24 16:39
1,2,3-Trichloropropane	3.59	U	4.78	1.48	3.59	ug/kg	1		07/26/24 16:39
1,2,4-Trichlorobenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,2,4-Trimethylbenzene	179	U	239	71.7	179	ug/kg	1		07/26/24 16:39
1,2-Dibromo-3-chloropropane	179	U	239	74.1	179	ug/kg	1		07/26/24 16:39
1,2-Dibromoethane	2.69	U	3.59	1.79	2.69	ug/kg	1		07/26/24 16:39
1,2-Dichlorobenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,2-Dichloroethane	3.59	U	4.78	1.67	3.59	ug/kg	1		07/26/24 16:39
1,2-Dichloropropane	17.9	U	23.9	12.0	17.9	ug/kg	1		07/26/24 16:39
1,3,5-Trimethylbenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,3-Dichlorobenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
1,3-Dichloropropane	17.9	U	23.9	7.41	17.9	ug/kg	1		07/26/24 16:39
1,4-Dichlorobenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
2,2-Dichloropropane	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
2-Butanone (MEK)	449	U	598	186	449	ug/kg	1		07/26/24 16:39
2-Chlorotoluene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
2-Hexanone	215	U	287	143	215	ug/kg	1		07/26/24 16:39
4-Chlorotoluene	35.8	U	47.8	23.9	35.8	ug/kg	1		07/26/24 16:39
4-Isopropyltoluene	143	U	191	95.6	143	ug/kg	1		07/26/24 16:39
4-Methyl-2-pentanone (MIBK)	449	U	598	186	449	ug/kg	1		07/26/24 16:39
Acetone	449	U	598	263	449	ug/kg	1		07/26/24 16:39
Benzene	14.7	J	29.9	9.32	22.4	ug/kg	1		07/26/24 16:39
Bromobenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Bromochloromethane	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Bromodichloromethane	3.59	U	4.78	1.48	3.59	ug/kg	1		07/26/24 16:39
Bromoform	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Bromomethane	35.8	U	47.8	19.1	35.8	ug/kg	1		07/26/24 16:39
Carbon disulfide	179	U	239	74.1	179	ug/kg	1		07/26/24 16:39
Carbon tetrachloride	22.4	U	29.9	9.32	22.4	ug/kg	1		07/26/24 16:39
Chlorobenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	359	U	478	148	359	ug/kg	1		07/26/24 16:39
Chloroform	10.7	U	14.3	7.17	10.7	ug/kg	1		07/26/24 16:39
Chloromethane	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
cis-1,2-Dichloroethene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
cis-1,3-Dichloropropene	22.4	U	29.9	9.32	22.4	ug/kg	1		07/26/24 16:39
Dibromochloromethane	9.00	U	12.0	3.59	9.00	ug/kg	1		07/26/24 16:39
Dibromomethane	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Dichlorodifluoromethane	179	U	239	71.7	179	ug/kg	1		07/26/24 16:39
Ethylbenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Freon-113	179	U	239	74.1	179	ug/kg	1		07/26/24 16:39
Hexachlorobutadiene	35.8	U	47.8	14.8	35.8	ug/kg	1		07/26/24 16:39
Isopropylbenzene (Cumene)	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Methylene chloride	179	U	239	74.1	179	ug/kg	1		07/26/24 16:39
Methyl-t-butyl ether	179	U	239	74.1	179	ug/kg	1		07/26/24 16:39
Naphthalene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
n-Butylbenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
n-Propylbenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
o-Xylene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
P & M -Xylene	90.0	U	120	35.9	90.0	ug/kg	1		07/26/24 16:39
sec-Butylbenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Styrene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
tert-Butylbenzene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
Tetrachloroethene	22.4	U	29.9	9.32	22.4	ug/kg	1		07/26/24 16:39
Toluene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
trans-1,2-Dichloroethene	44.8	U	59.8	18.6	44.8	ug/kg	1		07/26/24 16:39
trans-1,3-Dichloropropene	22.4	U	29.9	9.32	22.4	ug/kg	1		07/26/24 16:39
Trichloroethene	17.9	U	23.9	7.65	17.9	ug/kg	1		07/26/24 16:39
Trichlorofluoromethane	90.0	U	120	35.9	90.0	ug/kg	1		07/26/24 16:39
Vinyl acetate	179	U	239	74.1	179	ug/kg	1		07/26/24 16:39
Vinyl chloride	1.43	U	1.91	0.598	1.43	ug/kg	1		07/26/24 16:39
Xylenes (total)	134	U	179	54.5	134	ug/kg	1		07/26/24 16:39
Surrogates									
1,2-Dichloroethane-D4 (surr)	113		71-136			%	1		07/26/24 16:39
4-Bromofluorobenzene (surr)	57.7		55-151			%	1		07/26/24 16:39
Toluene-d8 (surr)	95.2		85-116			%	1		07/26/24 16:39

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-STAIN08SS**

Client Sample ID: **2407ELIM-STAIN08SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787011
Lab Project ID: 1243787

Collection Date: 07/18/24 13:19
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.9
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 16:39
Container ID: 1243787011-D

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:19
Prep Initial Wt./Vol.: 53.305 g
Prep Extract Vol: 42.6368 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	29100		2810	983	2108	mg/kg	1000		08/30/24 10:38
Antimony	1.05	U	1.40	0.435	1.05	mg/kg	10		08/26/24 18:59
Arsenic	8.29		1.40	0.435	1.05	mg/kg	10		08/26/24 18:59
Barium	169		0.421	0.132	0.316	mg/kg	10		08/26/24 18:59
Beryllium	0.645		0.140	0.0435	0.105	mg/kg	10		08/26/24 18:59
Boron	21.1	U	28.1	8.70	21.1	mg/kg	10		08/26/24 18:59
Cadmium	0.262	J	0.281	0.0870	0.211	mg/kg	10		08/26/24 18:59
Calcium	5280		70.2	21.1	52.7	mg/kg	10		08/26/24 18:59
Chromium	28.2		1.40	0.435	1.05	mg/kg	10		08/26/24 18:59
Cobalt	14.8		0.702	0.211	0.526	mg/kg	10		08/26/24 18:59
Copper	21.9		0.842	0.253	0.631	mg/kg	10		08/26/24 18:59
Iron	39000		7020	2110	5265	mg/kg	1000		08/30/24 10:38
Lead	13.3		0.281	0.0870	0.211	mg/kg	10		08/26/24 18:59
Magnesium	5450		70.2	21.1	52.7	mg/kg	10		08/26/24 18:59
Manganese	603		28.1	8.70	21.1	mg/kg	1000		08/30/24 10:38
Molybdenum	0.781	J	1.40	0.435	1.05	mg/kg	10		08/26/24 18:59
Nickel	27.5		0.281	0.0870	0.211	mg/kg	10		08/26/24 18:59
Potassium	1000		140	43.5	105	mg/kg	10		08/26/24 18:59
Selenium	0.970	J	2.81	0.870	2.11	mg/kg	10		08/26/24 18:59
Silver	0.526	U	0.702	0.211	0.526	mg/kg	10		08/26/24 18:59
Sodium	134	J	140	43.5	105	mg/kg	10		08/26/24 18:59
Thallium	0.110	J	0.281	0.0870	0.211	mg/kg	10		08/26/24 18:59
Vanadium	60.4		7.02	2.11	5.26	mg/kg	10		08/26/24 18:59
Zinc	74.5		3.51	1.09	2.63	mg/kg	10		08/26/24 18:59

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:38
Container ID: 1243787012-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.089 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 18:59
Container ID: 1243787012-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.089 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	957		30.0	13.5	22.5	mg/kg	1		07/26/24 13:14
Surrogates									
5a Androstane (surr)	91.4		50-150			%	1		07/26/24 13:14

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 13:14
Container ID: 1243787012-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.96 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	801		150	64.4	113	mg/kg	1		07/26/24 13:14
Surrogates									
n-Triacontane-d62 (surr)	80.9		50-150			%	1		07/26/24 13:14

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 13:14
Container ID: 1243787012-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.96 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
1,2-Dichlorobenzene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
1,3-Dichlorobenzene	1.13	U	1.51	0.452	1.13	mg/kg	1		08/28/24 19:08
1,4-Dichlorobenzene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
1-Chloronaphthalene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
1-Methylnaphthalene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2,4,5-Trichlorophenol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2,4,6-Trichlorophenol	1.13	U	1.51	0.452	1.13	mg/kg	1		08/28/24 19:08
2,4-Dichlorophenol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2,4-Dimethylphenol	0.565	U	0.753	0.188	0.565	mg/kg	1		08/28/24 19:08
2,4-Dinitrophenol	5.65	U	7.53	2.26	5.65	mg/kg	1		08/28/24 19:08
2,4-Dinitrotoluene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2,6-Dichlorophenol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2,6-Dinitrotoluene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2-Chloronaphthalene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2-Chlorophenol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2-Methyl-4,6-dinitrophenol	2.26	U	3.01	0.934	2.26	mg/kg	1		08/28/24 19:08
2-Methylnaphthalene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2-Methylphenol (o-Cresol)	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2-Nitroaniline	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
2-Nitrophenol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
3&4-Methylphenol (p&m-Cresol)	1.13	U	1.51	0.467	1.13	mg/kg	1		08/28/24 19:08
3,3-Dichlorobenzidine	1.13	U	1.51	0.452	1.13	mg/kg	1		08/28/24 19:08
3-Nitroaniline	0.565	U	0.753	0.226	0.565	mg/kg	1		08/28/24 19:08
4-Bromophenyl-phenylether	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
4-Chloro-3-methylphenol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
4-Chloroaniline	1.13	U	1.51	0.467	1.13	mg/kg	1		08/28/24 19:08
4-Chlorophenyl-phenylether	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
4-Nitroaniline	3.39	U	4.52	1.42	3.39	mg/kg	1		08/28/24 19:08
4-Nitrophenol	2.26	U	3.01	0.934	2.26	mg/kg	1		08/28/24 19:08
Acenaphthene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Acenaphthylene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Aniline	4.51	U	6.02	1.51	4.51	mg/kg	1		08/28/24 19:08
Anthracene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Azobenzene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Benzo(a)Anthracene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Benzo[a]pyrene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Benzo[g,h,i]perylene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Benzo[k]fluoranthene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Benzoic acid	1.69	U	2.26	0.708	1.69	mg/kg	1		08/28/24 19:08
Benzyl alcohol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Bis(2chloro1methylethyl)Ether	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Bis(2-Chloroethoxy)methane	2.26	U	3.01	0.904	2.26	mg/kg	1		08/28/24 19:08
Bis(2-Chloroethyl)ether	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
bis(2-Ethylhexyl)phthalate	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Butylbenzylphthalate	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Carbazole	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Chrysene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Dibenzo[a,h]anthracene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Dibenzofuran	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Diethylphthalate	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Dimethylphthalate	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Di-n-butylphthalate	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
di-n-Octylphthalate	0.565	U	0.753	0.226	0.565	mg/kg	1		08/28/24 19:08
Fluoranthene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Fluorene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Hexachlorobenzene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Hexachlorobutadiene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Hexachlorocyclopentadiene	0.788	U	1.05	0.301	0.788	mg/kg	1		08/28/24 19:08
Hexachloroethane	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Indeno[1,2,3-c,d] pyrene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Isophorone	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Naphthalene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Nitrobenzene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
N-Nitrosodimethylamine	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
N-Nitroso-di-n-propylamine	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
N-Nitrosodiphenylamine	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Pentachlorophenol	1.58	J	6.02	1.51	4.51	mg/kg	1		08/28/24 19:08
Phenanthrene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Phenol	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08
Pyrene	0.283	U	0.377	0.117	0.283	mg/kg	1		08/28/24 19:08

Surrogates

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	72.6		35-125			%	1		08/28/24 19:08
2-Fluorobiphenyl (surr)	68.9		44-115			%	1		08/28/24 19:08
2-Fluorophenol (surr)	52.6		35-115			%	1		08/28/24 19:08
Nitrobenzene-d5 (surr)	57.7		37-122			%	1		08/28/24 19:08
Phenol-d6 (surr)	57.8		33-122			%	1		08/28/24 19:08
Terphenyl-d14 (surr)	72.1		54-127			%	1		08/28/24 19:08

Batch Information

Analytical Batch: XMS14454
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/28/24 19:08
Container ID: 1243787012-A

Prep Batch: XXX49918
Prep Method: SW3550C
Prep Date/Time: 07/26/24 16:19
Prep Initial Wt./Vol.: 22.839 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	4.90	U	6.53	1.96	4.90	mg/kg	1		07/29/24 21:58
Surrogates									
4-Bromofluorobenzene (surr)	85.1		50-150			%	1		07/29/24 21:58

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 21:58
Container ID: 1243787012-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:32
Prep Initial Wt./Vol.: 49.199 g
Prep Extract Vol: 42.0154 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	24.5	U	32.6	10.4	24.5	ug/kg	1		07/29/24 21:58
Ethylbenzene	49.0	U	65.3	23.5	49.0	ug/kg	1		07/29/24 21:58
o-Xylene	49.0	U	65.3	23.8	49.0	ug/kg	1		07/29/24 21:58
P & M -Xylene	98.3	U	131	39.2	98.3	ug/kg	1		07/29/24 21:58
Toluene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/29/24 21:58
Xylenes (total)	147	U	196	65.3	147	ug/kg	1		07/29/24 21:58
Surrogates									
1,4-Difluorobenzene (surr)	95.2		72-119			%	1		07/29/24 21:58

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 21:58
Container ID: 1243787012-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:32
Prep Initial Wt./Vol.: 49.199 g
Prep Extract Vol: 42.0154 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	39.2	U	52.2	16.2	39.2	ug/kg	1		07/26/24 16:54
1,1,1-Trichloroethane	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,1,2,2-Tetrachloroethane	3.92	U	5.22	1.62	3.92	ug/kg	1		07/26/24 16:54
1,1,2-Trichloroethane	1.96	U	2.61	1.31	1.96	ug/kg	1		07/26/24 16:54
1,1-Dichloroethane	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,1-Dichloroethene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,1-Dichloropropene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,2,3-Trichlorobenzene	196	U	261	78.3	196	ug/kg	1		07/26/24 16:54
1,2,3-Trichloropropane	3.92	U	5.22	1.62	3.92	ug/kg	1		07/26/24 16:54
1,2,4-Trichlorobenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,2,4-Trimethylbenzene	196	U	261	78.3	196	ug/kg	1		07/26/24 16:54
1,2-Dibromo-3-chloropropane	196	U	261	80.9	196	ug/kg	1		07/26/24 16:54
1,2-Dibromoethane	2.94	U	3.92	1.96	2.94	ug/kg	1		07/26/24 16:54
1,2-Dichlorobenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,2-Dichloroethane	3.92	U	5.22	1.83	3.92	ug/kg	1		07/26/24 16:54
1,2-Dichloropropane	19.6	U	26.1	13.1	19.6	ug/kg	1		07/26/24 16:54
1,3,5-Trimethylbenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,3-Dichlorobenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
1,3-Dichloropropane	19.6	U	26.1	8.09	19.6	ug/kg	1		07/26/24 16:54
1,4-Dichlorobenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
2,2-Dichloropropane	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
2-Butanone (MEK)	490	U	653	204	490	ug/kg	1		07/26/24 16:54
2-Chlorotoluene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
2-Hexanone	235	U	313	157	235	ug/kg	1		07/26/24 16:54
4-Chlorotoluene	39.2	U	52.2	26.1	39.2	ug/kg	1		07/26/24 16:54
4-Isopropyltoluene	157	U	209	104	157	ug/kg	1		07/26/24 16:54
4-Methyl-2-pentanone (MIBK)	490	U	653	204	490	ug/kg	1		07/26/24 16:54
Acetone	490	U	653	287	490	ug/kg	1		07/26/24 16:54
Benzene	24.5	U	32.6	10.2	24.5	ug/kg	1		07/26/24 16:54
Bromobenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Bromochloromethane	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Bromodichloromethane	3.92	U	5.22	1.62	3.92	ug/kg	1		07/26/24 16:54
Bromoform	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Bromomethane	39.2	U	52.2	20.9	39.2	ug/kg	1		07/26/24 16:54
Carbon disulfide	196	U	261	80.9	196	ug/kg	1		07/26/24 16:54
Carbon tetrachloride	24.5	U	32.6	10.2	24.5	ug/kg	1		07/26/24 16:54
Chlorobenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	392	U	522	162	392	ug/kg	1		07/26/24 16:54
Chloroform	11.8	U	15.7	7.83	11.8	ug/kg	1		07/26/24 16:54
Chloromethane	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
cis-1,2-Dichloroethene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
cis-1,3-Dichloropropene	24.5	U	32.6	10.2	24.5	ug/kg	1		07/26/24 16:54
Dibromochloromethane	9.82	U	13.1	3.92	9.82	ug/kg	1		07/26/24 16:54
Dibromomethane	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Dichlorodifluoromethane	196	U	261	78.3	196	ug/kg	1		07/26/24 16:54
Ethylbenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Freon-113	196	U	261	80.9	196	ug/kg	1		07/26/24 16:54
Hexachlorobutadiene	39.2	U	52.2	16.2	39.2	ug/kg	1		07/26/24 16:54
Isopropylbenzene (Cumene)	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Methylene chloride	196	U	261	80.9	196	ug/kg	1		07/26/24 16:54
Methyl-t-butyl ether	196	U	261	80.9	196	ug/kg	1		07/26/24 16:54
Naphthalene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
n-Butylbenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
n-Propylbenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
o-Xylene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
P & M -Xylene	98.3	U	131	39.2	98.3	ug/kg	1		07/26/24 16:54
sec-Butylbenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Styrene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
tert-Butylbenzene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
Tetrachloroethene	24.5	U	32.6	10.2	24.5	ug/kg	1		07/26/24 16:54
Toluene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
trans-1,2-Dichloroethene	49.0	U	65.3	20.4	49.0	ug/kg	1		07/26/24 16:54
trans-1,3-Dichloropropene	24.5	U	32.6	10.2	24.5	ug/kg	1		07/26/24 16:54
Trichloroethene	19.6	U	26.1	8.36	19.6	ug/kg	1		07/26/24 16:54
Trichlorofluoromethane	98.3	U	131	39.2	98.3	ug/kg	1		07/26/24 16:54
Vinyl acetate	196	U	261	80.9	196	ug/kg	1		07/26/24 16:54
Vinyl chloride	1.57	U	2.09	0.653	1.57	ug/kg	1		07/26/24 16:54
Xylenes (total)	147	U	196	59.5	147	ug/kg	1		07/26/24 16:54
Surrogates									
1,2-Dichloroethane-D4 (surr)	115		71-136			%	1		07/26/24 16:54
4-Bromofluorobenzene (surr)	73.4		55-151			%	1		07/26/24 16:54
Toluene-d8 (surr)	96.2		85-116			%	1		07/26/24 16:54

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK01SS**

Client Sample ID: **2407ELIM-TANK01SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787012
Lab Project ID: 1243787

Collection Date: 07/18/24 13:32
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.4
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 16:54
Container ID: 1243787012-D

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:32
Prep Initial Wt./Vol.: 49.199 g
Prep Extract Vol: 42.0154 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	24900		2720	951	2040	mg/kg	1000		08/30/24 10:41
Antimony	1.02	U	1.36	0.421	1.02	mg/kg	10		08/26/24 19:01
Arsenic	9.00		1.36	0.421	1.02	mg/kg	10		08/26/24 19:01
Barium	160		0.408	0.128	0.306	mg/kg	10		08/26/24 19:01
Beryllium	0.573		0.136	0.0421	0.102	mg/kg	10		08/26/24 19:01
Boron	20.4	U	27.2	8.43	20.4	mg/kg	10		08/26/24 19:01
Cadmium	0.308		0.272	0.0843	0.204	mg/kg	10		08/26/24 19:01
Calcium	5480		67.9	20.4	50.9	mg/kg	10		08/26/24 19:01
Chromium	28.2		1.36	0.421	1.02	mg/kg	10		08/26/24 19:01
Cobalt	15.4		0.679	0.204	0.509	mg/kg	10		08/26/24 19:01
Copper	29.9		0.815	0.245	0.611	mg/kg	10		08/26/24 19:01
Iron	45600		6790	2040	5093	mg/kg	1000		08/30/24 10:41
Lead	13.9		0.272	0.0843	0.204	mg/kg	10		08/26/24 19:01
Magnesium	5680		67.9	20.4	50.9	mg/kg	10		08/26/24 19:01
Manganese	853		27.2	8.43	20.4	mg/kg	1000		08/30/24 10:41
Molybdenum	0.582	J	1.36	0.421	1.02	mg/kg	10		08/26/24 19:01
Nickel	28.9		0.272	0.0843	0.204	mg/kg	10		08/26/24 19:01
Potassium	863		136	42.1	102	mg/kg	10		08/26/24 19:01
Selenium	0.863	J	2.72	0.843	2.04	mg/kg	10		08/26/24 19:01
Silver	0.509	U	0.679	0.204	0.509	mg/kg	10		08/26/24 19:01
Sodium	116	J	136	42.1	102	mg/kg	10		08/26/24 19:01
Thallium	0.118	J	0.272	0.0843	0.204	mg/kg	10		08/26/24 19:01
Vanadium	62.6		6.79	2.04	5.09	mg/kg	10		08/26/24 19:01
Zinc	68.9		3.40	1.06	2.55	mg/kg	10		08/26/24 19:01

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:41
Container ID: 1243787013-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.026 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 19:01
Container ID: 1243787013-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.026 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	7910		55.7	25.1	41.8	mg/kg	2		07/30/24 02:20
Surrogates									
5a Androstane (surr)	109		50-150			%	2		07/30/24 02:20

Batch Information

Analytical Batch: XFC16968
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/30/24 02:20
Container ID: 1243787013-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.538 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	1200		139	59.9	104	mg/kg	1		07/26/24 13:23
Surrogates									
n-Triacontane-d62 (surr)	90.1		50-150			%	1		07/26/24 13:23

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 13:23
Container ID: 1243787013-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.538 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
1,2-Dichlorobenzene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
1,3-Dichlorobenzene	10.4	U	13.8	4.15	10.4	mg/kg	10		08/28/24 19:25
1,4-Dichlorobenzene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
1-Chloronaphthalene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
1-Methylnaphthalene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2,4,5-Trichlorophenol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2,4,6-Trichlorophenol	10.4	U	13.8	4.15	10.4	mg/kg	10		08/28/24 19:25
2,4-Dichlorophenol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2,4-Dimethylphenol	5.18	U	6.91	1.73	5.18	mg/kg	10		08/28/24 19:25
2,4-Dinitrophenol	51.8	U	69.1	20.7	51.8	mg/kg	10		08/28/24 19:25
2,4-Dinitrotoluene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2,6-Dichlorophenol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2,6-Dinitrotoluene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2-Chloronaphthalene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2-Chlorophenol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2-Methyl-4,6-dinitrophenol	20.8	U	27.7	8.57	20.8	mg/kg	10		08/28/24 19:25
2-Methylnaphthalene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2-Methylphenol (o-Cresol)	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2-Nitroaniline	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
2-Nitrophenol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
3&4-Methylphenol (p&m-Cresol)	10.4	U	13.8	4.29	10.4	mg/kg	10		08/28/24 19:25
3,3-Dichlorobenzidine	10.4	U	13.8	4.15	10.4	mg/kg	10		08/28/24 19:25
3-Nitroaniline	5.18	U	6.91	2.07	5.18	mg/kg	10		08/28/24 19:25
4-Bromophenyl-phenylether	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
4-Chloro-3-methylphenol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
4-Chloroaniline	10.4	U	13.8	4.29	10.4	mg/kg	10		08/28/24 19:25
4-Chlorophenyl-phenylether	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
4-Nitroaniline	31.1	U	41.5	13.0	31.1	mg/kg	10		08/28/24 19:25
4-Nitrophenol	20.8	U	27.7	8.57	20.8	mg/kg	10		08/28/24 19:25
Acenaphthene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Acenaphthylene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Aniline	41.5	U	55.3	13.8	41.5	mg/kg	10		08/28/24 19:25
Anthracene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Azobenzene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Benzo(a)Anthracene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Benzo[a]pyrene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Benzo[g,h,i]perylene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Benzo[k]fluoranthene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Benzoic acid	15.5	U	20.7	6.50	15.5	mg/kg	10		08/28/24 19:25
Benzyl alcohol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Bis(2chloro1methylethyl)Ether	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Bis(2-Chloroethoxy)methane	20.8	U	27.7	8.30	20.8	mg/kg	10		08/28/24 19:25
Bis(2-Chloroethyl)ether	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
bis(2-Ethylhexyl)phthalate	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Butylbenzylphthalate	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Carbazole	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Chrysene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Dibenzo[a,h]anthracene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Dibenzofuran	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Diethylphthalate	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Dimethylphthalate	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Di-n-butylphthalate	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
di-n-Octylphthalate	5.18	U	6.91	2.07	5.18	mg/kg	10		08/28/24 19:25
Fluoranthene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Fluorene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Hexachlorobenzene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Hexachlorobutadiene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Hexachlorocyclopentadiene	7.26	U	9.68	2.77	7.26	mg/kg	10		08/28/24 19:25
Hexachloroethane	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Indeno[1,2,3-c,d] pyrene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Isophorone	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Naphthalene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Nitrobenzene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
N-Nitrosodimethylamine	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
N-Nitroso-di-n-propylamine	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
N-Nitrosodiphenylamine	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Pentachlorophenol	24.6	J	55.3	13.8	41.5	mg/kg	10		08/28/24 19:25
Phenanthrene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Phenol	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25
Pyrene	2.59	U	3.46	1.08	2.59	mg/kg	10		08/28/24 19:25

Surrogates

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	77.9		35-125			%	10		08/28/24 19:25
2-Fluorobiphenyl (surr)	75.6		44-115			%	10		08/28/24 19:25
2-Fluorophenol (surr)	66.3		35-115			%	10		08/28/24 19:25
Nitrobenzene-d5 (surr)	77.1		37-122			%	10		08/28/24 19:25
Phenol-d6 (surr)	72		33-122			%	10		08/28/24 19:25
Terphenyl-d14 (surr)	77.7		54-127			%	10		08/28/24 19:25

Batch Information

Analytical Batch: XMS14454
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/28/24 19:25
Container ID: 1243787013-A

Prep Batch: XXX49918
Prep Method: SW3550C
Prep Date/Time: 07/26/24 16:19
Prep Initial Wt./Vol.: 22.687 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.53	J	4.78	1.44	3.59	mg/kg	1		07/29/24 22:17
Surrogates									
4-Bromofluorobenzene (surr)	63.4		50-150			%	1		07/29/24 22:17

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 22:17
Container ID: 1243787013-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:39
Prep Initial Wt./Vol.: 61.947 g
Prep Extract Vol: 42.517 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	17.9	U	23.9	7.66	17.9	ug/kg	1		07/29/24 22:17
Ethylbenzene	35.8	U	47.8	17.2	35.8	ug/kg	1		07/29/24 22:17
o-Xylene	35.8	U	47.8	17.4	35.8	ug/kg	1		07/29/24 22:17
P & M -Xylene	71.8	U	95.7	28.7	71.8	ug/kg	1		07/29/24 22:17
Toluene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/29/24 22:17
Xylenes (total)	108	U	144	47.8	108	ug/kg	1		07/29/24 22:17
Surrogates									
1,4-Difluorobenzene (surr)	95.4		72-119			%	1		07/29/24 22:17

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 22:17
Container ID: 1243787013-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:39
Prep Initial Wt./Vol.: 61.947 g
Prep Extract Vol: 42.517 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	28.7	U	38.3	11.9	28.7	ug/kg	1		07/26/24 17:10
1,1,1-Trichloroethane	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,1,2,2-Tetrachloroethane	2.87	U	3.83	1.19	2.87	ug/kg	1		07/26/24 17:10
1,1,2-Trichloroethane	1.43	U	1.91	0.957	1.43	ug/kg	1		07/26/24 17:10
1,1-Dichloroethane	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,1-Dichloroethene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,1-Dichloropropene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,2,3-Trichlorobenzene	143	U	191	57.4	143	ug/kg	1		07/26/24 17:10
1,2,3-Trichloropropane	2.87	U	3.83	1.19	2.87	ug/kg	1		07/26/24 17:10
1,2,4-Trichlorobenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,2,4-Trimethylbenzene	143	U	191	57.4	143	ug/kg	1		07/26/24 17:10
1,2-Dibromo-3-chloropropane	143	U	191	59.3	143	ug/kg	1		07/26/24 17:10
1,2-Dibromoethane	2.15	U	2.87	1.44	2.15	ug/kg	1		07/26/24 17:10
1,2-Dichlorobenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,2-Dichloroethane	2.87	U	3.83	1.34	2.87	ug/kg	1		07/26/24 17:10
1,2-Dichloropropane	14.3	U	19.1	9.57	14.3	ug/kg	1		07/26/24 17:10
1,3,5-Trimethylbenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,3-Dichlorobenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
1,3-Dichloropropane	14.3	U	19.1	5.93	14.3	ug/kg	1		07/26/24 17:10
1,4-Dichlorobenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
2,2-Dichloropropane	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
2-Butanone (MEK)	359	U	478	149	359	ug/kg	1		07/26/24 17:10
2-Chlorotoluene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
2-Hexanone	173	U	230	115	173	ug/kg	1		07/26/24 17:10
4-Chlorotoluene	28.7	U	38.3	19.1	28.7	ug/kg	1		07/26/24 17:10
4-Isopropyltoluene	115	U	153	76.6	115	ug/kg	1		07/26/24 17:10
4-Methyl-2-pentanone (MIBK)	359	U	478	149	359	ug/kg	1		07/26/24 17:10
Acetone	359	U	478	211	359	ug/kg	1		07/26/24 17:10
Benzene	17.9	U	23.9	7.46	17.9	ug/kg	1		07/26/24 17:10
Bromobenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Bromochloromethane	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Bromodichloromethane	2.87	U	3.83	1.19	2.87	ug/kg	1		07/26/24 17:10
Bromoform	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Bromomethane	28.7	U	38.3	15.3	28.7	ug/kg	1		07/26/24 17:10
Carbon disulfide	143	U	191	59.3	143	ug/kg	1		07/26/24 17:10
Carbon tetrachloride	17.9	U	23.9	7.46	17.9	ug/kg	1		07/26/24 17:10
Chlorobenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	287	U	383	119	287	ug/kg	1		07/26/24 17:10
Chloroform	8.63	U	11.5	5.74	8.63	ug/kg	1		07/26/24 17:10
Chloromethane	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
cis-1,2-Dichloroethene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
cis-1,3-Dichloropropene	17.9	U	23.9	7.46	17.9	ug/kg	1		07/26/24 17:10
Dibromochloromethane	7.18	U	9.57	2.87	7.18	ug/kg	1		07/26/24 17:10
Dibromomethane	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Dichlorodifluoromethane	143	U	191	57.4	143	ug/kg	1		07/26/24 17:10
Ethylbenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Freon-113	143	U	191	59.3	143	ug/kg	1		07/26/24 17:10
Hexachlorobutadiene	28.7	U	38.3	11.9	28.7	ug/kg	1		07/26/24 17:10
Isopropylbenzene (Cumene)	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Methylene chloride	143	U	191	59.3	143	ug/kg	1		07/26/24 17:10
Methyl-t-butyl ether	143	U	191	59.3	143	ug/kg	1		07/26/24 17:10
Naphthalene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
n-Butylbenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
n-Propylbenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
o-Xylene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
P & M -Xylene	71.8	U	95.7	28.7	71.8	ug/kg	1		07/26/24 17:10
sec-Butylbenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Styrene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
tert-Butylbenzene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
Tetrachloroethene	17.9	U	23.9	7.46	17.9	ug/kg	1		07/26/24 17:10
Toluene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
trans-1,2-Dichloroethene	35.8	U	47.8	14.9	35.8	ug/kg	1		07/26/24 17:10
trans-1,3-Dichloropropene	17.9	U	23.9	7.46	17.9	ug/kg	1		07/26/24 17:10
Trichloroethene	14.3	U	19.1	6.12	14.3	ug/kg	1		07/26/24 17:10
Trichlorofluoromethane	71.8	U	95.7	28.7	71.8	ug/kg	1		07/26/24 17:10
Vinyl acetate	143	U	191	59.3	143	ug/kg	1		07/26/24 17:10
Vinyl chloride	1.15	U	1.53	0.478	1.15	ug/kg	1		07/26/24 17:10
Xylenes (total)	108	U	144	43.6	108	ug/kg	1		07/26/24 17:10
Surrogates									
1,2-Dichloroethane-D4 (surr)	119		71-136			%	1		07/26/24 17:10
4-Bromofluorobenzene (surr)	50.4	*	55-151			%	1		07/26/24 17:10
Toluene-d8 (surr)	93.9		85-116			%	1		07/26/24 17:10

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SS**

Client Sample ID: **2407ELIM-TANK02SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787013
Lab Project ID: 1243787

Collection Date: 07/18/24 13:39
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):71.7
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 17:10
Container ID: 1243787013-D

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:39
Prep Initial Wt./Vol.: 61.947 g
Prep Extract Vol: 42.517 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	29200		2980	1040	2235	mg/kg	1000		08/30/24 10:44
Antimony	1.12	U	1.49	0.462	1.12	mg/kg	10		08/26/24 19:03
Arsenic	8.69		1.49	0.462	1.12	mg/kg	10		08/26/24 19:03
Barium	190		0.447	0.140	0.335	mg/kg	10		08/26/24 19:03
Beryllium	0.683		0.149	0.0462	0.112	mg/kg	10		08/26/24 19:03
Boron	22.4	U	29.8	9.23	22.4	mg/kg	10		08/26/24 19:03
Cadmium	1.02		0.298	0.0923	0.223	mg/kg	10		08/26/24 19:03
Calcium	6000		74.5	22.3	55.9	mg/kg	10		08/26/24 19:03
Chromium	33.1		1.49	0.462	1.12	mg/kg	10		08/26/24 19:03
Cobalt	19.1		0.745	0.223	0.559	mg/kg	10		08/26/24 19:03
Copper	36.8		0.894	0.268	0.670	mg/kg	10		08/26/24 19:03
Iron	49900		7450	2230	5588	mg/kg	1000		08/30/24 10:44
Lead	13.7		0.298	0.0923	0.223	mg/kg	10		08/26/24 19:03
Magnesium	7580		74.5	22.3	55.9	mg/kg	10		08/26/24 19:03
Manganese	996		29.8	9.23	22.4	mg/kg	1000		08/30/24 10:44
Molybdenum	1.32	J	1.49	0.462	1.12	mg/kg	10		08/26/24 19:03
Nickel	32.2		0.298	0.0923	0.223	mg/kg	10		08/26/24 19:03
Potassium	1330		149	46.2	112	mg/kg	10		08/26/24 19:03
Selenium	2.23	U	2.98	0.923	2.23	mg/kg	10		08/26/24 19:03
Silver	0.559	U	0.745	0.223	0.559	mg/kg	10		08/26/24 19:03
Sodium	153		149	46.2	112	mg/kg	10		08/26/24 19:03
Thallium	0.127	J	0.298	0.0923	0.223	mg/kg	10		08/26/24 19:03
Vanadium	85.6		7.45	2.23	5.59	mg/kg	10		08/26/24 19:03
Zinc	84.2		3.72	1.16	2.79	mg/kg	10		08/26/24 19:03

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 10:44
Container ID: 1243787014-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.018 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/26/24 19:03
Container ID: 1243787014-A

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 07/24/24 12:31
Prep Initial Wt./Vol.: 1.018 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	5170		30.3	13.6	22.7	mg/kg	1		07/28/24 13:42
Surrogates									
5a Androstane (surr)	114		50-150			%	1		07/28/24 13:42

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/28/24 13:42
Container ID: 1243787014-A

Prep Batch: XXX49920
Prep Method: SW3550C
Prep Date/Time: 07/27/24 09:29
Prep Initial Wt./Vol.: 22.53 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	872		151	65.1	113	mg/kg	1		07/28/24 13:42
Surrogates									
n-Triacontane-d62 (surr)	94.5		50-150			%	1		07/28/24 13:42

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/28/24 13:42
Container ID: 1243787014-A

Prep Batch: XXX49920
Prep Method: SW3550C
Prep Date/Time: 07/27/24 09:29
Prep Initial Wt./Vol.: 22.53 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
1,2-Dichlorobenzene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
1,3-Dichlorobenzene	22.5	U	30.0	8.99	22.5	mg/kg	20		08/29/24 16:28
1,4-Dichlorobenzene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
1-Chloronaphthalene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
1-Methylnaphthalene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2,4,5-Trichlorophenol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2,4,6-Trichlorophenol	22.5	U	30.0	8.99	22.5	mg/kg	20		08/29/24 16:28
2,4-Dichlorophenol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2,4-Dimethylphenol	11.3	U	15.0	3.75	11.3	mg/kg	20		08/29/24 16:28
2,4-Dinitrophenol	113	U	150	45.0	113	mg/kg	20		08/29/24 16:28
2,4-Dinitrotoluene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2,6-Dichlorophenol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2,6-Dinitrotoluene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2-Chloronaphthalene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2-Chlorophenol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2-Methyl-4,6-dinitrophenol	45.0	U	60.0	18.6	45.0	mg/kg	20		08/29/24 16:28
2-Methylnaphthalene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2-Methylphenol (o-Cresol)	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2-Nitroaniline	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
2-Nitrophenol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
3&4-Methylphenol (p&m-Cresol)	22.5	U	30.0	9.29	22.5	mg/kg	20		08/29/24 16:28
3,3-Dichlorobenzidine	22.5	U	30.0	8.99	22.5	mg/kg	20		08/29/24 16:28
3-Nitroaniline	11.3	U	15.0	4.50	11.3	mg/kg	20		08/29/24 16:28
4-Bromophenyl-phenylether	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
4-Chloro-3-methylphenol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
4-Chloroaniline	22.5	U	30.0	9.29	22.5	mg/kg	20		08/29/24 16:28
4-Chlorophenyl-phenylether	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
4-Nitroaniline	67.4	U	89.9	28.2	67.4	mg/kg	20		08/29/24 16:28
4-Nitrophenol	45.0	U	60.0	18.6	45.0	mg/kg	20		08/29/24 16:28
Acenaphthene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Acenaphthylene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Aniline	90.0	U	120	30.0	90.0	mg/kg	20		08/29/24 16:28
Anthracene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Azobenzene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Benzo(a)Anthracene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Benzo[a]pyrene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28

Print Date: 08/30/2024 5:14:09PM

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Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Benzo[g,h,i]perylene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Benzo[k]fluoranthene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Benzoic acid	33.8	U	45.0	14.1	33.8	mg/kg	20		08/29/24 16:28
Benzyl alcohol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Bis(2chloro1methylethyl)Ether	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Bis(2-Chloroethoxy)methane	45.0	U	60.0	18.0	45.0	mg/kg	20		08/29/24 16:28
Bis(2-Chloroethyl)ether	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
bis(2-Ethylhexyl)phthalate	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Butylbenzylphthalate	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Carbazole	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Chrysene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Dibenzo[a,h]anthracene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Dibenzofuran	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Diethylphthalate	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Dimethylphthalate	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Di-n-butylphthalate	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
di-n-Octylphthalate	11.3	U	15.0	4.50	11.3	mg/kg	20		08/29/24 16:28
Fluoranthene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Fluorene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Hexachlorobenzene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Hexachlorobutadiene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Hexachlorocyclopentadiene	15.8	U	21.0	6.00	15.8	mg/kg	20		08/29/24 16:28
Hexachloroethane	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Indeno[1,2,3-c,d] pyrene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Isophorone	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Naphthalene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Nitrobenzene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
N-Nitrosodimethylamine	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
N-Nitroso-di-n-propylamine	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
N-Nitrosodiphenylamine	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Pentachlorophenol	90.0	U	120	30.0	90.0	mg/kg	20		08/29/24 16:28
Phenanthrene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Phenol	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28
Pyrene	5.62	U	7.49	2.34	5.62	mg/kg	20		08/29/24 16:28

Surrogates

Print Date: 08/30/2024 5:14:09PM

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Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	72.7		35-125			%	20		08/29/24 16:28
2-Fluorobiphenyl (surr)	78.3		44-115			%	20		08/29/24 16:28
2-Fluorophenol (surr)	62.6		35-115			%	20		08/29/24 16:28
Nitrobenzene-d5 (surr)	69.3		37-122			%	20		08/29/24 16:28
Phenol-d6 (surr)	66.4		33-122			%	20		08/29/24 16:28
Terphenyl-d14 (surr)	77.5		54-127			%	20		08/29/24 16:28

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/29/24 16:28
Container ID: 1243787014-A

Prep Batch: XXX49926
Prep Method: SW3550C
Prep Date/Time: 07/29/24 09:46
Prep Initial Wt./Vol.: 22.759 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	5.28	U	7.04	2.11	5.28	mg/kg	1		07/29/24 22:35
Surrogates									
4-Bromofluorobenzene (surr)	89.3		50-150			%	1		07/29/24 22:35

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 22:35
Container ID: 1243787014-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:48
Prep Initial Wt./Vol.: 42.536 g
Prep Extract Vol: 39.4785 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	26.4	U	35.2	11.3	26.4	ug/kg	1		07/29/24 22:35
Ethylbenzene	52.8	U	70.4	25.3	52.8	ug/kg	1		07/29/24 22:35
o-Xylene	52.8	U	70.4	25.6	52.8	ug/kg	1		07/29/24 22:35
P & M -Xylene	106	U	141	42.2	106	ug/kg	1		07/29/24 22:35
Toluene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/29/24 22:35
Xylenes (total)	158	U	211	70.4	158	ug/kg	1		07/29/24 22:35
Surrogates									
1,4-Difluorobenzene (surr)	95.1		72-119			%	1		07/29/24 22:35

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 22:35
Container ID: 1243787014-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:48
Prep Initial Wt./Vol.: 42.536 g
Prep Extract Vol: 39.4785 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	42.2	U	56.3	17.4	42.2	ug/kg	1		07/26/24 17:26
1,1,1-Trichloroethane	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,1,2,2-Tetrachloroethane	4.22	U	5.63	1.74	4.22	ug/kg	1		07/26/24 17:26
1,1,2-Trichloroethane	2.11	U	2.81	1.41	2.11	ug/kg	1		07/26/24 17:26
1,1-Dichloroethane	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,1-Dichloroethene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,1-Dichloropropene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,2,3-Trichlorobenzene	211	U	281	84.4	211	ug/kg	1		07/26/24 17:26
1,2,3-Trichloropropane	4.22	U	5.63	1.74	4.22	ug/kg	1		07/26/24 17:26
1,2,4-Trichlorobenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,2,4-Trimethylbenzene	211	U	281	84.4	211	ug/kg	1		07/26/24 17:26
1,2-Dibromo-3-chloropropane	211	U	281	87.2	211	ug/kg	1		07/26/24 17:26
1,2-Dibromoethane	3.17	U	4.22	2.11	3.17	ug/kg	1		07/26/24 17:26
1,2-Dichlorobenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,2-Dichloroethane	4.22	U	5.63	1.97	4.22	ug/kg	1		07/26/24 17:26
1,2-Dichloropropane	21.1	U	28.1	14.1	21.1	ug/kg	1		07/26/24 17:26
1,3,5-Trimethylbenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,3-Dichlorobenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
1,3-Dichloropropane	21.1	U	28.1	8.72	21.1	ug/kg	1		07/26/24 17:26
1,4-Dichlorobenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
2,2-Dichloropropane	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
2-Butanone (MEK)	528	U	704	220	528	ug/kg	1		07/26/24 17:26
2-Chlorotoluene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
2-Hexanone	254	U	338	169	254	ug/kg	1		07/26/24 17:26
4-Chlorotoluene	42.2	U	56.3	28.1	42.2	ug/kg	1		07/26/24 17:26
4-Isopropyltoluene	169	U	225	113	169	ug/kg	1		07/26/24 17:26
4-Methyl-2-pentanone (MIBK)	528	U	704	220	528	ug/kg	1		07/26/24 17:26
Acetone	528	U	704	310	528	ug/kg	1		07/26/24 17:26
Benzene	26.4	U	35.2	11.0	26.4	ug/kg	1		07/26/24 17:26
Bromobenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Bromochloromethane	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Bromodichloromethane	4.22	U	5.63	1.74	4.22	ug/kg	1		07/26/24 17:26
Bromoform	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Bromomethane	42.2	U	56.3	22.5	42.2	ug/kg	1		07/26/24 17:26
Carbon disulfide	211	U	281	87.2	211	ug/kg	1		07/26/24 17:26
Carbon tetrachloride	26.4	U	35.2	11.0	26.4	ug/kg	1		07/26/24 17:26
Chlorobenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26

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J flagging is activated

Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	422	U	563	174	422	ug/kg	1		07/26/24 17:26
Chloroform	12.7	U	16.9	8.44	12.7	ug/kg	1		07/26/24 17:26
Chloromethane	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
cis-1,2-Dichloroethene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
cis-1,3-Dichloropropene	26.4	U	35.2	11.0	26.4	ug/kg	1		07/26/24 17:26
Dibromochloromethane	10.6	U	14.1	4.22	10.6	ug/kg	1		07/26/24 17:26
Dibromomethane	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Dichlorodifluoromethane	211	U	281	84.4	211	ug/kg	1		07/26/24 17:26
Ethylbenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Freon-113	211	U	281	87.2	211	ug/kg	1		07/26/24 17:26
Hexachlorobutadiene	42.2	U	56.3	17.4	42.2	ug/kg	1		07/26/24 17:26
Isopropylbenzene (Cumene)	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Methylene chloride	211	U	281	87.2	211	ug/kg	1		07/26/24 17:26
Methyl-t-butyl ether	211	U	281	87.2	211	ug/kg	1		07/26/24 17:26
Naphthalene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
n-Butylbenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
n-Propylbenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
o-Xylene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
P & M -Xylene	106	U	141	42.2	106	ug/kg	1		07/26/24 17:26
sec-Butylbenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Styrene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
tert-Butylbenzene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
Tetrachloroethene	26.4	U	35.2	11.0	26.4	ug/kg	1		07/26/24 17:26
Toluene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
trans-1,2-Dichloroethene	52.8	U	70.4	22.0	52.8	ug/kg	1		07/26/24 17:26
trans-1,3-Dichloropropene	26.4	U	35.2	11.0	26.4	ug/kg	1		07/26/24 17:26
Trichloroethene	21.1	U	28.1	9.01	21.1	ug/kg	1		07/26/24 17:26
Trichlorofluoromethane	106	U	141	42.2	106	ug/kg	1		07/26/24 17:26
Vinyl acetate	211	U	281	87.2	211	ug/kg	1		07/26/24 17:26
Vinyl chloride	1.69	U	2.25	0.704	1.69	ug/kg	1		07/26/24 17:26
Xylenes (total)	158	U	211	64.2	158	ug/kg	1		07/26/24 17:26
Surrogates									
1,2-Dichloroethane-D4 (surr)	119		71-136			%	1		07/26/24 17:26
4-Bromofluorobenzene (surr)	73.4		55-151			%	1		07/26/24 17:26
Toluene-d8 (surr)	95.5		85-116			%	1		07/26/24 17:26

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK02SUB**

Client Sample ID: **2407ELIM-TANK02SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787014
Lab Project ID: 1243787

Collection Date: 07/18/24 13:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):66.0
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 17:26
Container ID: 1243787014-D

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:48
Prep Initial Wt./Vol.: 42.536 g
Prep Extract Vol: 39.4785 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SS**

Client Sample ID: **2407ELIM-TANK03SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787015
Lab Project ID: 1243787

Collection Date: 07/18/24 13:56
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):78.2
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	168		25.5	11.5	19.1	mg/kg	1		07/26/24 13:43
Surrogates									
5a Androstane (surr)	114		50-150			%	1		07/26/24 13:43

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 13:43
Container ID: 1243787015-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.597 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	430		127	54.8	95.3	mg/kg	1		07/26/24 13:43
Surrogates									
n-Triacontane-d62 (surr)	104		50-150			%	1		07/26/24 13:43

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 13:43
Container ID: 1243787015-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.597 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SS**

Client Sample ID: **2407ELIM-TANK03SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787015
Lab Project ID: 1243787

Collection Date: 07/18/24 13:56
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):78.2
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	4.22	U	5.63	1.69	4.22	mg/kg	1		07/29/24 22:54
Surrogates									
4-Bromofluorobenzene (surr)	102		50-150			%	1		07/29/24 22:54

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 22:54
Container ID: 1243787015-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:56
Prep Initial Wt./Vol.: 37.746 g
Prep Extract Vol: 33.2416 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	21.1	U	28.2	9.01	21.1	ug/kg	1		07/29/24 22:54
Ethylbenzene	42.2	U	56.3	20.3	42.2	ug/kg	1		07/29/24 22:54
o-Xylene	42.2	U	56.3	20.5	42.2	ug/kg	1		07/29/24 22:54
P & M -Xylene	84.8	U	113	33.8	84.8	ug/kg	1		07/29/24 22:54
Toluene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/29/24 22:54
Xylenes (total)	127	U	169	56.3	127	ug/kg	1		07/29/24 22:54
Surrogates									
1,4-Difluorobenzene (surr)	94.3		72-119			%	1		07/29/24 22:54

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 22:54
Container ID: 1243787015-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:56
Prep Initial Wt./Vol.: 37.746 g
Prep Extract Vol: 33.2416 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SS**

Client Sample ID: **2407ELIM-TANK03SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787015
Lab Project ID: 1243787

Collection Date: 07/18/24 13:56
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):78.2
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	33.8	U	45.1	14.0	33.8	ug/kg	1		07/26/24 17:41
1,1,1-Trichloroethane	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,1,2,2-Tetrachloroethane	3.38	U	4.51	1.40	3.38	ug/kg	1		07/26/24 17:41
1,1,2-Trichloroethane	1.69	U	2.25	1.13	1.69	ug/kg	1		07/26/24 17:41
1,1-Dichloroethane	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,1-Dichloroethene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,1-Dichloropropene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,2,3-Trichlorobenzene	169	U	225	67.6	169	ug/kg	1		07/26/24 17:41
1,2,3-Trichloropropane	3.38	U	4.51	1.40	3.38	ug/kg	1		07/26/24 17:41
1,2,4-Trichlorobenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,2,4-Trimethylbenzene	169	U	225	67.6	169	ug/kg	1		07/26/24 17:41
1,2-Dibromo-3-chloropropane	169	U	225	69.9	169	ug/kg	1		07/26/24 17:41
1,2-Dibromoethane	2.54	U	3.38	1.69	2.54	ug/kg	1		07/26/24 17:41
1,2-Dichlorobenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,2-Dichloroethane	3.38	U	4.51	1.58	3.38	ug/kg	1		07/26/24 17:41
1,2-Dichloropropane	16.9	U	22.5	11.3	16.9	ug/kg	1		07/26/24 17:41
1,3,5-Trimethylbenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,3-Dichlorobenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
1,3-Dichloropropane	16.9	U	22.5	6.99	16.9	ug/kg	1		07/26/24 17:41
1,4-Dichlorobenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
2,2-Dichloropropane	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
2-Butanone (MEK)	422	U	563	176	422	ug/kg	1		07/26/24 17:41
2-Chlorotoluene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
2-Hexanone	203	U	270	135	203	ug/kg	1		07/26/24 17:41
4-Chlorotoluene	33.8	U	45.1	22.5	33.8	ug/kg	1		07/26/24 17:41
4-Isopropyltoluene	135	U	180	90.1	135	ug/kg	1		07/26/24 17:41
4-Methyl-2-pentanone (MIBK)	422	U	563	176	422	ug/kg	1		07/26/24 17:41
Acetone	422	U	563	248	422	ug/kg	1		07/26/24 17:41
Benzene	21.1	U	28.2	8.79	21.1	ug/kg	1		07/26/24 17:41
Bromobenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Bromochloromethane	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Bromodichloromethane	3.38	U	4.51	1.40	3.38	ug/kg	1		07/26/24 17:41
Bromoform	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Bromomethane	33.8	U	45.1	18.0	33.8	ug/kg	1		07/26/24 17:41
Carbon disulfide	169	U	225	69.9	169	ug/kg	1		07/26/24 17:41
Carbon tetrachloride	21.1	U	28.2	8.79	21.1	ug/kg	1		07/26/24 17:41
Chlorobenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SS**

Client Sample ID: **2407ELIM-TANK03SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787015
Lab Project ID: 1243787

Collection Date: 07/18/24 13:56
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):78.2
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	338	U	451	140	338	ug/kg	1		07/26/24 17:41
Chloroform	10.1	U	13.5	6.76	10.1	ug/kg	1		07/26/24 17:41
Chloromethane	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
cis-1,2-Dichloroethene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
cis-1,3-Dichloropropene	21.1	U	28.2	8.79	21.1	ug/kg	1		07/26/24 17:41
Dibromochloromethane	8.48	U	11.3	3.38	8.48	ug/kg	1		07/26/24 17:41
Dibromomethane	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Dichlorodifluoromethane	169	U	225	67.6	169	ug/kg	1		07/26/24 17:41
Ethylbenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Freon-113	169	U	225	69.9	169	ug/kg	1		07/26/24 17:41
Hexachlorobutadiene	33.8	U	45.1	14.0	33.8	ug/kg	1		07/26/24 17:41
Isopropylbenzene (Cumene)	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Methylene chloride	169	U	225	69.9	169	ug/kg	1		07/26/24 17:41
Methyl-t-butyl ether	169	U	225	69.9	169	ug/kg	1		07/26/24 17:41
Naphthalene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
n-Butylbenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
n-Propylbenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
o-Xylene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
P & M -Xylene	84.8	U	113	33.8	84.8	ug/kg	1		07/26/24 17:41
sec-Butylbenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Styrene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
tert-Butylbenzene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
Tetrachloroethene	21.1	U	28.2	8.79	21.1	ug/kg	1		07/26/24 17:41
Toluene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
trans-1,2-Dichloroethene	42.2	U	56.3	17.6	42.2	ug/kg	1		07/26/24 17:41
trans-1,3-Dichloropropene	21.1	U	28.2	8.79	21.1	ug/kg	1		07/26/24 17:41
Trichloroethene	16.9	U	22.5	7.21	16.9	ug/kg	1		07/26/24 17:41
Trichlorofluoromethane	84.8	U	113	33.8	84.8	ug/kg	1		07/26/24 17:41
Vinyl acetate	169	U	225	69.9	169	ug/kg	1		07/26/24 17:41
Vinyl chloride	1.35	U	1.80	0.563	1.35	ug/kg	1		07/26/24 17:41
Xylenes (total)	127	U	169	51.4	127	ug/kg	1		07/26/24 17:41
Surrogates									
1,2-Dichloroethane-D4 (surr)	115		71-136			%	1		07/26/24 17:41
4-Bromofluorobenzene (surr)	83.7		55-151			%	1		07/26/24 17:41
Toluene-d8 (surr)	96.5		85-116			%	1		07/26/24 17:41

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SS**

Client Sample ID: **2407ELIM-TANK03SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787015
Lab Project ID: 1243787

Collection Date: 07/18/24 13:56
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):78.2
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 17:41
Container ID: 1243787015-B

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 13:56
Prep Initial Wt./Vol.: 37.746 g
Prep Extract Vol: 33.2416 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SUB**

Client Sample ID: **2407ELIM-TANK03SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787016
Lab Project ID: 1243787

Collection Date: 07/18/24 14:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.5
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	406		30.5	13.7	22.9	mg/kg	1		07/26/24 13:52
Surrogates									
5a Androstane (surr)	113		50-150			%	1		07/26/24 13:52

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/26/24 13:52
Container ID: 1243787016-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.548 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	1080		152	65.5	114	mg/kg	1		07/26/24 13:52
Surrogates									
n-Triacontane-d62 (surr)	98		50-150			%	1		07/26/24 13:52

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/26/24 13:52
Container ID: 1243787016-A

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 07/24/24 11:29
Prep Initial Wt./Vol.: 22.548 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SUB**

Client Sample ID: **2407ELIM-TANK03SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787016
Lab Project ID: 1243787

Collection Date: 07/18/24 14:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.5
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	4.93	J	7.39	2.22	5.54	mg/kg	1		07/29/24 23:13
Surrogates									
4-Bromofluorobenzene (surr)	97.5		50-150			%	1		07/29/24 23:13

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 23:13
Container ID: 1243787016-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:00
Prep Initial Wt./Vol.: 40.077 g
Prep Extract Vol: 38.8253 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	27.8	U	37.0	11.8	27.8	ug/kg	1		07/29/24 23:13
Ethylbenzene	55.4	U	73.9	26.6	55.4	ug/kg	1		07/29/24 23:13
o-Xylene	55.4	U	73.9	26.9	55.4	ug/kg	1		07/29/24 23:13
P & M -Xylene	111	U	148	44.4	111	ug/kg	1		07/29/24 23:13
Toluene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/29/24 23:13
Xylenes (total)	167	U	222	73.9	167	ug/kg	1		07/29/24 23:13
Surrogates									
1,4-Difluorobenzene (surr)	93		72-119			%	1		07/29/24 23:13

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 23:13
Container ID: 1243787016-B

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:00
Prep Initial Wt./Vol.: 40.077 g
Prep Extract Vol: 38.8253 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SUB**

Client Sample ID: **2407ELIM-TANK03SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787016
Lab Project ID: 1243787

Collection Date: 07/18/24 14:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.5
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	44.4	U	59.2	18.3	44.4	ug/kg	1		07/26/24 17:57
1,1,1-Trichloroethane	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,1,2,2-Tetrachloroethane	4.44	U	5.92	1.83	4.44	ug/kg	1		07/26/24 17:57
1,1,2-Trichloroethane	2.22	U	2.96	1.48	2.22	ug/kg	1		07/26/24 17:57
1,1-Dichloroethane	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,1-Dichloroethene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,1-Dichloropropene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,2,3-Trichlorobenzene	222	U	296	88.7	222	ug/kg	1		07/26/24 17:57
1,2,3-Trichloropropane	4.44	U	5.92	1.83	4.44	ug/kg	1		07/26/24 17:57
1,2,4-Trichlorobenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,2,4-Trimethylbenzene	222	U	296	88.7	222	ug/kg	1		07/26/24 17:57
1,2-Dibromo-3-chloropropane	222	U	296	91.7	222	ug/kg	1		07/26/24 17:57
1,2-Dibromoethane	3.33	U	4.44	2.22	3.33	ug/kg	1		07/26/24 17:57
1,2-Dichlorobenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,2-Dichloroethane	4.44	U	5.92	2.07	4.44	ug/kg	1		07/26/24 17:57
1,2-Dichloropropane	22.2	U	29.6	14.8	22.2	ug/kg	1		07/26/24 17:57
1,3,5-Trimethylbenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,3-Dichlorobenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
1,3-Dichloropropane	22.2	U	29.6	9.17	22.2	ug/kg	1		07/26/24 17:57
1,4-Dichlorobenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
2,2-Dichloropropane	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
2-Butanone (MEK)	554	U	739	231	554	ug/kg	1		07/26/24 17:57
2-Chlorotoluene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
2-Hexanone	266	U	355	177	266	ug/kg	1		07/26/24 17:57
4-Chlorotoluene	44.4	U	59.2	29.6	44.4	ug/kg	1		07/26/24 17:57
4-Isopropyltoluene	178	U	237	118	178	ug/kg	1		07/26/24 17:57
4-Methyl-2-pentanone (MIBK)	554	U	739	231	554	ug/kg	1		07/26/24 17:57
Acetone	554	U	739	325	554	ug/kg	1		07/26/24 17:57
Benzene	27.8	U	37.0	11.5	27.8	ug/kg	1		07/26/24 17:57
Bromobenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Bromochloromethane	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Bromodichloromethane	4.44	U	5.92	1.83	4.44	ug/kg	1		07/26/24 17:57
Bromoform	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Bromomethane	44.4	U	59.2	23.7	44.4	ug/kg	1		07/26/24 17:57
Carbon disulfide	222	U	296	91.7	222	ug/kg	1		07/26/24 17:57
Carbon tetrachloride	27.8	U	37.0	11.5	27.8	ug/kg	1		07/26/24 17:57
Chlorobenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK03SUB**

Client Sample ID: **2407ELIM-TANK03SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787016
Lab Project ID: 1243787

Collection Date: 07/18/24 14:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.5
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	444	U	592	183	444	ug/kg	1		07/26/24 17:57
Chloroform	13.3	U	17.7	8.87	13.3	ug/kg	1		07/26/24 17:57
Chloromethane	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
cis-1,2-Dichloroethene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
cis-1,3-Dichloropropene	27.8	U	37.0	11.5	27.8	ug/kg	1		07/26/24 17:57
Dibromochloromethane	11.1	U	14.8	4.44	11.1	ug/kg	1		07/26/24 17:57
Dibromomethane	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Dichlorodifluoromethane	222	U	296	88.7	222	ug/kg	1		07/26/24 17:57
Ethylbenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Freon-113	222	U	296	91.7	222	ug/kg	1		07/26/24 17:57
Hexachlorobutadiene	44.4	U	59.2	18.3	44.4	ug/kg	1		07/26/24 17:57
Isopropylbenzene (Cumene)	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Methylene chloride	222	U	296	91.7	222	ug/kg	1		07/26/24 17:57
Methyl-t-butyl ether	222	U	296	91.7	222	ug/kg	1		07/26/24 17:57
Naphthalene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
n-Butylbenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
n-Propylbenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
o-Xylene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
P & M -Xylene	111	U	148	44.4	111	ug/kg	1		07/26/24 17:57
sec-Butylbenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Styrene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
tert-Butylbenzene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
Tetrachloroethene	27.8	U	37.0	11.5	27.8	ug/kg	1		07/26/24 17:57
Toluene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
trans-1,2-Dichloroethene	55.4	U	73.9	23.1	55.4	ug/kg	1		07/26/24 17:57
trans-1,3-Dichloropropene	27.8	U	37.0	11.5	27.8	ug/kg	1		07/26/24 17:57
Trichloroethene	22.2	U	29.6	9.47	22.2	ug/kg	1		07/26/24 17:57
Trichlorofluoromethane	111	U	148	44.4	111	ug/kg	1		07/26/24 17:57
Vinyl acetate	222	U	296	91.7	222	ug/kg	1		07/26/24 17:57
Vinyl chloride	1.78	U	2.37	0.739	1.78	ug/kg	1		07/26/24 17:57
Xylenes (total)	167	U	222	67.4	167	ug/kg	1		07/26/24 17:57
Surrogates									
1,2-Dichloroethane-D4 (surr)	118		71-136			%	1		07/26/24 17:57
4-Bromofluorobenzene (surr)	79.7		55-151			%	1		07/26/24 17:57
Toluene-d8 (surr)	94.8		85-116			%	1		07/26/24 17:57

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J flagging is activated

Results of **2407ELIM-TANK03SUB**

Client Sample ID: **2407ELIM-TANK03SUB**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787016
Lab Project ID: 1243787

Collection Date: 07/18/24 14:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):65.5
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 17:57
Container ID: 1243787016-B

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:00
Prep Initial Wt./Vol.: 40.077 g
Prep Extract Vol: 38.8253 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	25700		2940	1030	2205	mg/kg	1000		08/30/24 11:07
Antimony	1.10	U	1.47	0.456	1.10	mg/kg	10		08/16/24 16:54
Arsenic	38.3		3.68	1.14	2.76	mg/kg	25		08/28/24 12:20
Barium	153		0.441	0.138	0.331	mg/kg	10		08/16/24 16:54
Beryllium	0.598		0.147	0.0456	0.110	mg/kg	10		08/16/24 16:54
Boron	22.0	U	29.4	9.12	22.0	mg/kg	10		08/16/24 16:54
Cadmium	0.383		0.294	0.0912	0.220	mg/kg	10		08/16/24 16:54
Calcium	7180		73.6	22.1	55.2	mg/kg	10		08/16/24 16:54
Chromium	33.0		1.47	0.456	1.10	mg/kg	10		08/16/24 16:54
Cobalt	14.6		0.736	0.221	0.552	mg/kg	10		08/16/24 16:54
Copper	42.2		0.883	0.265	0.662	mg/kg	10		08/16/24 16:54
Iron	35800		73.6	22.1	55.2	mg/kg	10		08/16/24 16:54
Lead	15.8		0.294	0.0912	0.220	mg/kg	10		08/16/24 16:54
Magnesium	5190		73.6	22.1	55.2	mg/kg	10		08/16/24 16:54
Manganese	118		29.4	9.12	22.0	mg/kg	1000		08/28/24 14:03
Molybdenum	0.754	J	1.47	0.456	1.10	mg/kg	10		08/16/24 16:54
Nickel	25.7		0.294	0.0912	0.220	mg/kg	10		08/16/24 16:54
Potassium	839		147	45.6	110	mg/kg	10		08/16/24 16:54
Selenium	2.21	U	2.94	0.912	2.21	mg/kg	10		08/16/24 16:54
Silver	0.552	U	0.736	0.221	0.552	mg/kg	10		08/16/24 16:54
Sodium	192		147	45.6	110	mg/kg	10		08/16/24 16:54
Thallium	0.120	J	0.294	0.0912	0.220	mg/kg	10		08/16/24 16:54
Vanadium	53.1		7.36	2.21	5.52	mg/kg	10		08/16/24 16:54
Zinc	84.6		3.68	1.15	2.76	mg/kg	10		08/16/24 16:54

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J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Metals by ICP/MS**

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 11:07
Container ID: 1243787017-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.08 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12404
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/28/24 12:20
Container ID: 1243787017-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.08 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12404
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/28/24 14:03
Container ID: 1243787017-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.08 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12392
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/16/24 16:54
Container ID: 1243787017-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.08 g
Prep Extract Vol: 50 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Polychlorinated Biphenyls**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aroclor-1016	58.7	U	78.3	19.6	58.7	ug/kg	1		08/23/24 20:48
Aroclor-1221	118	U	157	39.2	118	ug/kg	1		08/23/24 20:48
Aroclor-1232	58.7	U	78.3	19.6	58.7	ug/kg	1		08/23/24 20:48
Aroclor-1242	58.7	U	78.3	19.6	58.7	ug/kg	1		08/23/24 20:48
Aroclor-1248	58.7	U	78.3	19.6	58.7	ug/kg	1		08/23/24 20:48
Aroclor-1254	58.7	U	78.3	19.6	58.7	ug/kg	1		08/23/24 20:48
Aroclor-1260	58.7	U	78.3	19.6	58.7	ug/kg	1		08/23/24 20:48
Surrogates									
Decachlorobiphenyl (surr)	90		60-125			%	1		08/23/24 20:48

Batch Information

Analytical Batch: XGC11547
Analytical Method: SW8082A
Analyst: OZH
Analytical Date/Time: 08/23/24 20:48
Container ID: 1243787017-A

Prep Batch: XXX50134
Prep Method: SW3546
Prep Date/Time: 08/20/24 12:00
Prep Initial Wt./Vol.: 22.828 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	145		31.6	14.2	23.7	mg/kg	1		07/28/24 13:52
Surrogates									
5a Androstane (surr)	92.2		50-150			%	1		07/28/24 13:52

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/28/24 13:52
Container ID: 1243787017-A

Prep Batch: XXX49920
Prep Method: SW3550C
Prep Date/Time: 07/27/24 09:29
Prep Initial Wt./Vol.: 22.617 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	537		158	68.0	119	mg/kg	1		07/28/24 13:52
Surrogates									
n-Triacontane-d62 (surr)	82.9		50-150			%	1		07/28/24 13:52

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/28/24 13:52
Container ID: 1243787017-A

Prep Batch: XXX49920
Prep Method: SW3550C
Prep Date/Time: 07/27/24 09:29
Prep Initial Wt./Vol.: 22.617 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
1,2-Dichlorobenzene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
1,3-Dichlorobenzene	1.19	U	1.58	0.473	1.19	mg/kg	1		08/29/24 16:44
1,4-Dichlorobenzene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
1-Chloronaphthalene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
1-Methylnaphthalene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2,4,5-Trichlorophenol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2,4,6-Trichlorophenol	1.19	U	1.58	0.473	1.19	mg/kg	1		08/29/24 16:44
2,4-Dichlorophenol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2,4-Dimethylphenol	0.592	U	0.789	0.197	0.592	mg/kg	1		08/29/24 16:44
2,4-Dinitrophenol	5.92	U	7.89	2.37	5.92	mg/kg	1		08/29/24 16:44
2,4-Dinitrotoluene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2,6-Dichlorophenol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2,6-Dinitrotoluene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2-Chloronaphthalene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2-Chlorophenol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2-Methyl-4,6-dinitrophenol	2.36	U	3.15	0.978	2.36	mg/kg	1		08/29/24 16:44
2-Methylnaphthalene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2-Methylphenol (o-Cresol)	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2-Nitroaniline	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
2-Nitrophenol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
3&4-Methylphenol (p&m-Cresol)	1.19	U	1.58	0.489	1.19	mg/kg	1		08/29/24 16:44
3,3-Dichlorobenzidine	1.19	U	1.58	0.473	1.19	mg/kg	1		08/29/24 16:44
3-Nitroaniline	0.592	U	0.789	0.237	0.592	mg/kg	1		08/29/24 16:44
4-Bromophenyl-phenylether	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
4-Chloro-3-methylphenol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
4-Chloroaniline	1.19	U	1.58	0.489	1.19	mg/kg	1		08/29/24 16:44
4-Chlorophenyl-phenylether	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
4-Nitroaniline	3.55	U	4.73	1.48	3.55	mg/kg	1		08/29/24 16:44
4-Nitrophenol	2.36	U	3.15	0.978	2.36	mg/kg	1		08/29/24 16:44
Acenaphthene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Acenaphthylene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Aniline	4.73	U	6.31	1.58	4.73	mg/kg	1		08/29/24 16:44
Anthracene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Azobenzene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Benzo(a)Anthracene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Benzo[a]pyrene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Benzo[g,h,i]perylene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Benzo[k]fluoranthene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Benzoic acid	1.78	U	2.37	0.741	1.78	mg/kg	1		08/29/24 16:44
Benzyl alcohol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Bis(2chloro1methylethyl)Ether	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Bis(2-Chloroethoxy)methane	2.36	U	3.15	0.946	2.36	mg/kg	1		08/29/24 16:44
Bis(2-Chloroethyl)ether	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
bis(2-Ethylhexyl)phthalate	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Butylbenzylphthalate	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Carbazole	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Chrysene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Dibenzo[a,h]anthracene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Dibenzofuran	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Diethylphthalate	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Dimethylphthalate	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Di-n-butylphthalate	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
di-n-Octylphthalate	0.592	U	0.789	0.237	0.592	mg/kg	1		08/29/24 16:44
Fluoranthene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Fluorene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Hexachlorobenzene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Hexachlorobutadiene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Hexachlorocyclopentadiene	0.825	U	1.10	0.315	0.825	mg/kg	1		08/29/24 16:44
Hexachloroethane	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Indeno[1,2,3-c,d] pyrene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Isophorone	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Naphthalene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Nitrobenzene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
N-Nitrosodimethylamine	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
N-Nitroso-di-n-propylamine	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
N-Nitrosodiphenylamine	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Pentachlorophenol	4.73	U	6.31	1.58	4.73	mg/kg	1		08/29/24 16:44
Phenanthrene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Phenol	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44
Pyrene	0.295	U	0.394	0.123	0.295	mg/kg	1		08/29/24 16:44

Surrogates

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	71.4		35-125			%	1		08/29/24 16:44
2-Fluorobiphenyl (surr)	65.8		44-115			%	1		08/29/24 16:44
2-Fluorophenol (surr)	53.1		35-115			%	1		08/29/24 16:44
Nitrobenzene-d5 (surr)	56.4		37-122			%	1		08/29/24 16:44
Phenol-d6 (surr)	57.3		33-122			%	1		08/29/24 16:44
Terphenyl-d14 (surr)	67.7		54-127			%	1		08/29/24 16:44

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/29/24 16:44
Container ID: 1243787017-A

Prep Batch: XXX49926
Prep Method: SW3550C
Prep Date/Time: 07/29/24 09:46
Prep Initial Wt./Vol.: 22.666 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	7.13	U	9.50	2.85	7.13	mg/kg	1		07/30/24 00:08
Surrogates									
4-Bromofluorobenzene (surr)	88.3		50-150			%	1		07/30/24 00:08

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/30/24 00:08
Container ID: 1243787017-E

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:10
Prep Initial Wt./Vol.: 30.294 g
Prep Extract Vol: 36.2304 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	35.6	U	47.5	15.2	35.6	ug/kg	1		07/30/24 00:08
Ethylbenzene	71.3	U	95.0	34.2	71.3	ug/kg	1		07/30/24 00:08
o-Xylene	71.3	U	95.0	34.6	71.3	ug/kg	1		07/30/24 00:08
P & M -Xylene	143	U	190	57.0	143	ug/kg	1		07/30/24 00:08
Toluene	41.8	J	95.0	29.6	71.3	ug/kg	1		07/30/24 00:08
Xylenes (total)	214	U	285	95.0	214	ug/kg	1		07/30/24 00:08
Surrogates									
1,4-Difluorobenzene (surr)	94.4		72-119			%	1		07/30/24 00:08

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/30/24 00:08
Container ID: 1243787017-E

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:10
Prep Initial Wt./Vol.: 30.294 g
Prep Extract Vol: 36.2304 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	57.0	U	76.0	23.6	57.0	ug/kg	1		07/26/24 18:13
1,1,1-Trichloroethane	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,1,2,2-Tetrachloroethane	5.70	U	7.60	2.36	5.70	ug/kg	1		07/26/24 18:13
1,1,2-Trichloroethane	2.85	U	3.80	1.90	2.85	ug/kg	1		07/26/24 18:13
1,1-Dichloroethane	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,1-Dichloroethene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,1-Dichloropropene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,2,3-Trichlorobenzene	285	U	380	114	285	ug/kg	1		07/26/24 18:13
1,2,3-Trichloropropane	5.70	U	7.60	2.36	5.70	ug/kg	1		07/26/24 18:13
1,2,4-Trichlorobenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,2,4-Trimethylbenzene	285	U	380	114	285	ug/kg	1		07/26/24 18:13
1,2-Dibromo-3-chloropropane	285	U	380	118	285	ug/kg	1		07/26/24 18:13
1,2-Dibromoethane	4.28	U	5.70	2.85	4.28	ug/kg	1		07/26/24 18:13
1,2-Dichlorobenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,2-Dichloroethane	5.70	U	7.60	2.66	5.70	ug/kg	1		07/26/24 18:13
1,2-Dichloropropane	28.5	U	38.0	19.0	28.5	ug/kg	1		07/26/24 18:13
1,3,5-Trimethylbenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,3-Dichlorobenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
1,3-Dichloropropane	28.5	U	38.0	11.8	28.5	ug/kg	1		07/26/24 18:13
1,4-Dichlorobenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
2,2-Dichloropropane	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
2-Butanone (MEK)	713	U	950	296	713	ug/kg	1		07/26/24 18:13
2-Chlorotoluene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
2-Hexanone	342	U	456	228	342	ug/kg	1		07/26/24 18:13
4-Chlorotoluene	57.0	U	76.0	38.0	57.0	ug/kg	1		07/26/24 18:13
4-Isopropyltoluene	228	U	304	152	228	ug/kg	1		07/26/24 18:13
4-Methyl-2-pentanone (MIBK)	713	U	950	296	713	ug/kg	1		07/26/24 18:13
Acetone	713	U	950	418	713	ug/kg	1		07/26/24 18:13
Benzene	35.6	U	47.5	14.8	35.6	ug/kg	1		07/26/24 18:13
Bromobenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Bromochloromethane	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Bromodichloromethane	5.70	U	7.60	2.36	5.70	ug/kg	1		07/26/24 18:13
Bromoform	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Bromomethane	57.0	U	76.0	30.4	57.0	ug/kg	1		07/26/24 18:13
Carbon disulfide	285	U	380	118	285	ug/kg	1		07/26/24 18:13
Carbon tetrachloride	35.6	U	47.5	14.8	35.6	ug/kg	1		07/26/24 18:13
Chlorobenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13

Print Date: 08/30/2024 5:14:09PM

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Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	570	U	760	236	570	ug/kg	1		07/26/24 18:13
Chloroform	17.1	U	22.8	11.4	17.1	ug/kg	1		07/26/24 18:13
Chloromethane	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
cis-1,2-Dichloroethene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
cis-1,3-Dichloropropene	35.6	U	47.5	14.8	35.6	ug/kg	1		07/26/24 18:13
Dibromochloromethane	14.3	U	19.0	5.70	14.3	ug/kg	1		07/26/24 18:13
Dibromomethane	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Dichlorodifluoromethane	285	U	380	114	285	ug/kg	1		07/26/24 18:13
Ethylbenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Freon-113	285	U	380	118	285	ug/kg	1		07/26/24 18:13
Hexachlorobutadiene	57.0	U	76.0	23.6	57.0	ug/kg	1		07/26/24 18:13
Isopropylbenzene (Cumene)	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Methylene chloride	285	U	380	118	285	ug/kg	1		07/26/24 18:13
Methyl-t-butyl ether	285	U	380	118	285	ug/kg	1		07/26/24 18:13
Naphthalene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
n-Butylbenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
n-Propylbenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
o-Xylene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
P & M -Xylene	143	U	190	57.0	143	ug/kg	1		07/26/24 18:13
sec-Butylbenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Styrene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
tert-Butylbenzene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
Tetrachloroethene	35.6	U	47.5	14.8	35.6	ug/kg	1		07/26/24 18:13
Toluene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
trans-1,2-Dichloroethene	71.3	U	95.0	29.6	71.3	ug/kg	1		07/26/24 18:13
trans-1,3-Dichloropropene	35.6	U	47.5	14.8	35.6	ug/kg	1		07/26/24 18:13
Trichloroethene	28.5	U	38.0	12.2	28.5	ug/kg	1		07/26/24 18:13
Trichlorofluoromethane	143	U	190	57.0	143	ug/kg	1		07/26/24 18:13
Vinyl acetate	285	U	380	118	285	ug/kg	1		07/26/24 18:13
Vinyl chloride	2.28	U	3.04	0.950	2.28	ug/kg	1		07/26/24 18:13
Xylenes (total)	214	U	285	86.7	214	ug/kg	1		07/26/24 18:13
Surrogates									
1,2-Dichloroethane-D4 (surr)	113		71-136			%	1		07/26/24 18:13
4-Bromofluorobenzene (surr)	84.4		55-151			%	1		07/26/24 18:13
Toluene-d8 (surr)	95.2		85-116			%	1		07/26/24 18:13

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK04SS**

Client Sample ID: **2407ELIM-TANK04SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787017
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):62.9
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 18:13
Container ID: 1243787017-E

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:10
Prep Initial Wt./Vol.: 30.294 g
Prep Extract Vol: 36.2304 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK05SS**

Client Sample ID: **2407ELIM-TANK05SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787018
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Solid/Soil (Wet Weight)
Solids (%):62.9
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	3.86	U	5.15	1.54	3.86	mg/kg	1		07/30/24 00:26
Surrogates									
4-Bromofluorobenzene (surr)	101		50-150			%	1		07/30/24 00:26

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/30/24 00:26
Container ID: 1243787018-A

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:10
Prep Initial Wt./Vol.: 37.923 g
Prep Extract Vol: 39.0586 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	19.3	U	25.7	8.24	19.3	ug/kg	1		07/30/24 00:26
Ethylbenzene	38.6	U	51.5	18.5	38.6	ug/kg	1		07/30/24 00:26
o-Xylene	38.6	U	51.5	18.7	38.6	ug/kg	1		07/30/24 00:26
P & M -Xylene	77.3	U	103	30.9	77.3	ug/kg	1		07/30/24 00:26
Toluene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/30/24 00:26
Xylenes (total)	116	U	154	51.5	116	ug/kg	1		07/30/24 00:26
Surrogates									
1,4-Difluorobenzene (surr)	93.4		72-119			%	1		07/30/24 00:26

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/30/24 00:26
Container ID: 1243787018-A

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:10
Prep Initial Wt./Vol.: 37.923 g
Prep Extract Vol: 39.0586 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK05SS**

Client Sample ID: **2407ELIM-TANK05SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787018
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Solid/Soil (Wet Weight)
Solids (%):62.9
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	30.9	U	41.2	12.8	30.9	ug/kg	1		07/26/24 18:28
1,1,1-Trichloroethane	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,1,2,2-Tetrachloroethane	3.09	U	4.12	1.28	3.09	ug/kg	1		07/26/24 18:28
1,1,2-Trichloroethane	1.54	U	2.06	1.03	1.54	ug/kg	1		07/26/24 18:28
1,1-Dichloroethane	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,1-Dichloroethene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,1-Dichloropropene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,2,3-Trichlorobenzene	155	U	206	61.8	155	ug/kg	1		07/26/24 18:28
1,2,3-Trichloropropane	3.09	U	4.12	1.28	3.09	ug/kg	1		07/26/24 18:28
1,2,4-Trichlorobenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,2,4-Trimethylbenzene	155	U	206	61.8	155	ug/kg	1		07/26/24 18:28
1,2-Dibromo-3-chloropropane	155	U	206	63.9	155	ug/kg	1		07/26/24 18:28
1,2-Dibromoethane	2.32	U	3.09	1.54	2.32	ug/kg	1		07/26/24 18:28
1,2-Dichlorobenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,2-Dichloroethane	3.09	U	4.12	1.44	3.09	ug/kg	1		07/26/24 18:28
1,2-Dichloropropane	15.5	U	20.6	10.3	15.5	ug/kg	1		07/26/24 18:28
1,3,5-Trimethylbenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,3-Dichlorobenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
1,3-Dichloropropane	15.5	U	20.6	6.39	15.5	ug/kg	1		07/26/24 18:28
1,4-Dichlorobenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
2,2-Dichloropropane	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
2-Butanone (MEK)	386	U	515	161	386	ug/kg	1		07/26/24 18:28
2-Chlorotoluene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
2-Hexanone	185	U	247	124	185	ug/kg	1		07/26/24 18:28
4-Chlorotoluene	30.9	U	41.2	20.6	30.9	ug/kg	1		07/26/24 18:28
4-Isopropyltoluene	124	U	165	82.4	124	ug/kg	1		07/26/24 18:28
4-Methyl-2-pentanone (MIBK)	386	U	515	161	386	ug/kg	1		07/26/24 18:28
Acetone	386	U	515	227	386	ug/kg	1		07/26/24 18:28
Benzene	19.3	U	25.7	8.03	19.3	ug/kg	1		07/26/24 18:28
Bromobenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Bromochloromethane	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Bromodichloromethane	3.09	U	4.12	1.28	3.09	ug/kg	1		07/26/24 18:28
Bromoform	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Bromomethane	30.9	U	41.2	16.5	30.9	ug/kg	1		07/26/24 18:28
Carbon disulfide	155	U	206	63.9	155	ug/kg	1		07/26/24 18:28
Carbon tetrachloride	19.3	U	25.7	8.03	19.3	ug/kg	1		07/26/24 18:28
Chlorobenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK05SS**

Client Sample ID: **2407ELIM-TANK05SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787018
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Solid/Soil (Wet Weight)
Solids (%):62.9
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	309	U	412	128	309	ug/kg	1		07/26/24 18:28
Chloroform	9.30	U	12.4	6.18	9.30	ug/kg	1		07/26/24 18:28
Chloromethane	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
cis-1,2-Dichloroethene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
cis-1,3-Dichloropropene	19.3	U	25.7	8.03	19.3	ug/kg	1		07/26/24 18:28
Dibromochloromethane	7.73	U	10.3	3.09	7.73	ug/kg	1		07/26/24 18:28
Dibromomethane	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Dichlorodifluoromethane	155	U	206	61.8	155	ug/kg	1		07/26/24 18:28
Ethylbenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Freon-113	155	U	206	63.9	155	ug/kg	1		07/26/24 18:28
Hexachlorobutadiene	30.9	U	41.2	12.8	30.9	ug/kg	1		07/26/24 18:28
Isopropylbenzene (Cumene)	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Methylene chloride	155	U	206	63.9	155	ug/kg	1		07/26/24 18:28
Methyl-t-butyl ether	155	U	206	63.9	155	ug/kg	1		07/26/24 18:28
Naphthalene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
n-Butylbenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
n-Propylbenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
o-Xylene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
P & M -Xylene	77.3	U	103	30.9	77.3	ug/kg	1		07/26/24 18:28
sec-Butylbenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Styrene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
tert-Butylbenzene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
Tetrachloroethene	19.3	U	25.7	8.03	19.3	ug/kg	1		07/26/24 18:28
Toluene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
trans-1,2-Dichloroethene	38.6	U	51.5	16.1	38.6	ug/kg	1		07/26/24 18:28
trans-1,3-Dichloropropene	19.3	U	25.7	8.03	19.3	ug/kg	1		07/26/24 18:28
Trichloroethene	15.5	U	20.6	6.59	15.5	ug/kg	1		07/26/24 18:28
Trichlorofluoromethane	77.3	U	103	30.9	77.3	ug/kg	1		07/26/24 18:28
Vinyl acetate	155	U	206	63.9	155	ug/kg	1		07/26/24 18:28
Vinyl chloride	1.24	U	1.65	0.515	1.24	ug/kg	1		07/26/24 18:28
Xylenes (total)	116	U	154	47.0	116	ug/kg	1		07/26/24 18:28
Surrogates									
1,2-Dichloroethane-D4 (surr)	113		71-136			%	1		07/26/24 18:28
4-Bromofluorobenzene (surr)	89.8		55-151			%	1		07/26/24 18:28
Toluene-d8 (surr)	96		85-116			%	1		07/26/24 18:28

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK05SS**

Client Sample ID: **2407ELIM-TANK05SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787018
Lab Project ID: 1243787

Collection Date: 07/18/24 14:10
Received Date: 07/19/24 16:21
Matrix: Solid/Soil (Wet Weight)
Solids (%):62.9
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 18:28
Container ID: 1243787018-A

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:10
Prep Initial Wt./Vol.: 37.923 g
Prep Extract Vol: 39.0586 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	22.1	J	23.6	10.6	17.7	mg/kg	1		07/28/24 17:48
Surrogates									
5a Androstane (surr)	86.7		50-150			%	1		07/28/24 17:48

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/28/24 17:48
Container ID: 1243787019-A

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 07/27/24 13:31
Prep Initial Wt./Vol.: 22.567 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	128		118	50.8	88.5	mg/kg	1		07/28/24 17:48
Surrogates									
n-Triacontane-d62 (surr)	88.5		50-150			%	1		07/28/24 17:48

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/28/24 17:48
Container ID: 1243787019-A

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 07/27/24 13:31
Prep Initial Wt./Vol.: 22.567 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
1,2-Dichlorobenzene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
1,3-Dichlorobenzene	0.877	U	1.17	0.352	0.877	mg/kg	1		08/29/24 17:01
1,4-Dichlorobenzene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
1-Chloronaphthalene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
1-Methylnaphthalene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2,4,5-Trichlorophenol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2,4,6-Trichlorophenol	0.877	U	1.17	0.352	0.877	mg/kg	1		08/29/24 17:01
2,4-Dichlorophenol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2,4-Dimethylphenol	0.440	U	0.586	0.147	0.440	mg/kg	1		08/29/24 17:01
2,4-Dinitrophenol	4.40	U	5.86	1.76	4.40	mg/kg	1		08/29/24 17:01
2,4-Dinitrotoluene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2,6-Dichlorophenol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2,6-Dinitrotoluene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2-Chloronaphthalene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2-Chlorophenol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2-Methyl-4,6-dinitrophenol	1.75	U	2.34	0.727	1.75	mg/kg	1		08/29/24 17:01
2-Methylnaphthalene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2-Methylphenol (o-Cresol)	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2-Nitroaniline	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
2-Nitrophenol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
3&4-Methylphenol (p&m-Cresol)	0.877	U	1.17	0.363	0.877	mg/kg	1		08/29/24 17:01
3,3-Dichlorobenzidine	0.877	U	1.17	0.352	0.877	mg/kg	1		08/29/24 17:01
3-Nitroaniline	0.440	U	0.586	0.176	0.440	mg/kg	1		08/29/24 17:01
4-Bromophenyl-phenylether	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
4-Chloro-3-methylphenol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
4-Chloroaniline	0.877	U	1.17	0.363	0.877	mg/kg	1		08/29/24 17:01
4-Chlorophenyl-phenylether	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
4-Nitroaniline	2.64	U	3.52	1.10	2.64	mg/kg	1		08/29/24 17:01
4-Nitrophenol	1.75	U	2.34	0.727	1.75	mg/kg	1		08/29/24 17:01
Acenaphthene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Acenaphthylene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Aniline	3.52	U	4.69	1.17	3.52	mg/kg	1		08/29/24 17:01
Anthracene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Azobenzene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Benzo(a)Anthracene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Benzo[a]pyrene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	0.216	J	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Benzo[g,h,i]perylene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Benzo[k]fluoranthene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Benzoic acid	1.32	U	1.76	0.551	1.32	mg/kg	1		08/29/24 17:01
Benzyl alcohol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Bis(2chloro1methylethyl)Ether	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Bis(2-Chloroethoxy)methane	1.75	U	2.34	0.703	1.75	mg/kg	1		08/29/24 17:01
Bis(2-Chloroethyl)ether	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
bis(2-Ethylhexyl)phthalate	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Butylbenzylphthalate	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Carbazole	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Chrysene	0.204	J	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Dibenzo[a,h]anthracene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Dibenzofuran	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Diethylphthalate	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Dimethylphthalate	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Di-n-butylphthalate	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
di-n-Octylphthalate	0.440	U	0.586	0.176	0.440	mg/kg	1		08/29/24 17:01
Fluoranthene	0.464		0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Fluorene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Hexachlorobenzene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Hexachlorobutadiene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Hexachlorocyclopentadiene	0.616	U	0.821	0.234	0.616	mg/kg	1		08/29/24 17:01
Hexachloroethane	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Indeno[1,2,3-c,d] pyrene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Isophorone	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Naphthalene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Nitrobenzene	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
N-Nitrosodimethylamine	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
N-Nitroso-di-n-propylamine	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
N-Nitrosodiphenylamine	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Pentachlorophenol	3.52	U	4.69	1.17	3.52	mg/kg	1		08/29/24 17:01
Phenanthrene	0.121	J	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Phenol	0.220	U	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01
Pyrene	0.281	J	0.293	0.0914	0.220	mg/kg	1		08/29/24 17:01

Surrogates

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	75		35-125			%	1		08/29/24 17:01
2-Fluorobiphenyl (surr)	63.6		44-115			%	1		08/29/24 17:01
2-Fluorophenol (surr)	45.9		35-115			%	1		08/29/24 17:01
Nitrobenzene-d5 (surr)	50.7		37-122			%	1		08/29/24 17:01
Phenol-d6 (surr)	51.4		33-122			%	1		08/29/24 17:01
Terphenyl-d14 (surr)	71.4		54-127			%	1		08/29/24 17:01

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/29/24 17:01
Container ID: 1243787019-A

Prep Batch: XXX49926
Prep Method: SW3550C
Prep Date/Time: 07/29/24 09:46
Prep Initial Wt./Vol.: 22.736 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	4.70	U	6.27	1.88	4.70	mg/kg	1		07/30/24 00:45
Surrogates									
4-Bromofluorobenzene (surr)	118		50-150			%	1		07/30/24 00:45

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/30/24 00:45
Container ID: 1243787019-C

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:37
Prep Initial Wt./Vol.: 27.703 g
Prep Extract Vol: 29.314 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	23.5	U	31.3	10.0	23.5	ug/kg	1		07/30/24 00:45
Ethylbenzene	47.0	U	62.7	22.6	47.0	ug/kg	1		07/30/24 00:45
o-Xylene	47.0	U	62.7	22.8	47.0	ug/kg	1		07/30/24 00:45
P & M -Xylene	93.8	U	125	37.6	93.8	ug/kg	1		07/30/24 00:45
Toluene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/30/24 00:45
Xylenes (total)	141	U	188	62.7	141	ug/kg	1		07/30/24 00:45
Surrogates									
1,4-Difluorobenzene (surr)	94.3		72-119			%	1		07/30/24 00:45

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/30/24 00:45
Container ID: 1243787019-C

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:37
Prep Initial Wt./Vol.: 27.703 g
Prep Extract Vol: 29.314 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	37.6	U	50.1	15.5	37.6	ug/kg	1		07/26/24 18:44
1,1,1-Trichloroethane	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,1,2,2-Tetrachloroethane	3.76	U	5.01	1.55	3.76	ug/kg	1		07/26/24 18:44
1,1,2-Trichloroethane	1.88	U	2.51	1.25	1.88	ug/kg	1		07/26/24 18:44
1,1-Dichloroethane	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,1-Dichloroethene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,1-Dichloropropene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,2,3-Trichlorobenzene	188	U	251	75.2	188	ug/kg	1		07/26/24 18:44
1,2,3-Trichloropropane	3.76	U	5.01	1.55	3.76	ug/kg	1		07/26/24 18:44
1,2,4-Trichlorobenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,2,4-Trimethylbenzene	188	U	251	75.2	188	ug/kg	1		07/26/24 18:44
1,2-Dibromo-3-chloropropane	188	U	251	77.7	188	ug/kg	1		07/26/24 18:44
1,2-Dibromoethane	2.82	U	3.76	1.88	2.82	ug/kg	1		07/26/24 18:44
1,2-Dichlorobenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,2-Dichloroethane	3.76	U	5.01	1.75	3.76	ug/kg	1		07/26/24 18:44
1,2-Dichloropropane	18.8	U	25.1	12.5	18.8	ug/kg	1		07/26/24 18:44
1,3,5-Trimethylbenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,3-Dichlorobenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
1,3-Dichloropropane	18.8	U	25.1	7.77	18.8	ug/kg	1		07/26/24 18:44
1,4-Dichlorobenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
2,2-Dichloropropane	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
2-Butanone (MEK)	470	U	627	196	470	ug/kg	1		07/26/24 18:44
2-Chlorotoluene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
2-Hexanone	226	U	301	150	226	ug/kg	1		07/26/24 18:44
4-Chlorotoluene	37.6	U	50.1	25.1	37.6	ug/kg	1		07/26/24 18:44
4-Isopropyltoluene	151	U	201	100	151	ug/kg	1		07/26/24 18:44
4-Methyl-2-pentanone (MIBK)	470	U	627	196	470	ug/kg	1		07/26/24 18:44
Acetone	470	U	627	276	470	ug/kg	1		07/26/24 18:44
Benzene	23.5	U	31.3	9.78	23.5	ug/kg	1		07/26/24 18:44
Bromobenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Bromochloromethane	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Bromodichloromethane	3.76	U	5.01	1.55	3.76	ug/kg	1		07/26/24 18:44
Bromoform	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Bromomethane	37.6	U	50.1	20.1	37.6	ug/kg	1		07/26/24 18:44
Carbon disulfide	188	U	251	77.7	188	ug/kg	1		07/26/24 18:44
Carbon tetrachloride	23.5	U	31.3	9.78	23.5	ug/kg	1		07/26/24 18:44
Chlorobenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	376	U	501	155	376	ug/kg	1		07/26/24 18:44
Chloroform	11.3	U	15.0	7.52	11.3	ug/kg	1		07/26/24 18:44
Chloromethane	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
cis-1,2-Dichloroethene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
cis-1,3-Dichloropropene	23.5	U	31.3	9.78	23.5	ug/kg	1		07/26/24 18:44
Dibromochloromethane	9.38	U	12.5	3.76	9.38	ug/kg	1		07/26/24 18:44
Dibromomethane	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Dichlorodifluoromethane	188	U	251	75.2	188	ug/kg	1		07/26/24 18:44
Ethylbenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Freon-113	188	U	251	77.7	188	ug/kg	1		07/26/24 18:44
Hexachlorobutadiene	37.6	U	50.1	15.5	37.6	ug/kg	1		07/26/24 18:44
Isopropylbenzene (Cumene)	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Methylene chloride	188	U	251	77.7	188	ug/kg	1		07/26/24 18:44
Methyl-t-butyl ether	188	U	251	77.7	188	ug/kg	1		07/26/24 18:44
Naphthalene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
n-Butylbenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
n-Propylbenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
o-Xylene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
P & M -Xylene	93.8	U	125	37.6	93.8	ug/kg	1		07/26/24 18:44
sec-Butylbenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Styrene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
tert-Butylbenzene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
Tetrachloroethene	23.5	U	31.3	9.78	23.5	ug/kg	1		07/26/24 18:44
Toluene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
trans-1,2-Dichloroethene	47.0	U	62.7	19.6	47.0	ug/kg	1		07/26/24 18:44
trans-1,3-Dichloropropene	23.5	U	31.3	9.78	23.5	ug/kg	1		07/26/24 18:44
Trichloroethene	18.8	U	25.1	8.02	18.8	ug/kg	1		07/26/24 18:44
Trichlorofluoromethane	93.8	U	125	37.6	93.8	ug/kg	1		07/26/24 18:44
Vinyl acetate	188	U	251	77.7	188	ug/kg	1		07/26/24 18:44
Vinyl chloride	1.51	U	2.01	0.627	1.51	ug/kg	1		07/26/24 18:44
Xylenes (total)	141	U	188	57.2	141	ug/kg	1		07/26/24 18:44
Surrogates									
1,2-Dichloroethane-D4 (surr)	116		71-136			%	1		07/26/24 18:44
4-Bromofluorobenzene (surr)	92.3		55-151			%	1		07/26/24 18:44
Toluene-d8 (surr)	96.6		85-116			%	1		07/26/24 18:44

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J flagging is activated

Results of **2407ELIM-TANK06SS**

Client Sample ID: **2407ELIM-TANK06SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787019
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):84.4
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 18:44
Container ID: 1243787019-C

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:37
Prep Initial Wt./Vol.: 27.703 g
Prep Extract Vol: 29.314 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK07SS**

Client Sample ID: **2407ELIM-TANK07SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787020
Lab Project ID: 1243787

Collection Date: 07/18/24 14:37
Received Date: 07/19/24 16:21
Matrix: Solid/Soil (Wet Weight)
Solids (%):84.4
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	3.43	U	4.57	1.37	3.43	mg/kg	1		07/30/24 01:04
Surrogates									
4-Bromofluorobenzene (surr)	112		50-150			%	1		07/30/24 01:04

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/30/24 01:04
Container ID: 1243787020-A

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:37
Prep Initial Wt./Vol.: 32.931 g
Prep Extract Vol: 30.1282 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	17.2	U	22.9	7.32	17.2	ug/kg	1		07/30/24 01:04
Ethylbenzene	34.3	U	45.7	16.5	34.3	ug/kg	1		07/30/24 01:04
o-Xylene	34.3	U	45.7	16.7	34.3	ug/kg	1		07/30/24 01:04
P & M -Xylene	68.6	U	91.5	27.4	68.6	ug/kg	1		07/30/24 01:04
Toluene	34.3	U	45.7	14.3	34.3	ug/kg	1		07/30/24 01:04
Xylenes (total)	103	U	137	45.7	103	ug/kg	1		07/30/24 01:04
Surrogates									
1,4-Difluorobenzene (surr)	94.4		72-119			%	1		07/30/24 01:04

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/30/24 01:04
Container ID: 1243787020-A

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:37
Prep Initial Wt./Vol.: 32.931 g
Prep Extract Vol: 30.1282 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TF10SS**

Client Sample ID: **2407ELIM-TF10SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787021
Lab Project ID: 1243787

Collection Date: 07/18/24 14:30
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):45.6
Location:

Results by **Polychlorinated Biphenyls**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aroclor-1016	82.5	U	110	27.4	82.5	ug/kg	1		08/23/24 20:58
Aroclor-1221	164	U	219	54.8	164	ug/kg	1		08/23/24 20:58
Aroclor-1232	82.5	U	110	27.4	82.5	ug/kg	1		08/23/24 20:58
Aroclor-1242	82.5	U	110	27.4	82.5	ug/kg	1		08/23/24 20:58
Aroclor-1248	82.5	U	110	27.4	82.5	ug/kg	1		08/23/24 20:58
Aroclor-1254	82.5	U	110	27.4	82.5	ug/kg	1		08/23/24 20:58
Aroclor-1260	82.5	U	110	27.4	82.5	ug/kg	1		08/23/24 20:58
Surrogates									
Decachlorobiphenyl (surr)	77.5		60-125			%	1		08/23/24 20:58

Batch Information

Analytical Batch: XGC11547
Analytical Method: SW8082A
Analyst: OZH
Analytical Date/Time: 08/23/24 20:58
Container ID: 1243787021-A

Prep Batch: XXX50134
Prep Method: SW3546
Prep Date/Time: 08/20/24 12:00
Prep Initial Wt./Vol.: 22.518 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	24.3		21.8	9.81	16.4	mg/kg	1		07/28/24 17:58
Surrogates									
5a Androstane (surr)	99.8		50-150			%	1		07/28/24 17:58

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/28/24 17:58
Container ID: 1243787022-A

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 07/27/24 13:31
Prep Initial Wt./Vol.: 22.61 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	116		109	46.9	81.8	mg/kg	1		07/28/24 17:58
Surrogates									
n-Triacontane-d62 (surr)	99.3		50-150			%	1		07/28/24 17:58

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/28/24 17:58
Container ID: 1243787022-A

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 07/27/24 13:31
Prep Initial Wt./Vol.: 22.61 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
1,2-Dichlorobenzene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
1,3-Dichlorobenzene	0.818	U	1.09	0.327	0.818	mg/kg	1		08/29/24 17:18
1,4-Dichlorobenzene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
1-Chloronaphthalene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
1-Methylnaphthalene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2,4,5-Trichlorophenol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2,4,6-Trichlorophenol	0.818	U	1.09	0.327	0.818	mg/kg	1		08/29/24 17:18
2,4-Dichlorophenol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2,4-Dimethylphenol	0.409	U	0.545	0.136	0.409	mg/kg	1		08/29/24 17:18
2,4-Dinitrophenol	4.09	U	5.45	1.64	4.09	mg/kg	1		08/29/24 17:18
2,4-Dinitrotoluene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2,6-Dichlorophenol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2,6-Dinitrotoluene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2-Chloronaphthalene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2-Chlorophenol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2-Methyl-4,6-dinitrophenol	1.64	U	2.18	0.676	1.64	mg/kg	1		08/29/24 17:18
2-Methylnaphthalene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2-Methylphenol (o-Cresol)	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2-Nitroaniline	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
2-Nitrophenol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
3&4-Methylphenol (p&m-Cresol)	0.818	U	1.09	0.338	0.818	mg/kg	1		08/29/24 17:18
3,3-Dichlorobenzidine	0.818	U	1.09	0.327	0.818	mg/kg	1		08/29/24 17:18
3-Nitroaniline	0.409	U	0.545	0.164	0.409	mg/kg	1		08/29/24 17:18
4-Bromophenyl-phenylether	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
4-Chloro-3-methylphenol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
4-Chloroaniline	0.818	U	1.09	0.338	0.818	mg/kg	1		08/29/24 17:18
4-Chlorophenyl-phenylether	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
4-Nitroaniline	2.45	U	3.27	1.02	2.45	mg/kg	1		08/29/24 17:18
4-Nitrophenol	1.64	U	2.18	0.676	1.64	mg/kg	1		08/29/24 17:18
Acenaphthene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Acenaphthylene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Aniline	3.27	U	4.36	1.09	3.27	mg/kg	1		08/29/24 17:18
Anthracene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Azobenzene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Benzo(a)Anthracene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Benzo[a]pyrene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Benzo[g,h,i]perylene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Benzo[k]fluoranthene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Benzoic acid	1.23	U	1.64	0.512	1.23	mg/kg	1		08/29/24 17:18
Benzyl alcohol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Bis(2chloro1methylethyl)Ether	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Bis(2-Chloroethoxy)methane	1.64	U	2.18	0.654	1.64	mg/kg	1		08/29/24 17:18
Bis(2-Chloroethyl)ether	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
bis(2-Ethylhexyl)phthalate	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Butylbenzylphthalate	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Carbazole	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Chrysene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Dibenzo[a,h]anthracene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Dibenzofuran	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Diethylphthalate	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Dimethylphthalate	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Di-n-butylphthalate	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
di-n-Octylphthalate	0.409	U	0.545	0.164	0.409	mg/kg	1		08/29/24 17:18
Fluoranthene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Fluorene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Hexachlorobenzene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Hexachlorobutadiene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Hexachlorocyclopentadiene	0.572	U	0.763	0.218	0.572	mg/kg	1		08/29/24 17:18
Hexachloroethane	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Indeno[1,2,3-c,d] pyrene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Isophorone	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Naphthalene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Nitrobenzene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
N-Nitrosodimethylamine	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
N-Nitroso-di-n-propylamine	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
N-Nitrosodiphenylamine	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Pentachlorophenol	3.27	U	4.36	1.09	3.27	mg/kg	1		08/29/24 17:18
Phenanthrene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Phenol	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18
Pyrene	0.205	U	0.273	0.0850	0.205	mg/kg	1		08/29/24 17:18

Surrogates

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	80		35-125			%	1		08/29/24 17:18
2-Fluorobiphenyl (surr)	59.3		44-115			%	1		08/29/24 17:18
2-Fluorophenol (surr)	44.7		35-115			%	1		08/29/24 17:18
Nitrobenzene-d5 (surr)	48.5		37-122			%	1		08/29/24 17:18
Phenol-d6 (surr)	51.7		33-122			%	1		08/29/24 17:18
Terphenyl-d14 (surr)	82.7		54-127			%	1		08/29/24 17:18

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/29/24 17:18
Container ID: 1243787022-A

Prep Batch: XXX49926
Prep Method: SW3550C
Prep Date/Time: 07/29/24 09:46
Prep Initial Wt./Vol.: 22.605 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	2.93	U	3.91	1.17	2.93	mg/kg	1		07/30/24 01:22
Surrogates									
4-Bromofluorobenzene (surr)	110		50-150			%	1		07/30/24 01:22

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/30/24 01:22
Container ID: 1243787022-C

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 15:00
Prep Initial Wt./Vol.: 39.865 g
Prep Extract Vol: 28.4621 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	14.6	U	19.5	6.25	14.6	ug/kg	1		07/30/24 01:22
Ethylbenzene	29.3	U	39.1	14.1	29.3	ug/kg	1		07/30/24 01:22
o-Xylene	29.3	U	39.1	14.2	29.3	ug/kg	1		07/30/24 01:22
P & M -Xylene	58.7	U	78.2	23.5	58.7	ug/kg	1		07/30/24 01:22
Toluene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/30/24 01:22
Xylenes (total)	87.8	U	117	39.1	87.8	ug/kg	1		07/30/24 01:22
Surrogates									
1,4-Difluorobenzene (surr)	94.4		72-119			%	1		07/30/24 01:22

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/30/24 01:22
Container ID: 1243787022-C

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 15:00
Prep Initial Wt./Vol.: 39.865 g
Prep Extract Vol: 28.4621 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	23.5	U	31.3	9.70	23.5	ug/kg	1		07/26/24 19:00
1,1,1-Trichloroethane	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,1,2,2-Tetrachloroethane	2.35	U	3.13	0.970	2.35	ug/kg	1		07/26/24 19:00
1,1,2-Trichloroethane	1.17	U	1.56	0.782	1.17	ug/kg	1		07/26/24 19:00
1,1-Dichloroethane	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,1-Dichloroethene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,1-Dichloropropene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,2,3-Trichlorobenzene	117	U	156	46.9	117	ug/kg	1		07/26/24 19:00
1,2,3-Trichloropropane	2.35	U	3.13	0.970	2.35	ug/kg	1		07/26/24 19:00
1,2,4-Trichlorobenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,2,4-Trimethylbenzene	117	U	156	46.9	117	ug/kg	1		07/26/24 19:00
1,2-Dibromo-3-chloropropane	117	U	156	48.5	117	ug/kg	1		07/26/24 19:00
1,2-Dibromoethane	1.76	U	2.35	1.17	1.76	ug/kg	1		07/26/24 19:00
1,2-Dichlorobenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,2-Dichloroethane	2.35	U	3.13	1.09	2.35	ug/kg	1		07/26/24 19:00
1,2-Dichloropropane	11.7	U	15.6	7.82	11.7	ug/kg	1		07/26/24 19:00
1,3,5-Trimethylbenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,3-Dichlorobenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
1,3-Dichloropropane	11.7	U	15.6	4.85	11.7	ug/kg	1		07/26/24 19:00
1,4-Dichlorobenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
2,2-Dichloropropane	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
2-Butanone (MEK)	293	U	391	122	293	ug/kg	1		07/26/24 19:00
2-Chlorotoluene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
2-Hexanone	141	U	188	93.8	141	ug/kg	1		07/26/24 19:00
4-Chlorotoluene	23.5	U	31.3	15.6	23.5	ug/kg	1		07/26/24 19:00
4-Isopropyltoluene	93.8	U	125	62.5	93.8	ug/kg	1		07/26/24 19:00
4-Methyl-2-pentanone (MIBK)	293	U	391	122	293	ug/kg	1		07/26/24 19:00
Acetone	293	U	391	172	293	ug/kg	1		07/26/24 19:00
Benzene	13.0	J	19.5	6.10	14.6	ug/kg	1		07/26/24 19:00
Bromobenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Bromochloromethane	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Bromodichloromethane	2.35	U	3.13	0.970	2.35	ug/kg	1		07/26/24 19:00
Bromoform	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Bromomethane	23.5	U	31.3	12.5	23.5	ug/kg	1		07/26/24 19:00
Carbon disulfide	117	U	156	48.5	117	ug/kg	1		07/26/24 19:00
Carbon tetrachloride	14.6	U	19.5	6.10	14.6	ug/kg	1		07/26/24 19:00
Chlorobenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00

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Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	235	U	313	97.0	235	ug/kg	1		07/26/24 19:00
Chloroform	7.04	U	9.38	4.69	7.04	ug/kg	1		07/26/24 19:00
Chloromethane	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
cis-1,2-Dichloroethene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
cis-1,3-Dichloropropene	14.6	U	19.5	6.10	14.6	ug/kg	1		07/26/24 19:00
Dibromochloromethane	5.87	U	7.82	2.35	5.87	ug/kg	1		07/26/24 19:00
Dibromomethane	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Dichlorodifluoromethane	117	U	156	46.9	117	ug/kg	1		07/26/24 19:00
Ethylbenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Freon-113	117	U	156	48.5	117	ug/kg	1		07/26/24 19:00
Hexachlorobutadiene	23.5	U	31.3	9.70	23.5	ug/kg	1		07/26/24 19:00
Isopropylbenzene (Cumene)	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Methylene chloride	117	U	156	48.5	117	ug/kg	1		07/26/24 19:00
Methyl-t-butyl ether	117	U	156	48.5	117	ug/kg	1		07/26/24 19:00
Naphthalene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
n-Butylbenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
n-Propylbenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
o-Xylene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
P & M -Xylene	58.7	U	78.2	23.5	58.7	ug/kg	1		07/26/24 19:00
sec-Butylbenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Styrene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
tert-Butylbenzene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
Tetrachloroethene	14.6	U	19.5	6.10	14.6	ug/kg	1		07/26/24 19:00
Toluene	13.6	J	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
trans-1,2-Dichloroethene	29.3	U	39.1	12.2	29.3	ug/kg	1		07/26/24 19:00
trans-1,3-Dichloropropene	14.6	U	19.5	6.10	14.6	ug/kg	1		07/26/24 19:00
Trichloroethene	11.7	U	15.6	5.00	11.7	ug/kg	1		07/26/24 19:00
Trichlorofluoromethane	58.7	U	78.2	23.5	58.7	ug/kg	1		07/26/24 19:00
Vinyl acetate	117	U	156	48.5	117	ug/kg	1		07/26/24 19:00
Vinyl chloride	0.938	U	1.25	0.391	0.938	ug/kg	1		07/26/24 19:00
Xylenes (total)	87.8	U	117	35.7	87.8	ug/kg	1		07/26/24 19:00
Surrogates									
1,2-Dichloroethane-D4 (surr)	117		71-136			%	1		07/26/24 19:00
4-Bromofluorobenzene (surr)	97.9		55-151			%	1		07/26/24 19:00
Toluene-d8 (surr)	96.4		85-116			%	1		07/26/24 19:00

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-DRUM11SS**

Client Sample ID: **2407ELIM-DRUM11SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787022
Lab Project ID: 1243787

Collection Date: 07/18/24 15:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):91.3
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 19:00
Container ID: 1243787022-C

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 15:00
Prep Initial Wt./Vol.: 39.865 g
Prep Extract Vol: 28.4621 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **2407ELIM-DRUM12SS**

Client Sample ID: **2407ELIM-DRUM12SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787023
Lab Project ID: 1243787

Collection Date: 07/18/24 15:20
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):90.7
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	3770		2020	708	1515	mg/kg	1000		08/30/24 11:09
Antimony	0.758	U	1.01	0.314	0.758	mg/kg	10		08/16/24 16:56
Arsenic	3.48		1.01	0.314	0.758	mg/kg	10		08/16/24 16:56
Barium	13.7		0.304	0.0951	0.228	mg/kg	10		08/16/24 16:56
Beryllium	0.102		0.101	0.0314	0.0758	mg/kg	10		08/16/24 16:56
Boron	15.1	U	20.2	6.27	15.1	mg/kg	10		08/16/24 16:56
Cadmium	0.147	J	0.202	0.0627	0.152	mg/kg	10		08/16/24 16:56
Calcium	106000		50.6	15.2	38.0	mg/kg	10		08/16/24 16:56
Chromium	4.16		1.01	0.314	0.758	mg/kg	10		08/16/24 16:56
Cobalt	2.75		0.506	0.152	0.380	mg/kg	10		08/16/24 16:56
Copper	5.76		0.607	0.182	0.455	mg/kg	10		08/16/24 16:56
Iron	6810		50.6	15.2	38.0	mg/kg	10		08/16/24 16:56
Lead	3.60		0.202	0.0627	0.152	mg/kg	10		08/16/24 16:56
Magnesium	21500		50.6	15.2	38.0	mg/kg	10		08/16/24 16:56
Manganese	161		0.202	0.0627	0.152	mg/kg	10		08/16/24 16:56
Molybdenum	0.393	J	1.01	0.314	0.758	mg/kg	10		08/16/24 16:56
Nickel	6.25		0.202	0.0627	0.152	mg/kg	10		08/16/24 16:56
Potassium	241		101	31.4	75.8	mg/kg	10		08/16/24 16:56
Selenium	1.52	U	2.02	0.627	1.52	mg/kg	10		08/16/24 16:56
Silver	0.380	U	0.506	0.152	0.380	mg/kg	10		08/16/24 16:56
Sodium	145		101	31.4	75.8	mg/kg	10		08/16/24 16:56
Thallium	0.152	U	0.202	0.0627	0.152	mg/kg	10		08/16/24 16:56
Vanadium	7.85		5.06	1.52	3.79	mg/kg	10		08/16/24 16:56
Zinc	35.0		2.53	0.789	1.90	mg/kg	10		08/16/24 16:56

Batch Information

Analytical Batch: MMS12406
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/30/24 11:09
Container ID: 1243787023-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.09 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12392
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/16/24 16:56
Container ID: 1243787023-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.09 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	20600		3550	1240	2663	mg/kg	1000		08/28/24 22:14
Antimony	1.34	U	1.78	0.551	1.34	mg/kg	10		08/16/24 16:59
Arsenic	54.4		4.44	1.38	3.33	mg/kg	25		08/28/24 12:32
Barium	139		0.533	0.167	0.400	mg/kg	10		08/16/24 16:59
Beryllium	0.474		0.178	0.0551	0.134	mg/kg	10		08/16/24 16:59
Boron	26.6	U	35.5	11.0	26.6	mg/kg	10		08/16/24 16:59
Cadmium	0.413		0.355	0.110	0.266	mg/kg	10		08/16/24 16:59
Calcium	9650		88.8	26.7	66.6	mg/kg	10		08/16/24 16:59
Chromium	38.1		1.78	0.551	1.34	mg/kg	10		08/16/24 16:59
Cobalt	12.2		0.888	0.267	0.666	mg/kg	10		08/16/24 16:59
Copper	35.6		1.07	0.320	0.802	mg/kg	10		08/16/24 16:59
Iron	32800		88.8	26.7	66.6	mg/kg	10		08/16/24 16:59
Lead	28.3		0.355	0.110	0.266	mg/kg	10		08/16/24 16:59
Magnesium	5230		88.8	26.7	66.6	mg/kg	10		08/16/24 16:59
Manganese	851		0.888	0.275	0.666	mg/kg	25		08/28/24 12:32
Molybdenum	0.711	J	1.78	0.551	1.34	mg/kg	10		08/16/24 16:59
Nickel	22.9		0.355	0.110	0.266	mg/kg	10		08/16/24 16:59
Potassium	793		178	55.1	134	mg/kg	10		08/16/24 16:59
Selenium	2.66	U	3.55	1.10	2.66	mg/kg	10		08/16/24 16:59
Silver	0.666	U	0.888	0.267	0.666	mg/kg	10		08/16/24 16:59
Sodium	160	J	178	55.1	134	mg/kg	10		08/16/24 16:59
Thallium	0.124	J	0.355	0.110	0.266	mg/kg	10		08/16/24 16:59
Vanadium	51.7		8.88	2.67	6.66	mg/kg	10		08/16/24 16:59
Zinc	90.5		4.44	1.39	3.33	mg/kg	10		08/16/24 16:59

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Metals by ICP/MS**

Batch Information

Analytical Batch: MMS12404
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/28/24 12:32
Container ID: 1243787024-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.046 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12392
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/16/24 16:59
Container ID: 1243787024-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.046 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12404
Analytical Method: SW6020B
Analyst: HGS
Analytical Date/Time: 08/28/24 22:14
Container ID: 1243787024-A

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 08/01/24 16:13
Prep Initial Wt./Vol.: 1.046 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	275		36.9	16.6	27.7	mg/kg	1		07/28/24 18:07
Surrogates									
5a Androstane (surr)	91.4		50-150			%	1		07/28/24 18:07

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK102
Analyst: KFC
Analytical Date/Time: 07/28/24 18:07
Container ID: 1243787024-A

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 07/27/24 13:31
Prep Initial Wt./Vol.: 22.676 g
Prep Extract Vol: 5 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	1050		184	79.3	138	mg/kg	1		07/28/24 18:07
Surrogates									
n-Triacontane-d62 (surr)	80.6		50-150			%	1		07/28/24 18:07

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK103
Analyst: KFC
Analytical Date/Time: 07/28/24 18:07
Container ID: 1243787024-A

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 07/27/24 13:31
Prep Initial Wt./Vol.: 22.676 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
1,2-Dichlorobenzene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
1,3-Dichlorobenzene	1.38	U	1.84	0.551	1.38	mg/kg	1		08/29/24 17:35
1,4-Dichlorobenzene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
1-Chloronaphthalene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
1-Methylnaphthalene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2,4,5-Trichlorophenol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2,4,6-Trichlorophenol	1.38	U	1.84	0.551	1.38	mg/kg	1		08/29/24 17:35
2,4-Dichlorophenol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2,4-Dimethylphenol	0.689	U	0.918	0.229	0.689	mg/kg	1		08/29/24 17:35
2,4-Dinitrophenol	6.88	U	9.18	2.75	6.88	mg/kg	1		08/29/24 17:35
2,4-Dinitrotoluene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2,6-Dichlorophenol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2,6-Dinitrotoluene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2-Chloronaphthalene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2-Chlorophenol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2-Methyl-4,6-dinitrophenol	2.75	U	3.67	1.14	2.75	mg/kg	1		08/29/24 17:35
2-Methylnaphthalene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2-Methylphenol (o-Cresol)	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2-Nitroaniline	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
2-Nitrophenol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
3&4-Methylphenol (p&m-Cresol)	1.38	U	1.84	0.569	1.38	mg/kg	1		08/29/24 17:35
3,3-Dichlorobenzidine	1.38	U	1.84	0.551	1.38	mg/kg	1		08/29/24 17:35
3-Nitroaniline	0.689	U	0.918	0.275	0.689	mg/kg	1		08/29/24 17:35
4-Bromophenyl-phenylether	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
4-Chloro-3-methylphenol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
4-Chloroaniline	1.38	U	1.84	0.569	1.38	mg/kg	1		08/29/24 17:35
4-Chlorophenyl-phenylether	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
4-Nitroaniline	4.13	U	5.51	1.73	4.13	mg/kg	1		08/29/24 17:35
4-Nitrophenol	2.75	U	3.67	1.14	2.75	mg/kg	1		08/29/24 17:35
Acenaphthene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Acenaphthylene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Aniline	5.50	U	7.34	1.84	5.50	mg/kg	1		08/29/24 17:35
Anthracene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Azobenzene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Benzo(a)Anthracene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Benzo[a]pyrene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzo[b]Fluoranthene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Benzo[g,h,i]perylene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Benzo[k]fluoranthene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Benzoic acid	2.06	U	2.75	0.863	2.06	mg/kg	1		08/29/24 17:35
Benzyl alcohol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Bis(2chloro1methylethyl)Ether	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Bis(2-Chloroethoxy)methane	2.75	U	3.67	1.10	2.75	mg/kg	1		08/29/24 17:35
Bis(2-Chloroethyl)ether	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
bis(2-Ethylhexyl)phthalate	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Butylbenzylphthalate	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Carbazole	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Chrysene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Dibenzo[a,h]anthracene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Dibenzofuran	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Diethylphthalate	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Dimethylphthalate	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Di-n-butylphthalate	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
di-n-Octylphthalate	0.689	U	0.918	0.275	0.689	mg/kg	1		08/29/24 17:35
Fluoranthene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Fluorene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Hexachlorobenzene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Hexachlorobutadiene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Hexachlorocyclopentadiene	0.968	U	1.29	0.367	0.968	mg/kg	1		08/29/24 17:35
Hexachloroethane	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Indeno[1,2,3-c,d] pyrene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Isophorone	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Naphthalene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Nitrobenzene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
N-Nitrosodimethylamine	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
N-Nitroso-di-n-propylamine	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
N-Nitrosodiphenylamine	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Pentachlorophenol	5.50	U	7.34	1.84	5.50	mg/kg	1		08/29/24 17:35
Phenanthrene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Phenol	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35
Pyrene	0.344	U	0.459	0.143	0.344	mg/kg	1		08/29/24 17:35

Surrogates

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
2,4,6-Tribromophenol (surr)	72.3		35-125			%	1		08/29/24 17:35
2-Fluorobiphenyl (surr)	66.5		44-115			%	1		08/29/24 17:35
2-Fluorophenol (surr)	54.2		35-115			%	1		08/29/24 17:35
Nitrobenzene-d5 (surr)	56.3		37-122			%	1		08/29/24 17:35
Phenol-d6 (surr)	58.5		33-122			%	1		08/29/24 17:35
Terphenyl-d14 (surr)	71.7		54-127			%	1		08/29/24 17:35

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Analyst: NGG
Analytical Date/Time: 08/29/24 17:35
Container ID: 1243787024-A

Prep Batch: XXX49926
Prep Method: SW3550C
Prep Date/Time: 07/29/24 09:46
Prep Initial Wt./Vol.: 22.78 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	10.4	U	13.9	4.17	10.4	mg/kg	1		07/30/24 02:18
Surrogates									
4-Bromofluorobenzene (surr)	93.6		50-150			%	1		07/30/24 02:18

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/30/24 02:18
Container ID: 1243787024-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:48
Prep Initial Wt./Vol.: 24.214 g
Prep Extract Vol: 36.1857 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	52.1	U	69.4	22.2	52.1	ug/kg	1		07/30/24 02:18
Ethylbenzene	104	U	139	50.0	104	ug/kg	1		07/30/24 02:18
o-Xylene	104	U	139	50.6	104	ug/kg	1		07/30/24 02:18
P & M -Xylene	209	U	278	83.3	209	ug/kg	1		07/30/24 02:18
Toluene	104	U	139	43.3	104	ug/kg	1		07/30/24 02:18
Xylenes (total)	313	U	417	139	313	ug/kg	1		07/30/24 02:18
Surrogates									
1,4-Difluorobenzene (surr)	94.8		72-119			%	1		07/30/24 02:18

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/30/24 02:18
Container ID: 1243787024-D

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:48
Prep Initial Wt./Vol.: 24.214 g
Prep Extract Vol: 36.1857 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	83.3	U	111	34.4	83.3	ug/kg	1		07/26/24 19:15
1,1,1-Trichloroethane	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,1,2,2-Tetrachloroethane	8.32	U	11.1	3.44	8.32	ug/kg	1		07/26/24 19:15
1,1,2-Trichloroethane	4.16	U	5.55	2.78	4.16	ug/kg	1		07/26/24 19:15
1,1-Dichloroethane	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,1-Dichloroethene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,1-Dichloropropene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,2,3-Trichlorobenzene	416	U	555	167	416	ug/kg	1		07/26/24 19:15
1,2,3-Trichloropropane	8.32	U	11.1	3.44	8.32	ug/kg	1		07/26/24 19:15
1,2,4-Trichlorobenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,2,4-Trimethylbenzene	416	U	555	167	416	ug/kg	1		07/26/24 19:15
1,2-Dibromo-3-chloropropane	416	U	555	172	416	ug/kg	1		07/26/24 19:15
1,2-Dibromoethane	6.25	U	8.33	4.17	6.25	ug/kg	1		07/26/24 19:15
1,2-Dichlorobenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,2-Dichloroethane	8.32	U	11.1	3.89	8.32	ug/kg	1		07/26/24 19:15
1,2-Dichloropropane	41.6	U	55.5	27.8	41.6	ug/kg	1		07/26/24 19:15
1,3,5-Trimethylbenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,3-Dichlorobenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
1,3-Dichloropropane	41.6	U	55.5	17.2	41.6	ug/kg	1		07/26/24 19:15
1,4-Dichlorobenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
2,2-Dichloropropane	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
2-Butanone (MEK)	1043	U	1390	433	1043	ug/kg	1		07/26/24 19:15
2-Chlorotoluene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
2-Hexanone	500	U	667	333	500	ug/kg	1		07/26/24 19:15
4-Chlorotoluene	83.3	U	111	55.5	83.3	ug/kg	1		07/26/24 19:15
4-Isopropyltoluene	333	U	444	222	333	ug/kg	1		07/26/24 19:15
4-Methyl-2-pentanone (MIBK)	1043	U	1390	433	1043	ug/kg	1		07/26/24 19:15
Acetone	1043	U	1390	611	1043	ug/kg	1		07/26/24 19:15
Benzene	52.1	U	69.4	21.7	52.1	ug/kg	1		07/26/24 19:15
Bromobenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Bromochloromethane	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Bromodichloromethane	8.32	U	11.1	3.44	8.32	ug/kg	1		07/26/24 19:15
Bromoform	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Bromomethane	83.3	U	111	44.4	83.3	ug/kg	1		07/26/24 19:15
Carbon disulfide	416	U	555	172	416	ug/kg	1		07/26/24 19:15
Carbon tetrachloride	52.1	U	69.4	21.7	52.1	ug/kg	1		07/26/24 19:15
Chlorobenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	833	U	1110	344	833	ug/kg	1		07/26/24 19:15
Chloroform	25.0	U	33.3	16.7	25.0	ug/kg	1		07/26/24 19:15
Chloromethane	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
cis-1,2-Dichloroethene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
cis-1,3-Dichloropropene	52.1	U	69.4	21.7	52.1	ug/kg	1		07/26/24 19:15
Dibromochloromethane	20.9	U	27.8	8.33	20.9	ug/kg	1		07/26/24 19:15
Dibromomethane	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Dichlorodifluoromethane	416	U	555	167	416	ug/kg	1		07/26/24 19:15
Ethylbenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Freon-113	416	U	555	172	416	ug/kg	1		07/26/24 19:15
Hexachlorobutadiene	83.3	U	111	34.4	83.3	ug/kg	1		07/26/24 19:15
Isopropylbenzene (Cumene)	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Methylene chloride	416	U	555	172	416	ug/kg	1		07/26/24 19:15
Methyl-t-butyl ether	416	U	555	172	416	ug/kg	1		07/26/24 19:15
Naphthalene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
n-Butylbenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
n-Propylbenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
o-Xylene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
P & M -Xylene	209	U	278	83.3	209	ug/kg	1		07/26/24 19:15
sec-Butylbenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Styrene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
tert-Butylbenzene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
Tetrachloroethene	52.1	U	69.4	21.7	52.1	ug/kg	1		07/26/24 19:15
Toluene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
trans-1,2-Dichloroethene	104	U	139	43.3	104	ug/kg	1		07/26/24 19:15
trans-1,3-Dichloropropene	52.1	U	69.4	21.7	52.1	ug/kg	1		07/26/24 19:15
Trichloroethene	41.6	U	55.5	17.8	41.6	ug/kg	1		07/26/24 19:15
Trichlorofluoromethane	209	U	278	83.3	209	ug/kg	1		07/26/24 19:15
Vinyl acetate	416	U	555	172	416	ug/kg	1		07/26/24 19:15
Vinyl chloride	3.33	U	4.44	1.39	3.33	ug/kg	1		07/26/24 19:15
Xylenes (total)	313	U	417	127	313	ug/kg	1		07/26/24 19:15
Surrogates									
1,2-Dichloroethane-D4 (surr)	112		71-136			%	1		07/26/24 19:15
4-Bromofluorobenzene (surr)	83.2		55-151			%	1		07/26/24 19:15
Toluene-d8 (surr)	95.3		85-116			%	1		07/26/24 19:15

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **2407ELIM-TANK13SS**

Client Sample ID: **2407ELIM-TANK13SS**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787024
Lab Project ID: 1243787

Collection Date: 07/18/24 14:48
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):53.8
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 19:15
Container ID: 1243787024-D

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/18/24 14:48
Prep Initial Wt./Vol.: 24.214 g
Prep Extract Vol: 36.1857 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787025
Lab Project ID: 1243787

Collection Date: 07/17/24 00:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.89	U	2.52	0.756	1.89	mg/kg	1		07/29/24 19:31
Surrogates									
4-Bromofluorobenzene (surr)	101		50-150			%	1		07/29/24 19:31

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Analyst: T.L
Analytical Date/Time: 07/29/24 19:31
Container ID: 1243787025-A

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 00:00
Prep Initial Wt./Vol.: 49.608 g
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	9.45	U	12.6	4.03	9.45	ug/kg	1		07/29/24 19:31
Ethylbenzene	18.9	U	25.2	9.07	18.9	ug/kg	1		07/29/24 19:31
o-Xylene	18.9	U	25.2	9.17	18.9	ug/kg	1		07/29/24 19:31
P & M -Xylene	37.8	U	50.4	15.1	37.8	ug/kg	1		07/29/24 19:31
Toluene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/29/24 19:31
Xylenes (total)	56.7	U	75.6	25.2	56.7	ug/kg	1		07/29/24 19:31
Surrogates									
1,4-Difluorobenzene (surr)	92.9		72-119			%	1		07/29/24 19:31

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Analyst: T.L
Analytical Date/Time: 07/29/24 19:31
Container ID: 1243787025-A

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 07/17/24 00:00
Prep Initial Wt./Vol.: 49.608 g
Prep Extract Vol: 25 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787025
Lab Project ID: 1243787

Collection Date: 07/17/24 00:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	15.1	U	20.2	6.25	15.1	ug/kg	1		07/26/24 16:23
1,1,1-Trichloroethane	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,1,2,2-Tetrachloroethane	1.52	U	2.02	0.625	1.52	ug/kg	1		07/26/24 16:23
1,1,2-Trichloroethane	0.758	U	1.01	0.504	0.758	ug/kg	1		07/26/24 16:23
1,1-Dichloroethane	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,1-Dichloroethene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,1-Dichloropropene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,2,3-Trichlorobenzene	75.8	U	101	30.2	75.8	ug/kg	1		07/26/24 16:23
1,2,3-Trichloropropane	1.52	U	2.02	0.625	1.52	ug/kg	1		07/26/24 16:23
1,2,4-Trichlorobenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,2,4-Trimethylbenzene	75.8	U	101	30.2	75.8	ug/kg	1		07/26/24 16:23
1,2-Dibromo-3-chloropropane	75.8	U	101	31.2	75.8	ug/kg	1		07/26/24 16:23
1,2-Dibromoethane	1.13	U	1.51	0.756	1.13	ug/kg	1		07/26/24 16:23
1,2-Dichlorobenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,2-Dichloroethane	1.52	U	2.02	0.706	1.52	ug/kg	1		07/26/24 16:23
1,2-Dichloropropane	7.57	U	10.1	5.04	7.57	ug/kg	1		07/26/24 16:23
1,3,5-Trimethylbenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,3-Dichlorobenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
1,3-Dichloropropane	7.57	U	10.1	3.12	7.57	ug/kg	1		07/26/24 16:23
1,4-Dichlorobenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
2,2-Dichloropropane	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
2-Butanone (MEK)	189	U	252	78.6	189	ug/kg	1		07/26/24 16:23
2-Chlorotoluene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
2-Hexanone	90.8	U	121	60.5	90.8	ug/kg	1		07/26/24 16:23
4-Chlorotoluene	15.1	U	20.2	10.1	15.1	ug/kg	1		07/26/24 16:23
4-Isopropyltoluene	60.4	U	80.6	40.3	60.4	ug/kg	1		07/26/24 16:23
4-Methyl-2-pentanone (MIBK)	189	U	252	78.6	189	ug/kg	1		07/26/24 16:23
Acetone	189	U	252	111	189	ug/kg	1		07/26/24 16:23
Benzene	9.45	U	12.6	3.93	9.45	ug/kg	1		07/26/24 16:23
Bromobenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Bromochloromethane	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Bromodichloromethane	1.52	U	2.02	0.625	1.52	ug/kg	1		07/26/24 16:23
Bromoform	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Bromomethane	15.1	U	20.2	8.06	15.1	ug/kg	1		07/26/24 16:23
Carbon disulfide	75.8	U	101	31.2	75.8	ug/kg	1		07/26/24 16:23
Carbon tetrachloride	9.45	U	12.6	3.93	9.45	ug/kg	1		07/26/24 16:23
Chlorobenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787025
Lab Project ID: 1243787

Collection Date: 07/17/24 00:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	152	U	202	62.5	152	ug/kg	1		07/26/24 16:23
Chloroform	4.54	U	6.05	3.02	4.54	ug/kg	1		07/26/24 16:23
Chloromethane	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
cis-1,2-Dichloroethene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
cis-1,3-Dichloropropene	9.45	U	12.6	3.93	9.45	ug/kg	1		07/26/24 16:23
Dibromochloromethane	3.78	U	5.04	1.51	3.78	ug/kg	1		07/26/24 16:23
Dibromomethane	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Dichlorodifluoromethane	75.8	U	101	30.2	75.8	ug/kg	1		07/26/24 16:23
Ethylbenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Freon-113	75.8	U	101	31.2	75.8	ug/kg	1		07/26/24 16:23
Hexachlorobutadiene	15.1	U	20.2	6.25	15.1	ug/kg	1		07/26/24 16:23
Isopropylbenzene (Cumene)	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Methylene chloride	75.8	U	101	31.2	75.8	ug/kg	1		07/26/24 16:23
Methyl-t-butyl ether	75.8	U	101	31.2	75.8	ug/kg	1		07/26/24 16:23
Naphthalene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
n-Butylbenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
n-Propylbenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
o-Xylene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
P & M -Xylene	37.8	U	50.4	15.1	37.8	ug/kg	1		07/26/24 16:23
sec-Butylbenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Styrene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
tert-Butylbenzene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
Tetrachloroethene	9.45	U	12.6	3.93	9.45	ug/kg	1		07/26/24 16:23
Toluene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
trans-1,2-Dichloroethene	18.9	U	25.2	7.86	18.9	ug/kg	1		07/26/24 16:23
trans-1,3-Dichloropropene	9.45	U	12.6	3.93	9.45	ug/kg	1		07/26/24 16:23
Trichloroethene	7.57	U	10.1	3.23	7.57	ug/kg	1		07/26/24 16:23
Trichlorofluoromethane	37.8	U	50.4	15.1	37.8	ug/kg	1		07/26/24 16:23
Vinyl acetate	75.8	U	101	31.2	75.8	ug/kg	1		07/26/24 16:23
Vinyl chloride	0.605	U	0.806	0.252	0.605	ug/kg	1		07/26/24 16:23
Xylenes (total)	56.7	U	75.6	23.0	56.7	ug/kg	1		07/26/24 16:23
Surrogates									
1,2-Dichloroethane-D4 (surr)	109		71-136			%	1		07/26/24 16:23
4-Bromofluorobenzene (surr)	95.7		55-151			%	1		07/26/24 16:23
Toluene-d8 (surr)	95.9		85-116			%	1		07/26/24 16:23

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **Norton Sound**
Lab Sample ID: 1243787025
Lab Project ID: 1243787

Collection Date: 07/17/24 00:00
Received Date: 07/19/24 16:21
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Analyst: PHK
Analytical Date/Time: 07/26/24 16:23
Container ID: 1243787025-A

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 07/17/24 00:00
Prep Initial Wt./Vol.: 49.608 g
Prep Extract Vol: 25 mL

Print Date: 08/30/2024 5:14:09PM

J flagging is activated

Method Blank

Blank ID: MB for HBN 1895554 [MXX/36810]
Blank Lab ID: 1776279

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014

Results by **SW6020B**

Parameter	Results	LOQ/CL	DL	LOD	Units
Aluminum	15.0U	20.0	7.00	15.0	mg/kg
Antimony	0.750U	1.00	0.310	0.750	mg/kg
Arsenic	0.750U	1.00	0.310	0.750	mg/kg
Barium	0.225U	0.300	0.0940	0.225	mg/kg
Beryllium	0.0750U	0.100	0.0310	0.0750	mg/kg
Boron	15.0U	20.0	6.20	15.0	mg/kg
Cadmium	0.150U	0.200	0.0620	0.150	mg/kg
Calcium	37.5U	50.0	15.0	37.5	mg/kg
Chromium	0.750U	1.00	0.310	0.750	mg/kg
Cobalt	0.375U	0.500	0.150	0.375	mg/kg
Copper	0.450U	0.600	0.180	0.450	mg/kg
Iron	37.5U	50.0	15.0	37.5	mg/kg
Lead	0.150U	0.200	0.0620	0.150	mg/kg
Magnesium	37.5U	50.0	15.0	37.5	mg/kg
Manganese	0.150U	0.200	0.0620	0.150	mg/kg
Molybdenum	0.750U	1.00	0.310	0.750	mg/kg
Nickel	0.150U	0.200	0.0620	0.150	mg/kg
Potassium	75.0U	100	31.0	75.0	mg/kg
Selenium	1.50U	2.00	0.620	1.50	mg/kg
Silver	0.375U	0.500	0.150	0.375	mg/kg
Sodium	75.0U	100	31.0	75.0	mg/kg
Thallium	0.150U	0.200	0.0620	0.150	mg/kg
Vanadium	3.75U	5.00	1.50	3.75	mg/kg
Zinc	1.88U	2.50	0.780	1.88	mg/kg

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1895554 [MXX/36810]
Blank Lab ID: 1776279

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014

Results by **SW6020B**

Parameter	Results	LOQ/CL	DL	LOD	Units

Batch Information

Analytical Batch: MMS12370
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/26/2024 3:57:00PM

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12382
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/8/2024 1:41:00PM

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1 g
Prep Extract Vol: 50 mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/26/2024 6:08:40PM

Prep Batch: MXX36810
Prep Method: SW3050B
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1 g
Prep Extract Vol: 50 mL

Print Date: 08/30/2024 5:14:21PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [MXX36810]
Blank Spike Lab ID: 1776280
Date Analyzed: 07/26/2024 16:00

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014

Results by **SW6020B**

Blank Spike (mg/kg)

Parameter	Spike	Result	Rec (%)		CL
Aluminum	50	48.3	97		(78-124)
Antimony	50	54.1	108		(72-124)
Arsenic	50	44.6	89		(82-118)
Barium	50	47.1	94		(86-116)
Beryllium	5	4.77	95		(80-120)
Boron	50	46.5	93		(74-128)
Cadmium	5	4.72	95		(84-116)
Calcium	500	543	109		(86-118)
Chromium	20	20.6	103		(83-119)
Cobalt	25	26.5	106		(84-115)
Copper	50	50.2	100		(84-119)
Iron	250	265	106		(81-124)
Lead	50	54.7	109		(84-118)
Magnesium	500	499	100		(80-123)
Manganese	25	25.5	102		(85-116)
Molybdenum	20	20.0	100		(83-114)
Nickel	50	50.3	101		(84-119)
Potassium	500	501	100		(85-119)
Selenium	50	48.0	96		(80-119)
Silver	5	5.20	104		(83-118)
Sodium	500	472	94		(79-125)
Thallium	0.5	0.378	76	*	(83-118)
Vanadium	10	10.1	101		(82-116)
Zinc	50	48.5	97		(82-119)

Print Date: 08/30/2024 5:14:24PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [MXX36810]
Blank Spike Lab ID: 1776280
Date Analyzed: 07/26/2024 16:00

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014

Results by **SW6020B**

Parameter	Blank Spike (mg/kg) Spike	Result	Rec (%)	CL

Batch Information

Analytical Batch: **MMS12370**
Analytical Method: **SW6020B**
Instrument: **P7 Agilent 7800**
Analyst: **HGS**

Prep Batch: **MXX36810**
Prep Method: **SW3050B**
Prep Date/Time: **07/24/2024 12:31**
Spike Init Wt./Vol.: 50 mg/kg Extract Vol: 50 mL
Dupe Init Wt./Vol.: Extract Vol:

Analytical Batch: **MMS12382**
Analytical Method: **SW6020B**
Instrument: **P7 Agilent 7800**
Analyst: **HGS**

Prep Batch: **MXX36810**
Prep Method: **SW3050B**
Prep Date/Time: **07/24/2024 12:31**
Spike Init Wt./Vol.: 5 mg/kg Extract Vol: 50 mL
Dupe Init Wt./Vol.: Extract Vol:

Analytical Batch: **MMS12402**
Analytical Method: **SW6020B**
Instrument: **P7 Agilent 7800**
Analyst: **HGS**

Prep Batch: **MXX36810**
Prep Method: **SW3050B**
Prep Date/Time: **07/24/2024 12:31**
Spike Init Wt./Vol.: 20 mg/kg Extract Vol: 50 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/30/2024 5:14:24PM

Matrix Spike Summary

Original Sample ID: 1776281
MS Sample ID: 1776282 MS
MSD Sample ID: 1776283 MSD

Analysis Date: 08/30/2024 9:56
Analysis Date: 08/30/2024 9:58
Analysis Date: 08/30/2024 10:01
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014

Results by **SW6020B**

		Matrix Spike (mg/kg)				Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)		CL	RPD (%)	RPD CL
Aluminum	16500	48.6	18700	4540	*	48.4	15700	-1520	*	78-124	17.10	(< 20)
Antimony	0.693U	48.6	32.8	67	*	48.4	31.3	65	*	72-124	4.41	(< 20)
Arsenic	1.53	48.6	45.9	91		48.4	46.1	92		82-118	0.36	(< 20)
Barium	94.3	48.6	131	75	*	48.4	132	78	*	86-116	0.98	(< 20)
Beryllium	0.137	4.86	4.74	95		4.84	4.80	96		80-120	1.13	(< 20)
Boron	13.9U	48.6	44.7	92		48.4	44.7	92		74-128	0.18	(< 20)
Cadmium	0.140J	4.86	4.89	98		4.84	4.95	100		84-116	1.26	(< 20)
Calcium	4880	486	4950	13	*	484	4870	-3	*	86-118	1.61	(< 20)
Chromium	8.44	19.4	30.8	115		19.3	30.0	111		83-119	2.87	(< 20)
Cobalt	6.57	24.3	28.6	91		24.2	29.7	96		84-115	3.77	(< 20)
Copper	13.7	48.6	59.2	94		48.4	60.6	97		84-119	2.37	(< 20)
Iron	15300	243	17400	846	*	242	16800	628	*	81-124	3.14	(< 20)
Lead	2.74	48.6	57.5	113		48.4	54.3	107		84-118	5.77	(< 20)
Magnesium	3580	486	4140	116		484	4620	216	*	80-123	11.00	(< 20)
Manganese	152	24.3	170	74	*	24.2	182	123	*	85-116	6.61	(< 20)
Molybdenum	1.24	19.4	20.2	98		19.3	20.7	100		83-114	2.28	(< 20)
Nickel	7.15	48.6	54.3	97		48.4	55.0	99		84-119	1.15	(< 20)
Potassium	1180	486	1630	93		484	1550	76	*	85-119	5.21	(< 20)
Selenium	1.39U	48.6	48	99		48.4	49.0	101		80-119	2.18	(< 20)
Silver	0.347U	4.86	5.09	105		4.84	5.00	103		83-118	1.74	(< 20)
Sodium	328	486	793	96		484	780	94		79-125	1.68	(< 20)
Thallium	0.0655J	0.486	.437	76	*	0.484	0.419	73	*	83-118	4.25	(< 20)
Vanadium	36.6	9.72	45	86		9.67	46.6	103		82-116	3.49	(< 20)
Zinc	47.0	48.6	91	91		48.4	95.0	99		82-119	4.26	(< 20)

Print Date: 08/30/2024 5:14:26PM

Matrix Spike Summary

Original Sample ID: 1776281
MS Sample ID: 1776282 MS
MSD Sample ID: 1776283 MSD

Analysis Date: 07/26/2024 16:02
Analysis Date: 07/26/2024 16:05
Analysis Date: 07/26/2024 16:07
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014

Results by **SW6020B**

		Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL

Batch Information

Analytical Batch: MMS12370
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/26/2024 4:05:00PM

Prep Batch: MXX36810
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1.03g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/26/2024 6:21:00PM

Prep Batch: MXX36810
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1.03g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12406
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/30/2024 9:58:41AM

Prep Batch: MXX36810
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1.03g
Prep Extract Vol: 50.00mL

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Bench Spike Summary

Original Sample ID: 1776281
MS Sample ID: 1776284 BND
MSD Sample ID:

Analysis Date: 08/30/2024 9:56
Analysis Date: 08/30/2024 10:03
Analysis Date:
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014

Results by **SW6020B**

		Matrix Spike (mg/kg)				Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Aluminum	16500	11600	16300	-1	*				75-125		
Antimony	0.693U	116	120	104					75-125		
Barium	94.3	231	312	94					75-125		
Calcium	4880	2310	7090	95					75-125		
Iron	15300	231000	16500	1	*				75-125		
Magnesium	3580	2310	5940	102					75-125		
Manganese	152	116	249	84					75-125		
Potassium	1180	2310	3400	96					75-125		
Thallium	0.0655J	2.31	2.29	96					75-125		

Batch Information

Analytical Batch: MMS12370
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/26/2024 4:09:00PM

Prep Batch: MXX36810
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1.08g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12402
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/26/2024 6:25:00PM

Prep Batch: MXX36810
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1.08g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12406
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/30/2024 10:03:00AM

Prep Batch: MXX36810
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 7/24/2024 12:31:00PM
Prep Initial Wt./Vol.: 1.08g
Prep Extract Vol: 50.00mL

Print Date: 08/30/2024 5:14:26PM

Method Blank

Blank ID: MB for HBN 1896473 [MXX/36836]
Blank Lab ID: 1778399

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787017, 1243787023, 1243787024

Results by **SW6020B**

Parameter	Results	LOQ/CL	DL	LOD	Units
Aluminum	15.0U	20.0	7.00	15.0	mg/kg
Antimony	0.750U	1.00	0.310	0.750	mg/kg
Arsenic	0.750U	1.00	0.310	0.750	mg/kg
Barium	0.225U	0.300	0.0940	0.225	mg/kg
Beryllium	0.0750U	0.100	0.0310	0.0750	mg/kg
Boron	15.0U	20.0	6.20	15.0	mg/kg
Cadmium	0.150U	0.200	0.0620	0.150	mg/kg
Calcium	37.5U	50.0	15.0	37.5	mg/kg
Chromium	0.750U	1.00	0.310	0.750	mg/kg
Cobalt	0.375U	0.500	0.150	0.375	mg/kg
Copper	0.450U	0.600	0.180	0.450	mg/kg
Iron	37.5U	50.0	15.0	37.5	mg/kg
Lead	0.150U	0.200	0.0620	0.150	mg/kg
Magnesium	37.5U	50.0	15.0	37.5	mg/kg
Manganese	0.150U	0.200	0.0620	0.150	mg/kg
Molybdenum	0.750U	1.00	0.310	0.750	mg/kg
Nickel	0.150U	0.200	0.0620	0.150	mg/kg
Potassium	75.0U	100	31.0	75.0	mg/kg
Selenium	1.50U	2.00	0.620	1.50	mg/kg
Silver	0.375U	0.500	0.150	0.375	mg/kg
Sodium	75.0U	100	31.0	75.0	mg/kg
Thallium	0.150U	0.200	0.0620	0.150	mg/kg
Vanadium	3.75U	5.00	1.50	3.75	mg/kg
Zinc	1.88U	2.50	0.780	1.88	mg/kg

Batch Information

Analytical Batch: MMS12392
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/16/2024 3:51:16PM

Prep Batch: MXX36836
Prep Method: SW3050B
Prep Date/Time: 8/1/2024 4:13:00PM
Prep Initial Wt./Vol.: 1 g
Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [MXX36836]
Blank Spike Lab ID: 1778400
Date Analyzed: 08/16/2024 15:54

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787017, 1243787023, 1243787024

Results by **SW6020B**

Blank Spike (mg/kg)

Parameter	Spike	Result	Rec (%)		CL
Aluminum	50	51.4	103		(78-124)
Antimony	50	54.9	110		(72-124)
Arsenic	50	49.2	98		(82-118)
Barium	50	49.0	98		(86-116)
Beryllium	5	5.35	107		(80-120)
Boron	50	51.6	103		(74-128)
Cadmium	5	5.01	100		(84-116)
Calcium	500	523	105		(86-118)
Chromium	20	19.9	100		(83-119)
Cobalt	25	26.1	104		(84-115)
Copper	50	51.7	103		(84-119)
Iron	250	243	97		(81-124)
Lead	50	51.9	104		(84-118)
Magnesium	500	517	103		(80-123)
Manganese	25	27.0	108		(85-116)
Molybdenum	20	19.9	100		(83-114)
Nickel	50	49.1	98		(84-119)
Potassium	500	528	106		(85-119)
Selenium	50	48.0	96		(80-119)
Silver	5	5.11	102		(83-118)
Sodium	500	501	100		(79-125)
Thallium	0.5	0.414	83	*	(83-118)
Vanadium	10	9.47	95		(82-116)
Zinc	50	49.8	100		(82-119)

Batch Information

Analytical Batch: **MMS12392**
Analytical Method: **SW6020B**
Instrument: **P7 Agilent 7800**
Analyst: **HGS**

Prep Batch: **MXX36836**
Prep Method: **SW3050B**
Prep Date/Time: **08/01/2024 16:13**
Spike Init Wt./Vol.: 50 mg/kg Extract Vol: 50 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/30/2024 5:14:32PM

Matrix Spike Summary

Original Sample ID: 1778401
MS Sample ID: 1778402 MS
MSD Sample ID: 1778403 MSD

Analysis Date: 08/30/2024 10:49
Analysis Date: 08/30/2024 10:52
Analysis Date: 08/30/2024 10:54
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787017, 1243787023, 1243787024

Results by **SW6020B**

		Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Aluminum	8630	47.6	10600	4220 *	48.9	10200	3180 *	78-124	4.36	(< 20)
Antimony	0.586J	47.6	29.9	62 *	48.9	32.9	66 *	72-124	9.64	(< 20)
Arsenic	16.5	47.6	60.7	93	48.9	64.0	97	82-118	5.21	(< 20)
Barium	50.0	47.6	91.7	88	48.9	99.4	101	86-116	8.03	(< 20)
Beryllium	0.273	4.76	5.32	106	4.89	5.41	105	80-120	1.55	(< 20)
Boron	14.1U	47.6	48.4	102	48.9	50.3	103	74-128	3.90	(< 20)
Cadmium	0.126J	4.76	4.55	93	4.89	5.06	101	84-116	10.50	(< 20)
Calcium	1350	476	1960	128 *	489	2060	145 *	86-118	4.88	(< 20)
Chromium	18.1	19.0	35.9	93	19.6	35.9	91	83-119	0.03	(< 20)
Cobalt	8.48	23.8	31.7	98	24.5	35.0	109	84-115	9.95	(< 20)
Copper	15.0	47.6	59.8	94	48.9	62.0	96	84-119	3.71	(< 20)
Iron	21900	238	22800	353 *	245	21600	-124 *	81-124	5.15	(< 20)
Lead	7.98	47.6	60.3	110	48.9	63.6	114	84-118	5.29	(< 20)
Magnesium	4720	476	5650	196 *	489	5290	117	80-123	6.57	(< 20)
Manganese	270	23.8	305	148 *	24.5	301	129 *	85-116	1.21	(< 20)
Molybdenum	0.524J	19.0	18.2	93	19.6	19.5	97	83-114	6.91	(< 20)
Nickel	14.3	47.6	57.5	91	48.9	60.8	95	84-119	5.53	(< 20)
Potassium	1820	476	2250	90	489	2300	97	85-119	2.01	(< 20)
Selenium	1.41U	47.6	43	90	48.9	46.1	94	80-119	6.99	(< 20)
Silver	0.353U	4.76	4.57	96	4.89	5.08	104	83-118	10.50	(< 20)
Sodium	93.0J	476	625	112	489	646	113	79-125	3.34	(< 20)
Thallium	0.0998J	0.476	.506	85	0.489	0.539	90	83-118	6.34	(< 20)
Vanadium	23.9	9.51	35.1	118 *	9.78	33.6	99	82-116	4.37	(< 20)
Zinc	40.7	47.6	85	93	48.9	88.1	97	82-119	3.61	(< 20)

Print Date: 08/30/2024 5:14:34PM

Matrix Spike Summary

Original Sample ID: 1778401
MS Sample ID: 1778402 MS
MSD Sample ID: 1778403 MSD

Analysis Date: 08/16/2024 15:56
Analysis Date: 08/16/2024 15:58
Analysis Date: 08/16/2024 16:01
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787017, 1243787023, 1243787024

Results by **SW6020B**

		Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL

Batch Information

Analytical Batch: MMS12392
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/16/2024 3:58:00PM

Prep Batch: MXX36836
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 8/1/2024 4:13:00PM
Prep Initial Wt./Vol.: 1.05g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12404
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/28/2024 12:05:00PM

Prep Batch: MXX36836
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 8/1/2024 4:13:00PM
Prep Initial Wt./Vol.: 1.05g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12406
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/30/2024 10:52:11AM

Prep Batch: MXX36836
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 8/1/2024 4:13:00PM
Prep Initial Wt./Vol.: 1.05g
Prep Extract Vol: 50.00mL

Print Date: 08/30/2024 5:14:34PM

Bench Spike Summary

Original Sample ID: 1778401
MS Sample ID: 1778404 BND
MSD Sample ID:

Analysis Date: 08/30/2024 10:49
Analysis Date: 08/30/2024 11:02
Analysis Date:
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787017, 1243787023, 1243787024

Results by **SW6020B**

		Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Aluminum	8630	11800	21000	105				75-125		
Antimony	0.586J	118	125	106				75-125		
Calcium	1350	2350	3720	101				75-125		
Iron	21900	118000	136000	97				75-125		
Magnesium	4720	2350	7050	99				75-125		
Manganese	270	5890	5910	96				75-125		
Vanadium	23.9	118	131	91				75-125		

Batch Information

Analytical Batch: MMS12392
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/16/2024 4:03:00PM

Prep Batch: MXX36836
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 8/1/2024 4:13:00PM
Prep Initial Wt./Vol.: 1.06g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12404
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/28/2024 12:10:00PM

Prep Batch: MXX36836
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 8/1/2024 4:13:00PM
Prep Initial Wt./Vol.: 1.06g
Prep Extract Vol: 50.00mL

Analytical Batch: MMS12406
Analytical Method: SW6020B
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 8/30/2024 11:02:00AM

Prep Batch: MXX36836
Prep Method: Soils/Solids Digest for Metals by ICP-MS
Prep Date/Time: 8/1/2024 4:13:00PM
Prep Initial Wt./Vol.: 1.06g
Prep Extract Vol: 50.00mL

Print Date: 08/30/2024 5:14:34PM

Method Blank

Blank ID: MB for HBN 1895537 [SPT/12099]
Blank Lab ID: 1776174

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787015, 1243787016, 1243787021, 1243787023

Results by **SM21 2540G**

Parameter	Results	LOQ/CL	DL	LOD	Units
Total Solids	100				%

Batch Information

Analytical Batch: SPT12099
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT
Analytical Date/Time: 7/23/2024 5:54:00PM

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Duplicate Sample Summary

Original Sample ID: 1243735001
Duplicate Sample ID: 1776175
QC for Samples:
1243787001

Analysis Date: 07/23/2024 17:54
Matrix: Soil/Solid (dry weight)

Results by **SM21 2540G**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Solids	89.9	89.0	%	0.93	(< 15)

Batch Information

Analytical Batch: SPT12099
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT

Print Date: 08/30/2024 5:14:38PM

Duplicate Sample Summary

Original Sample ID: 1243787001
Duplicate Sample ID: 1776176
QC for Samples:
1243787001, 1243787002, 1243787003, 1243787004

Analysis Date: 07/23/2024 17:54
Matrix: Soil/Solid (dry weight)

Results by **SM21 2540G**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Solids	92.9	93.2	%	0.36	(< 15)

Batch Information

Analytical Batch: SPT12099
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT

Print Date: 08/30/2024 5:14:38PM

Duplicate Sample Summary

Original Sample ID: 1243787004
Duplicate Sample ID: 1776177
QC for Samples:
1243787002, 1243787003, 1243787004, 1243787005

Analysis Date: 07/23/2024 17:54
Matrix: Soil/Solid (dry weight)

Results by **SM21 2540G**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Solids	77.4	80.3	%	3.70	(< 15)

Batch Information

Analytical Batch: SPT12099
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT

Print Date: 08/30/2024 5:14:38PM

Duplicate Sample Summary

Original Sample ID: 1243787005
Duplicate Sample ID: 1776178
Analysis Date: 07/23/2024 17:54
Matrix: Soil/Solid (dry weight)

QC for Samples:

1243787005, 1243787006, 1243787007, 1243787008, 1243787009, 1243787010

Results by **SM21 2540G**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Solids	92.7	93.4	%	0.75	(< 15)

Batch Information

Analytical Batch: SPT12099
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT

Print Date: 08/30/2024 5:14:38PM

Duplicate Sample Summary

Original Sample ID: 1243787010
Duplicate Sample ID: 1776179

Analysis Date: 07/23/2024 17:54
Matrix: Soil/Solid (dry weight)

QC for Samples:

1243787006, 1243787007, 1243787008, 1243787009, 1243787010, 1243787011, 1243787012, 1243787013, 1243787015, 1243787016, 1243787021, 1243787023

Results by **SM21 2540G**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Solids	89.6	88.9	%	0.83	(< 15)

Batch Information

Analytical Batch: SPT12099
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT

Print Date: 08/30/2024 5:14:38PM

Method Blank

Blank ID: MB for HBN 1896139 [SPT/12103]
Blank Lab ID: 1777195

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787014, 1243787017, 1243787018, 1243787019, 1243787020, 1243787022, 1243787024

Results by **SM21 2540G**

Parameter	Results	LOQ/CL	DL	LOD	Units
Total Solids	100				%

Batch Information

Analytical Batch: SPT12103
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT
Analytical Date/Time: 7/26/2024 5:39:00PM

Print Date: 08/30/2024 5:14:43PM

Duplicate Sample Summary

Original Sample ID: 1243822001
Duplicate Sample ID: 1777196

Analysis Date: 07/26/2024 17:39
Matrix: Soil/Solid (dry weight)

QC for Samples:

1243787014, 1243787017, 1243787018, 1243787019, 1243787020, 1243787022, 1243787024

Results by **SM21 2540G**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Solids	93.8	93.9	%	0.18	(< 15)

Batch Information

Analytical Batch: SPT12103
Analytical Method: SM21 2540G
Instrument:
Analyst: DAT

Print Date: 08/30/2024 5:14:45PM

Method Blank

Blank ID: MB for HBN 1896175 [VXX/41551]
Blank Lab ID: 1777314

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	LOD	Units
1,1,1,2-Tetrachloroethane	15.0U	20.0	6.20	15.0	ug/kg
1,1,1-Trichloroethane	18.8U	25.0	7.80	18.8	ug/kg
1,1,2,2-Tetrachloroethane	1.50U	2.00	0.620	1.50	ug/kg
1,1,2-Trichloroethane	0.750U	1.00	0.500	0.750	ug/kg
1,1-Dichloroethane	18.8U	25.0	7.80	18.8	ug/kg
1,1-Dichloroethene	18.8U	25.0	7.80	18.8	ug/kg
1,1-Dichloropropene	18.8U	25.0	7.80	18.8	ug/kg
1,2,3-Trichlorobenzene	75.0U	100	30.0	75.0	ug/kg
1,2,3-Trichloropropane	1.50U	2.00	0.620	1.50	ug/kg
1,2,4-Trichlorobenzene	18.8U	25.0	7.80	18.8	ug/kg
1,2,4-Trimethylbenzene	75.0U	100	30.0	75.0	ug/kg
1,2-Dibromo-3-chloropropane	75.0U	100	31.0	75.0	ug/kg
1,2-Dibromoethane	1.13U	1.50	0.750	1.13	ug/kg
1,2-Dichlorobenzene	18.8U	25.0	7.80	18.8	ug/kg
1,2-Dichloroethane	1.50U	2.00	0.700	1.50	ug/kg
1,2-Dichloropropane	7.50U	10.0	5.00	7.50	ug/kg
1,3,5-Trimethylbenzene	18.8U	25.0	7.80	18.8	ug/kg
1,3-Dichlorobenzene	18.8U	25.0	7.80	18.8	ug/kg
1,3-Dichloropropane	7.50U	10.0	3.10	7.50	ug/kg
1,4-Dichlorobenzene	18.8U	25.0	7.80	18.8	ug/kg
2,2-Dichloropropane	18.8U	25.0	7.80	18.8	ug/kg
2-Butanone (MEK)	188U	250	78.0	188	ug/kg
2-Chlorotoluene	18.8U	25.0	7.80	18.8	ug/kg
2-Hexanone	90.0U	120	60.0	90.0	ug/kg
4-Chlorotoluene	15.0U	20.0	10.0	15.0	ug/kg
4-Isopropyltoluene	60.0U	80.0	40.0	60.0	ug/kg
4-Methyl-2-pentanone (MIBK)	188U	250	78.0	188	ug/kg
Acetone	188U	250	110	188	ug/kg
Benzene	9.38U	12.5	3.90	9.38	ug/kg
Bromobenzene	18.8U	25.0	7.80	18.8	ug/kg
Bromochloromethane	18.8U	25.0	7.80	18.8	ug/kg
Bromodichloromethane	1.50U	2.00	0.620	1.50	ug/kg
Bromoform	18.8U	25.0	7.80	18.8	ug/kg
Bromomethane	15.0U	20.0	8.00	15.0	ug/kg
Carbon disulfide	75.0U	100	31.0	75.0	ug/kg
Carbon tetrachloride	9.38U	12.5	3.90	9.38	ug/kg
Chlorobenzene	18.8U	25.0	7.80	18.8	ug/kg
Chloroethane	150U	200	62.0	150	ug/kg
Chloroform	4.50U	6.00	3.00	4.50	ug/kg
Chloromethane	18.8U	25.0	7.80	18.8	ug/kg
cis-1,2-Dichloroethene	18.8U	25.0	7.80	18.8	ug/kg
cis-1,3-Dichloropropene	9.38U	12.5	3.90	9.38	ug/kg

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Method Blank

Blank ID: MB for HBN 1896175 [VXX/41551]
Blank Lab ID: 1777314

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	LOD	Units
Dibromochloromethane	3.75U	5.00	1.50	3.75	ug/kg
Dibromomethane	18.8U	25.0	7.80	18.8	ug/kg
Dichlorodifluoromethane	75.0U	100	30.0	75.0	ug/kg
Ethylbenzene	18.8U	25.0	7.80	18.8	ug/kg
Freon-113	75.0U	100	31.0	75.0	ug/kg
Hexachlorobutadiene	15.0U	20.0	6.20	15.0	ug/kg
Isopropylbenzene (Cumene)	18.8U	25.0	7.80	18.8	ug/kg
Methylene chloride	75.0U	100	31.0	75.0	ug/kg
Methyl-t-butyl ether	75.0U	100	31.0	75.0	ug/kg
Naphthalene	18.8U	25.0	7.80	18.8	ug/kg
n-Butylbenzene	18.8U	25.0	7.80	18.8	ug/kg
n-Propylbenzene	18.8U	25.0	7.80	18.8	ug/kg
o-Xylene	18.8U	25.0	7.80	18.8	ug/kg
P & M -Xylene	37.5U	50.0	15.0	37.5	ug/kg
sec-Butylbenzene	18.8U	25.0	7.80	18.8	ug/kg
Styrene	18.8U	25.0	7.80	18.8	ug/kg
tert-Butylbenzene	18.8U	25.0	7.80	18.8	ug/kg
Tetrachloroethene	9.38U	12.5	3.90	9.38	ug/kg
Toluene	18.8U	25.0	7.80	18.8	ug/kg
trans-1,2-Dichloroethene	18.8U	25.0	7.80	18.8	ug/kg
trans-1,3-Dichloropropene	9.38U	12.5	3.90	9.38	ug/kg
Trichloroethene	7.50U	10.0	3.20	7.50	ug/kg
Trichlorofluoromethane	37.5U	50.0	15.0	37.5	ug/kg
Vinyl acetate	75.0U	100	31.0	75.0	ug/kg
Vinyl chloride	0.600U	0.800	0.250	0.600	ug/kg
Xylenes (total)	56.3U	75.0	22.8	56.3	ug/kg
Surrogates					
1,2-Dichloroethane-D4 (surr)	114	71-136		0	%
4-Bromofluorobenzene (surr)	93.4	55-151		0	%
Toluene-d8 (surr)	92.9	85-116		0	%

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Instrument: VQA 7890/5975 GC/MS
Analyst: PHK
Analytical Date/Time: 7/26/2024 2:20:00PM

Prep Batch: VXX41551
Prep Method: SW5035A
Prep Date/Time: 7/26/2024 12:30:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [VXX41551]
Blank Spike Lab ID: 1777315
Date Analyzed: 07/26/2024 14:36

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

Blank Spike (ug/kg)

Parameter	Spike	Result	Rec (%)	CL
1,1,1,2-Tetrachloroethane	750	802	107	(78-125)
1,1,1-Trichloroethane	750	778	104	(73-130)
1,1,2,2-Tetrachloroethane	750	704	94	(70-124)
1,1,2-Trichloroethane	750	780	104	(78-121)
1,1-Dichloroethane	750	750	100	(76-125)
1,1-Dichloroethene	750	813	108	(70-131)
1,1-Dichloropropene	750	795	106	(76-125)
1,2,3-Trichlorobenzene	750	637	85	(66-130)
1,2,3-Trichloropropane	750	723	96	(73-125)
1,2,4-Trichlorobenzene	750	641	85	(67-129)
1,2,4-Trimethylbenzene	750	663	88	(75-123)
1,2-Dibromo-3-chloropropane	750	650	87	(61-132)
1,2-Dibromoethane	750	842	112	(78-122)
1,2-Dichlorobenzene	750	748	100	(78-121)
1,2-Dichloroethane	750	775	103	(73-128)
1,2-Dichloropropane	750	773	103	(76-123)
1,3,5-Trimethylbenzene	750	704	94	(73-124)
1,3-Dichlorobenzene	750	768	102	(77-121)
1,3-Dichloropropane	750	761	101	(77-121)
1,4-Dichlorobenzene	750	764	102	(75-120)
2,2-Dichloropropane	750	851	113	(67-133)
2-Butanone (MEK)	2250	2140	95	(51-148)
2-Chlorotoluene	750	725	97	(75-122)
2-Hexanone	2250	1920	85	(53-145)
4-Chlorotoluene	750	727	97	(72-124)
4-Isopropyltoluene	750	724	97	(73-127)
4-Methyl-2-pentanone (MIBK)	2250	2310	102	(65-135)
Acetone	2250	2350	105	(36-164)
Benzene	750	809	108	(77-121)
Bromobenzene	750	810	108	(78-121)
Bromochloromethane	750	884	118	(78-125)
Bromodichloromethane	750	795	106	(75-127)
Bromoform	750	830	111	(67-132)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [VXX41551]
Blank Spike Lab ID: 1777315
Date Analyzed: 07/26/2024 14:36

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

Blank Spike (ug/kg)

Parameter	Spike	Result	Rec (%)		CL
Bromomethane	750	903	120		(53-143)
Carbon disulfide	1130	1210	107		(63-132)
Carbon tetrachloride	750	798	106		(70-135)
Chlorobenzene	750	802	107		(79-120)
Chloroethane	750	775	103		(59-139)
Chloroform	750	794	106		(78-123)
Chloromethane	750	630	84		(50-136)
cis-1,2-Dichloroethene	750	850	113		(77-123)
cis-1,3-Dichloropropene	750	834	111		(74-126)
Dibromochloromethane	750	817	109		(74-126)
Dibromomethane	750	818	109		(78-125)
Dichlorodifluoromethane	750	777	104		(29-149)
Ethylbenzene	750	805	107		(76-122)
Freon-113	1130	1250	111		(66-136)
Hexachlorobutadiene	750	710	95		(61-135)
Isopropylbenzene (Cumene)	750	737	98		(68-134)
Methylene chloride	750	833	111		(70-128)
Methyl-t-butyl ether	1130	1150	102		(73-125)
Naphthalene	750	626	83		(62-129)
n-Butylbenzene	750	673	90		(70-128)
n-Propylbenzene	750	713	95		(73-125)
o-Xylene	750	793	106		(77-123)
P & M -Xylene	1500	1630	109		(77-124)
sec-Butylbenzene	750	690	92		(73-126)
Styrene	750	797	106		(76-124)
tert-Butylbenzene	750	709	95		(73-125)
Tetrachloroethene	750	841	112		(73-128)
Toluene	750	765	102		(77-121)
trans-1,2-Dichloroethene	750	856	114		(74-125)
trans-1,3-Dichloropropene	750	767	102		(71-130)
Trichloroethene	750	839	112		(77-123)
Trichlorofluoromethane	750	1080	144	*	(62-140)
Vinyl acetate	750	725	97		(50-151)

Print Date: 08/30/2024 5:14:52PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [VXX41551]
Blank Spike Lab ID: 1777315
Date Analyzed: 07/26/2024 14:36

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

Blank Spike (ug/kg)

Parameter	Spike	Result	Rec (%)	CL
Vinyl chloride	750	791	105	(56-135)
Xylenes (total)	2250	2420	108	(78-124)
Surrogates				
1,2-Dichloroethane-D4 (surr)	750		100	(71-136)
4-Bromofluorobenzene (surr)	750		93	(55-151)
Toluene-d8 (surr)	750		99	(85-116)

Batch Information

Analytical Batch: **VMS23462**
Analytical Method: **SW8260D**
Instrument: **VQA 7890/5975 GC/MS**
Analyst: **PHK**

Prep Batch: **VXX41551**
Prep Method: **SW5035A**
Prep Date/Time: **07/26/2024 00:30**
Spike Init Wt./Vol.: 750 ug/kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/30/2024 5:14:52PM

Matrix Spike Summary

Original Sample ID: 1777313
MS Sample ID: 1777316 MS
MSD Sample ID: 1777317 MSD

Analysis Date: 07/26/2024 16:39
Analysis Date: 07/26/2024 15:04
Analysis Date: 07/26/2024 15:20
Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

		Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	24.0U	1200	1250	104	1200	1280	107	78-125	2.40	(< 20)
1,1,1-Trichloroethane	30.0U	1200	1320	110	1200	1320	110	73-130	0.57	(< 20)
1,1,2,2-Tetrachloroethane	2.40U	1200	1120	93	1200	1150	96	70-124	2.40	(< 20)
1,1,2-Trichloroethane	1.20U	1200	1280	106	1200	1280	107	78-121	0.31	(< 20)
1,1-Dichloroethane	30.0U	1200	1210	101	1200	1210	101	76-125	0.02	(< 20)
1,1-Dichloroethene	30.0U	1200	1370	114	1200	1340	112	70-131	2.30	(< 20)
1,1-Dichloropropene	30.0U	1200	1300	108	1200	1290	108	76-125	0.19	(< 20)
1,2,3-Trichlorobenzene	120U	1200	921	77	1200	995	83	66-130	7.80	(< 20)
1,2,3-Trichloropropane	2.40U	1200	1170	98	1200	1190	99	73-125	1.70	(< 20)
1,2,4-Trichlorobenzene	30.0U	1200	1000	83	1200	1060	88	67-129	5.60	(< 20)
1,2,4-Trimethylbenzene	120U	1200	1000	84	1200	1100	91	75-123	8.60	(< 20)
1,2-Dibromo-3-chloropropane	120U	1200	1070	89	1200	1070	89	61-132	0.10	(< 20)
1,2-Dibromoethane	1.80U	1200	1390	116	1200	1380	115	78-122	0.59	(< 20)
1,2-Dichlorobenzene	30.0U	1200	1150	96	1200	1190	99	78-121	3.40	(< 20)
1,2-Dichloroethane	2.40U	1200	1250	104	1200	1210	101	73-128	2.80	(< 20)
1,2-Dichloropropane	12.0U	1200	1220	102	1200	1210	101	76-123	0.84	(< 20)
1,3,5-Trimethylbenzene	30.0U	1200	1070	89	1200	1190	99	73-124	10.70	(< 20)
1,3-Dichlorobenzene	30.0U	1200	1150	96	1200	1220	102	77-121	6.00	(< 20)
1,3-Dichloropropane	12.0U	1200	1250	104	1200	1240	103	77-121	0.38	(< 20)
1,4-Dichlorobenzene	30.0U	1200	1150	96	1200	1210	101	75-120	4.70	(< 20)
2,2-Dichloropropane	30.0U	1200	1430	119	1200	1420	118	67-133	0.95	(< 20)
2-Butanone (MEK)	300U	3600	3540	98	3600	3410	95	51-148	3.80	(< 20)
2-Chlorotoluene	30.0U	1200	1090	90	1200	1170	97	75-122	7.20	(< 20)
2-Hexanone	144U	3600	3240	90	3600	3270	91	53-145	0.90	(< 20)
4-Chlorotoluene	24.0U	1200	1100	92	1200	1170	98	72-124	6.00	(< 20)
4-Isopropyltoluene	96.0U	1200	1090	91	1200	1220	102	73-127	11.50	(< 20)
4-Methyl-2-pentanone (MIBK)	300U	3600	3840	107	3600	3760	105	65-135	2.00	(< 20)
Acetone	300U	3600	3860	107	3600	3740	104	36-164	3.00	(< 20)
Benzene	9.82J	1200	1270	105	1200	1280	106	77-121	0.93	(< 20)
Bromobenzene	30.0U	1200	1250	104	1200	1280	106	78-121	1.90	(< 20)
Bromochloromethane	30.0U	1200	1440	120	1200	1370	114	78-125	5.00	(< 20)
Bromodichloromethane	2.40U	1200	1300	108	1200	1270	106	75-127	1.80	(< 20)
Bromoform	30.0U	1200	1370	114	1200	1370	114	67-132	0.11	(< 20)
Bromomethane	24.0U	1200	1550	129	1200	1550	130	53-143	0.37	(< 20)
Carbon disulfide	120U	1800	1900	106	1800	1840	102	63-132	3.30	(< 20)
Carbon tetrachloride	15.0U	1200	1350	112	1200	1340	112	70-135	0.49	(< 20)
Chlorobenzene	30.0U	1200	1260	105	1200	1300	108	79-120	3.10	(< 20)

Print Date: 08/30/2024 5:14:54PM

SGS

Matrix Spike Summary

Original Sample ID: 1777313
MS Sample ID: 1777316 MS
MSD Sample ID: 1777317 MSD

Analysis Date: 07/26/2024 16:39
Analysis Date: 07/26/2024 15:04
Analysis Date: 07/26/2024 15:20
Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

		Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Chloroethane	240U	1200	1220	101	1200	1200	100	59-139	1.30	(< 20)
Chloroform	7.20U	1200	1260	105	1200	1250	104	78-123	0.55	(< 20)
Chloromethane	30.0U	1200	993	83	1200	1010	84	50-136	1.30	(< 20)
cis-1,2-Dichloroethene	30.0U	1200	1360	113	1200	1280	107	77-123	5.90	(< 20)
cis-1,3-Dichloropropene	15.0U	1200	1350	112	1200	1320	110	74-126	1.70	(< 20)
Dibromochloromethane	6.00U	1200	1310	109	1200	1320	110	74-126	0.77	(< 20)
Dibromomethane	30.0U	1200	1340	111	1200	1300	108	78-125	3.20	(< 20)
Dichlorodifluoromethane	120U	1200	1170	98	1200	1140	95	29-149	2.70	(< 20)
Ethylbenzene	30.0U	1200	1280	107	1200	1340	112	76-122	4.40	(< 20)
Freon-113	120U	1800	2110	117	1800	2120	118	66-136	0.26	(< 20)
Hexachlorobutadiene	24.0U	1200	1190	99	1200	1170	98	61-135	1.90	(< 20)
Isopropylbenzene (Cumene)	30.0U	1200	1170	98	1200	1280	107	68-134	9.00	(< 20)
Methylene chloride	120U	1200	1330	111	1200	1320	110	70-128	0.61	(< 20)
Methyl-t-butyl ether	120U	1800	1810	101	1800	1730	96	73-125	5.00	(< 20)
Naphthalene	30.0U	1200	1010	84	1200	1070	89	62-129	5.60	(< 20)
n-Butylbenzene	30.0U	1200	1030	86	1200	1140	95	70-128	10.50	(< 20)
n-Propylbenzene	30.0U	1200	1050	88	1200	1180	98	73-125	11.10	(< 20)
o-Xylene	30.0U	1200	1290	107	1200	1350	113	77-123	4.60	(< 20)
P & M -Xylene	60.0U	2400	2550	106	2400	2710	113	77-124	6.20	(< 20)
sec-Butylbenzene	30.0U	1200	1020	85	1200	1180	98	73-126	13.90	(< 20)
Styrene	30.0U	1200	1300	108	1200	1330	111	76-124	2.40	(< 20)
tert-Butylbenzene	30.0U	1200	1050	88	1200	1180	99	73-125	11.70	(< 20)
Tetrachloroethene	15.0U	1200	1290	107	1200	1390	116	73-128	7.60	(< 20)
Toluene	30.0U	1200	1200	100	1200	1260	105	77-121	4.90	(< 20)
trans-1,2-Dichloroethene	30.0U	1200	1400	117	1200	1370	114	74-125	2.30	(< 20)
trans-1,3-Dichloropropene	15.0U	1200	1310	109	1200	1310	109	71-130	0.29	(< 20)
Trichloroethene	12.0U	1200	1350	112	1200	1360	113	77-123	1.10	(< 20)
Trichlorofluoromethane	60.0U	1200	1940	162 *	1200	1910	159 *	62-140	1.50	(< 20)
Vinyl acetate	120U	1200	1140	95	1200	1110	92	50-151	2.50	(< 20)
Vinyl chloride	0.960U	1200	1290	108	1200	1260	105	56-135	2.80	(< 20)
Xylenes (total)	90.0U	3600	3840	107	3600	4060	113	78-124	5.70	(< 20)
Surrogates										
1,2-Dichloroethane-D4 (surr)		1200	1240	103	1200	1210	100	71-136	2.70	
4-Bromofluorobenzene (surr)		1170	668	57	1170	698	60	55-151	4.30	
Toluene-d8 (surr)		1200	1180	98	1200	1210	101	85-116	2.40	

Print Date: 08/30/2024 5:14:54PM

Matrix Spike Summary

Original Sample ID: 1777313
MS Sample ID: 1777316 MS
MSD Sample ID: 1777317 MSD

Analysis Date:
Analysis Date: 07/26/2024 15:04
Analysis Date: 07/26/2024 15:20
Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787022, 1243787024, 1243787025

Results by **SW8260D**

		Matrix Spike (%)			Spike Duplicate (%)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL

Batch Information

Analytical Batch: VMS23462
Analytical Method: SW8260D
Instrument: VQA 7890/5975 GC/MS
Analyst: PHK
Analytical Date/Time: 7/26/2024 3:04:00PM

Prep Batch: VXX41551
Prep Method: Vol. Extraction SW8260 Field Extracted L
Prep Date/Time: 7/26/2024 12:30:00AM
Prep Initial Wt./Vol.: 53.31g
Prep Extract Vol: 42.64mL

Print Date: 08/30/2024 5:14:54PM

Method Blank

Blank ID: MB for HBN 1896328 [VXX/41573]
Blank Lab ID: 1778022

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787020, 1243787022, 1243787024, 1243787025

Results by **AK101**

Parameter	Results	LOQ/CL	DL	LOD	Units
Gasoline Range Organics	1.88U	2.50	0.750	1.88	mg/kg
Surrogates					
4-Bromofluorobenzene (surr)	101	50-150		0	%

Batch Information

Analytical Batch: VFC16917
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: T.L
Analytical Date/Time: 7/29/2024 2:58:00PM

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 7/29/2024 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 08/30/2024 5:14:57PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [VXX41573]
Blank Spike Lab ID: 1778025
Date Analyzed: 07/29/2024 14:21

Spike Duplicate ID: LCSD for HBN 1243787 [VXX41573]
Spike Duplicate Lab ID: 1778026
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787020, 1243787022, 1243787024, 1243787025

Results by **AK101**

	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	12.5	13.4	107	12.5	12.9	103	(60-120)	4.00	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	1.25		97	1.25		98	(50-150)	1.50	

Batch Information

Analytical Batch: **VFC16917**
Analytical Method: **AK101**
Instrument: **Agilent 7890A PID/FID**
Analyst: **T.L**

Prep Batch: **VXX41573**
Prep Method: **SW5035A**
Prep Date/Time: **07/29/2024 06:00**
Spike Init Wt./Vol.: 1.25 mg/kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: 1.25 mg/kg Extract Vol: 25 mL

Print Date: 08/30/2024 5:15:00PM

Method Blank

Blank ID: MB for HBN 1896328 [VXX/41573]
Blank Lab ID: 1778022

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787020, 1243787022, 1243787024, 1243787025

Results by **SW8021B**

Parameter	Results	LOQ/CL	DL	LOD	Units
Benzene	9.38U	12.5	4.00	9.38	ug/kg
Ethylbenzene	18.8U	25.0	9.00	18.8	ug/kg
o-Xylene	18.8U	25.0	9.10	18.8	ug/kg
P & M -Xylene	37.5U	50.0	15.0	37.5	ug/kg
Toluene	18.8U	25.0	7.80	18.8	ug/kg
Xylenes (total)	56.3U	75.0	25.0	56.3	ug/kg
Surrogates					
1,4-Difluorobenzene (surr)	103	72-119		0	%

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Instrument: Agilent 7890A PID/FID
Analyst: T.L
Analytical Date/Time: 7/29/2024 2:58:00PM

Prep Batch: VXX41573
Prep Method: SW5035A
Prep Date/Time: 7/29/2024 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 08/30/2024 5:15:04PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [VXX41573]
Blank Spike Lab ID: 1778023
Date Analyzed: 07/29/2024 13:44

Spike Duplicate ID: LCSD for HBN 1243787 [VXX41573]
Spike Duplicate Lab ID: 1778024
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787020, 1243787022, 1243787024, 1243787025

Results by **SW8021B**

	Blank Spike (ug/kg)			Spike Duplicate (ug/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	1250	1210	97	1250	1410	113	(75-125)	15.60	(< 20)
Ethylbenzene	1250	1140	91	1250	1330	107	(75-125)	15.40	(< 20)
o-Xylene	1250	1210	97	1250	1410	112	(75-125)	14.80	(< 20)
P & M -Xylene	2500	2350	94	2500	2740	109	(80-125)	15.00	(< 20)
Toluene	1250	1120	90	1250	1310	105	(70-125)	15.10	(< 20)
Xylenes (total)	3750	3560	95	3750	4140	110	(78-124)	15.00	(< 20)
Surrogates									
1,4-Difluorobenzene (surr)	1250		104	1250		106	(72-119)	1.80	

Batch Information

Analytical Batch: **VFC16917**
Analytical Method: **SW8021B**
Instrument: **Agilent 7890A PID/FID**
Analyst: **T.L**

Prep Batch: **VXX41573**
Prep Method: **SW5035A**
Prep Date/Time: **07/29/2024 06:00**
Spike Init Wt./Vol.: 1250 ug/kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: 1250 ug/kg Extract Vol: 25 mL

Print Date: 08/30/2024 5:15:07PM

Matrix Spike Summary

Original Sample ID: 1778027
MS Sample ID: 1778028 MS
MSD Sample ID: 1778029 MSD

Analysis Date: 07/30/2024 1:22
Analysis Date: 07/30/2024 1:41
Analysis Date: 07/30/2024 1:59
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787014, 1243787015, 1243787016, 1243787017, 1243787018, 1243787019, 1243787020, 1243787022, 1243787024, 1243787025

Results by **SW8021B**

		Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	11.8U	1570	1880	120	1570	1660	106	75-125	12.50	(< 20)
Ethylbenzene	23.5U	1570	1800	115	1570	1590	101	75-125	12.90	(< 20)
o-Xylene	23.5U	1570	1760	112	1570	1560	99	75-125	12.10	(< 20)
P & M -Xylene	47.0U	3140	3600	115	3140	3180	101	80-125	12.40	(< 20)
Toluene	23.5U	1570	1790	114	1570	1570	100	70-125	12.90	(< 20)
Xylenes (total)	70.6U	4700	5360	114	4700	4740	101	78-124	12.30	(< 20)
Surrogates										
1,4-Difluorobenzene (surr)		1570	1570	100	1570	1540	98	72-119	1.90	

Batch Information

Analytical Batch: VFC16917
Analytical Method: SW8021B
Instrument: Agilent 7890A PID/FID
Analyst: T.L
Analytical Date/Time: 7/30/2024 1:41:00AM

Prep Batch: VXX41573
Prep Method: AK101 Extraction (S)
Prep Date/Time: 7/29/2024 6:00:00AM
Prep Initial Wt./Vol.: 39.87g
Prep Extract Vol: 25.00mL

Print Date: 08/30/2024 5:15:09PM

Method Blank

Blank ID: MB for HBN 1895553 [XXX/49895]
Blank Lab ID: 1776268

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787015, 1243787016

Results by **AK102**

Parameter	Results	LOQ/CL	DL	LOD	Units
Diesel Range Organics	15.0U	20.0	9.00	15.0	mg/kg
Surrogates					
5a Androstane (surr)	114	60-120		0	%

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK102
Instrument: Agilent 7890B F
Analyst: KFC
Analytical Date/Time: 7/26/2024 8:22:00AM

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 7/24/2024 11:29:00AM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:12PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49895]
Blank Spike Lab ID: 1776269
Date Analyzed: 07/26/2024 08:32

Spike Duplicate ID: LCSD for HBN 1243787 [XXX49895]
Spike Duplicate Lab ID: 1776270
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787015, 1243787016

Results by **AK102**

	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Diesel Range Organics	1110	1170	105	1110	1210	109	(75-125)	3.70	(< 20)
Surrogates									
5a Androstane (surr)	22.2		103	22.2		107	(60-120)	3.30	

Batch Information

Analytical Batch: **XFC16964**
Analytical Method: **AK102**
Instrument: **Agilent 7890B F**
Analyst: **KFC**

Prep Batch: **XXX49895**
Prep Method: **SW3550C**
Prep Date/Time: **07/24/2024 11:29**
Spike Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:17PM

Method Blank

Blank ID: MB for HBN 1895553 [XXX/49895]
Blank Lab ID: 1776268

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787015, 1243787016

Results by **AK103**

Parameter	Results	LOQ/CL	DL	LOD	Units
Residual Range Organics	75.0U	100	43.0	75.0	mg/kg
Surrogates					
n-Triacontane-d62 (surr)	111	60-120		0	%

Batch Information

Analytical Batch: XFC16964
Analytical Method: AK103
Instrument: Agilent 7890B F
Analyst: KFC
Analytical Date/Time: 7/26/2024 8:22:00AM

Prep Batch: XXX49895
Prep Method: SW3550C
Prep Date/Time: 7/24/2024 11:29:00AM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:20PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49895]
Blank Spike Lab ID: 1776269
Date Analyzed: 07/26/2024 08:32

Spike Duplicate ID: LCSD for HBN 1243787 [XXX49895]
Spike Duplicate Lab ID: 1776270
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787001, 1243787002, 1243787003, 1243787004, 1243787005, 1243787010, 1243787011, 1243787012, 1243787013, 1243787015, 1243787016

Results by **AK103**

	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Residual Range Organics	1110	1090	99	1110	1150	104	(60-120)	5.20	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	22.2		103	22.2		101	(60-120)	2.10	

Batch Information

Analytical Batch: **XFC16964**
Analytical Method: **AK103**
Instrument: **Agilent 7890B F**
Analyst: **KFC**

Prep Batch: **XXX49895**
Prep Method: **SW3550C**
Prep Date/Time: **07/24/2024 11:29**
Spike Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:24PM

Method Blank

Blank ID: MB for HBN 1895879 [XXX/49918]
Blank Lab ID: 1776942

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787011, 1243787012, 1243787013

Results by **SW8270E**

Parameter	Results	LOQ/CL	DL	LOD	Units
1,2,4-Trichlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
1,2-Dichlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
1,3-Dichlorobenzene	0.750U	1.00	0.300	0.750	mg/kg
1,4-Dichlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
1-Chloronaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
1-Methylnaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
2,4,5-Trichlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2,4,6-Trichlorophenol	0.750U	1.00	0.300	0.750	mg/kg
2,4-Dichlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2,4-Dimethylphenol	0.375U	0.500	0.125	0.375	mg/kg
2,4-Dinitrophenol	3.75U	5.00	1.50	3.75	mg/kg
2,4-Dinitrotoluene	0.188U	0.250	0.0780	0.188	mg/kg
2,6-Dichlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2,6-Dinitrotoluene	0.188U	0.250	0.0780	0.188	mg/kg
2-Chloronaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
2-Chlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2-Methyl-4,6-dinitrophenol	1.50U	2.00	0.620	1.50	mg/kg
2-Methylnaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
2-Methylphenol (o-Cresol)	0.188U	0.250	0.0780	0.188	mg/kg
2-Nitroaniline	0.188U	0.250	0.0780	0.188	mg/kg
2-Nitrophenol	0.188U	0.250	0.0780	0.188	mg/kg
3&4-Methylphenol (p&m-Cresol)	0.750U	1.00	0.310	0.750	mg/kg
3,3-Dichlorobenzidine	0.750U	1.00	0.300	0.750	mg/kg
3-Nitroaniline	0.375U	0.500	0.150	0.375	mg/kg
4-Bromophenyl-phenylether	0.188U	0.250	0.0780	0.188	mg/kg
4-Chloro-3-methylphenol	0.188U	0.250	0.0780	0.188	mg/kg
4-Chloroaniline	0.750U	1.00	0.310	0.750	mg/kg
4-Chlorophenyl-phenylether	0.188U	0.250	0.0780	0.188	mg/kg
4-Nitroaniline	2.25U	3.00	0.940	2.25	mg/kg
4-Nitrophenol	1.50U	2.00	0.620	1.50	mg/kg
Acenaphthene	0.188U	0.250	0.0780	0.188	mg/kg
Acenaphthylene	0.188U	0.250	0.0780	0.188	mg/kg
Aniline	3.00U	4.00	1.00	3.00	mg/kg
Anthracene	0.188U	0.250	0.0780	0.188	mg/kg
Azobenzene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo(a)Anthracene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[a]pyrene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[b]Fluoranthene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[g,h,i]perylene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[k]fluoranthene	0.188U	0.250	0.0780	0.188	mg/kg
Benzoic acid	1.13U	1.50	0.470	1.13	mg/kg
Benzyl alcohol	0.188U	0.250	0.0780	0.188	mg/kg

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Method Blank

Blank ID: MB for HBN 1895879 [XXX/49918]
Blank Lab ID: 1776942

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787011, 1243787012, 1243787013

Results by **SW8270E**

Parameter	Results	LOQ/CL	DL	LOD	Units
Bis(2chloro1methylethyl)Ether	0.188U	0.250	0.0780	0.188	mg/kg
Bis(2-Chloroethoxy)methane	1.50U	2.00	0.600	1.50	mg/kg
Bis(2-Chloroethyl)ether	0.188U	0.250	0.0780	0.188	mg/kg
bis(2-Ethylhexyl)phthalate	0.188U	0.250	0.0780	0.188	mg/kg
Butylbenzylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
Carbazole	0.188U	0.250	0.0780	0.188	mg/kg
Chrysene	0.188U	0.250	0.0780	0.188	mg/kg
Dibenzo[a,h]anthracene	0.188U	0.250	0.0780	0.188	mg/kg
Dibenzofuran	0.188U	0.250	0.0780	0.188	mg/kg
Diethylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
Dimethylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
Di-n-butylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
di-n-Octylphthalate	0.375U	0.500	0.150	0.375	mg/kg
Fluoranthene	0.188U	0.250	0.0780	0.188	mg/kg
Fluorene	0.188U	0.250	0.0780	0.188	mg/kg
Hexachlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
Hexachlorobutadiene	0.188U	0.250	0.0780	0.188	mg/kg
Hexachlorocyclopentadiene	0.525U	0.700	0.200	0.525	mg/kg
Hexachloroethane	0.188U	0.250	0.0780	0.188	mg/kg
Indeno[1,2,3-c,d] pyrene	0.188U	0.250	0.0780	0.188	mg/kg
Isophorone	0.188U	0.250	0.0780	0.188	mg/kg
Naphthalene	0.188U	0.250	0.0780	0.188	mg/kg
Nitrobenzene	0.188U	0.250	0.0780	0.188	mg/kg
N-Nitrosodimethylamine	0.188U	0.250	0.0780	0.188	mg/kg
N-Nitroso-di-n-propylamine	0.188U	0.250	0.0780	0.188	mg/kg
N-Nitrosodiphenylamine	0.188U	0.250	0.0780	0.188	mg/kg
Pentachlorophenol	3.00U	4.00	1.00	3.00	mg/kg
Phenanthrene	0.188U	0.250	0.0780	0.188	mg/kg
Phenol	0.188U	0.250	0.0780	0.188	mg/kg
Pyrene	0.188U	0.250	0.0780	0.188	mg/kg
Surrogates					
2,4,6-Tribromophenol (surr)	83.2	35-125		0	%
2-Fluorobiphenyl (surr)	68.8	44-115		0	%
2-Fluorophenol (surr)	59.1	35-115		0	%
Nitrobenzene-d5 (surr)	59.2	37-122		0	%
Phenol-d6 (surr)	63.9	33-122		0	%
Terphenyl-d14 (surr)	88.5	54-127		0	%

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Method Blank

Blank ID: MB for HBN 1895879 [XXX/49918]
Blank Lab ID: 1776942

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787011, 1243787012, 1243787013

Results by **SW8270E**

Parameter	Results	LOQ/CL	DL	LOD	Units

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Instrument: HP 6890/5973 SSA
Analyst: NGG
Analytical Date/Time: 8/29/2024 11:25:00AM

Prep Batch: XXX49918
Prep Method: SW3550C
Prep Date/Time: 7/26/2024 4:19:00PM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:15:27PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49918]
Blank Spike Lab ID: 1776943
Date Analyzed: 08/29/2024 11:42

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013

Results by **SW8270E**

Blank Spike (mg/kg)

Parameter	Spike	Result	Rec (%)	CL
1,2,4-Trichlorobenzene	4.44	3.00	68	(34-118)
1,2-Dichlorobenzene	4.44	2.63	59	(33-117)
1,3-Dichlorobenzene	4.44	2.60	59	(30-115)
1,4-Dichlorobenzene	4.44	2.61	59	(31-115)
1-Chloronaphthalene	4.44	3.23	73	(48-115)
1-Methylnaphthalene	4.44	3.26	73	(40-119)
2,4,5-Trichlorophenol	4.44	3.56	80	(41-124)
2,4,6-Trichlorophenol	4.44	3.54	80	(39-126)
2,4-Dichlorophenol	4.44	3.29	74	(40-122)
2,4-Dimethylphenol	4.44	3.10	70	(30-127)
2,4-Dinitrophenol	8.89	7.85	88	(62-113)
2,4-Dinitrotoluene	4.44	3.82	86	(48-126)
2,6-Dichlorophenol	4.44	3.28	74	(41-117)
2,6-Dinitrotoluene	4.44	3.66	82	(46-124)
2-Chloronaphthalene	4.44	3.26	74	(41-114)
2-Chlorophenol	4.44	2.76	62	(34-121)
2-Methyl-4,6-dinitrophenol	13.3	11.3	85	(29-132)
2-Methylnaphthalene	4.44	3.25	73	(38-122)
2-Methylphenol (o-Cresol)	4.44	2.91	65	(32-122)
2-Nitroaniline	4.44	3.60	81	(44-127)
2-Nitrophenol	8.89	6.24	70	(36-123)
3&4-Methylphenol (p&m-Cresol)	8.89	5.85	66	(34-119)
3,3-Dichlorobenzidine	4.44	3.62	82	(22-121)
3-Nitroaniline	4.44	3.62	81	(33-119)
4-Bromophenyl-phenylether	4.44	3.73	84	(46-124)
4-Chloro-3-methylphenol	4.44	3.61	81	(45-122)
4-Chloroaniline	4.44	3.13	71	(17-106)
4-Chlorophenyl-phenylether	4.44	3.64	82	(45-121)
4-Nitroaniline	4.44	3.65	82	(77-120)
4-Nitrophenol	8.89	7.35	83	(30-132)
Acenaphthene	4.44	3.29	74	(40-123)
Acenaphthylene	4.44	3.29	74	(32-132)
Aniline	8.89	5.59	63	(24-89)

Print Date: 08/30/2024 5:15:30PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49918]
Blank Spike Lab ID: 1776943
Date Analyzed: 08/29/2024 11:42

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013

Results by **SW8270E**

Blank Spike (mg/kg)

Parameter	Spike	Result	Rec (%)	CL
Anthracene	4.44	3.60	81	(47-123)
Azobenzene	4.44	3.40	76	(39-125)
Benzo(a)Anthracene	4.44	3.83	86	(49-126)
Benzo[a]pyrene	4.44	3.83	86	(45-129)
Benzo[b]Fluoranthene	4.44	4.07	92	(45-132)
Benzo[g,h,i]perylene	4.44	4.41	99	(43-134)
Benzo[k]fluoranthene	4.44	3.44	78	(47-132)
Benzoic acid	8.89	8.02	90	(53-124)
Benzyl alcohol	4.44	3.22	73	(29-122)
Bis(2chloro1methylethyl)Ether	4.44	3.15	71	(33-131)
Bis(2-Chloroethoxy)methane	4.44	3.16	71	(36-121)
Bis(2-Chloroethyl)ether	4.44	2.83	64	(31-120)
bis(2-Ethylhexyl)phthalate	4.44	3.75	84	(51-133)
Butylbenzylphthalate	4.44	3.67	83	(48-132)
Carbazole	4.44	3.75	84	(50-123)
Chrysene	4.44	3.81	86	(50-124)
Dibenzo[a,h]anthracene	4.44	4.52	102	(45-134)
Dibenzofuran	4.44	3.40	76	(44-120)
Diethylphthalate	4.44	3.66	82	(50-124)
Dimethylphthalate	4.44	3.66	82	(48-124)
Di-n-butylphthalate	4.44	3.77	85	(51-128)
di-n-Octylphthalate	4.44	3.98	90	(45-140)
Fluoranthene	4.44	3.94	89	(50-127)
Fluorene	4.44	3.50	79	(43-125)
Hexachlorobenzene	4.44	3.79	85	(45-122)
Hexachlorobutadiene	4.44	2.94	66	(32-123)
Hexachlorocyclopentadiene	4.44	2.61	59	(45-107)
Hexachloroethane	4.44	2.67	60	(28-117)
Indeno[1,2,3-c,d] pyrene	4.44	4.41	99	(45-133)
Isophorone	4.44	3.34	75	(30-122)
Naphthalene	4.44	2.94	66	(35-123)
Nitrobenzene	4.44	3.02	68	(34-122)
N-Nitrosodimethylamine	4.44	2.71	61	(23-120)

Print Date: 08/30/2024 5:15:30PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49918]
Blank Spike Lab ID: 1776943
Date Analyzed: 08/29/2024 11:42

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013

Results by **SW8270E**

Blank Spike (mg/kg)

Parameter	Spike	Result	Rec (%)	CL
N-Nitroso-di-n-propylamine	4.44	3.22	72	(36-120)
N-Nitrosodiphenylamine	4.44	3.62	81	(38-127)
Pentachlorophenol	8.89	7.24	81	(25-133)
Phenanthrene	4.44	3.64	82	(50-121)
Phenol	4.44	2.84	64	(34-121)
Pyrene	4.44	3.45	78	(47-127)
Surrogates				
2,4,6-Tribromophenol (surr)	8.89		94	(35-125)
2-Fluorobiphenyl (surr)	4.44		75	(44-115)
2-Fluorophenol (surr)	8.89		61	(35-115)
Nitrobenzene-d5 (surr)	4.44		70	(37-122)
Phenol-d6 (surr)	8.89		67	(33-122)
Terphenyl-d14 (surr)	4.44		85	(54-127)

Batch Information

Analytical Batch: **XMS14457**
Analytical Method: **SW8270E**
Instrument: **HP 6890/5973 SSA**
Analyst: **NGG**

Prep Batch: **XXX49918**
Prep Method: **SW3550C**
Prep Date/Time: **07/26/2024 16:19**
Spike Init Wt./Vol.: 4.44 mg/kg Extract Vol: 1 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/30/2024 5:15:30PM

Matrix Spike Summary

Original Sample ID: 1243789002
MS Sample ID: 1776944 MS
MSD Sample ID: 1776945 MSD

Analysis Date: 08/29/2024 12:32
Analysis Date: 08/29/2024 12:49
Analysis Date: 08/29/2024 13:06
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013

Results by **SW8270E**

		Matrix Spike (mg/kg)				Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,2,4-Trichlorobenzene	0.210U	4.92	2.81	57		4.98	3.33	67	34-118	17.00	(< 20)
1,2-Dichlorobenzene	0.210U	4.92	2.53	51		4.98	2.90	58	33-117	13.70	(< 20)
1,3-Dichlorobenzene	0.840U	4.92	2.46	50		4.98	2.86	57	30-115	15.40	(< 20)
1,4-Dichlorobenzene	0.210U	4.92	2.46	50		4.98	2.85	57	31-115	14.90	(< 20)
1-Chloronaphthalene	0.210U	4.92	2.79	57		4.98	3.39	68	48-115	19.20	(< 20)
1-Methylnaphthalene	0.210U	4.92	3.01	61		4.98	3.56	71	40-119	16.70	(< 20)
2,4,5-Trichlorophenol	0.210U	4.92	3.23	66		4.98	3.87	78	41-124	17.80	(< 20)
2,4,6-Trichlorophenol	0.840U	4.92	3.18	65		4.98	3.77	76	39-126	17.30	(< 20)
2,4-Dichlorophenol	0.210U	4.92	3.06	62		4.98	3.59	72	40-122	15.80	(< 20)
2,4-Dimethylphenol	0.420U	4.92	2.96	60		4.98	3.49	70	30-127	16.40	(< 20)
2,4-Dinitrophenol	4.20U	9.82	6.61	67		9.97	8.27	83	62-113	22.30	* (< 20)
2,4-Dinitrotoluene	0.210U	4.92	3.25	66		4.98	4.14	83	48-126	24.00	* (< 20)
2,6-Dichlorophenol	0.210U	4.92	3.06	62		4.98	3.58	72	41-117	15.50	(< 20)
2,6-Dinitrotoluene	0.210U	4.92	3.32	68		4.98	3.92	79	46-124	16.60	(< 20)
2-Chloronaphthalene	0.210U	4.92	3.21	65		4.98	3.57	72	41-114	10.50	(< 20)
2-Chlorophenol	0.210U	4.92	2.59	53		4.98	2.96	60	34-121	13.20	(< 20)
2-Methyl-4,6-dinitrophenol	1.68U	14.7	9.74	66		14.9	11.7	78	29-132	17.50	(< 20)
2-Methylnaphthalene	0.210U	4.92	3.05	62		4.98	3.57	72	38-122	15.70	(< 20)
2-Methylphenol (o-Cresol)	0.210U	4.92	2.69	55		4.98	3.10	62	32-122	13.80	(< 20)
2-Nitroaniline	0.210U	4.92	3.23	66		4.98	3.80	76	44-127	16.30	(< 20)
2-Nitrophenol	0.210U	9.82	5.78	59		9.97	6.72	68	36-123	15.10	(< 20)
3&4-Methylphenol (p&m-Cresol)	0.840U	9.82	5.48	56		9.97	6.26	63	34-119	13.40	(< 20)
3,3-Dichlorobenzidine	0.840U	4.92	3.19	65		4.98	3.91	78	22-121	20.30	* (< 20)
3-Nitroaniline	0.420U	4.92	3.11	63		4.98	3.79	76	33-119	19.60	(< 20)
4-Bromophenyl-phenylether	0.210U	4.92	3.33	68		4.98	4.03	81	46-124	18.80	(< 20)
4-Chloro-3-methylphenol	0.210U	4.92	3.25	66		4.98	3.93	79	45-122	18.90	(< 20)
4-Chloroaniline	0.840U	4.92	2.81	57		4.98	3.28	66	17-106	15.40	(< 20)
4-Chlorophenyl-phenylether	0.210U	4.92	3.30	67		4.98	4.00	80	45-121	19.10	(< 20)
4-Nitroaniline	2.52U	4.92	3.14J	64	*	4.98	3.88	78	77-120	21.20	* (< 20)
4-Nitrophenol	1.68U	9.82	6.17	63		9.97	7.53	76	30-132	19.90	(< 20)
Acenaphthene	0.210U	4.92	3.10	63		4.98	3.52	71	40-123	12.90	(< 20)
Acenaphthylene	0.210U	4.92	3.05	62		4.98	3.57	72	32-132	15.60	(< 20)
Aniline	3.36U	9.82	5.13	52		9.97	5.71	57	24-89	10.70	(< 20)
Anthracene	0.210U	4.92	3.30	67		4.98	3.88	78	47-123	16.30	(< 20)
Azobenzene	0.210U	4.92	3.15	64		4.98	3.75	75	39-125	17.00	(< 20)
Benzo(a)Anthracene	0.210U	4.92	3.41	70		4.98	4.09	82	49-126	17.70	(< 20)
Benzo[a]pyrene	0.210U	4.92	3.38	69		4.98	4.12	83	45-129	19.60	(< 20)

Print Date: 08/30/2024 5:15:32PM

Matrix Spike Summary

Original Sample ID: 1243789002
MS Sample ID: 1776944 MS
MSD Sample ID: 1776945 MSD

Analysis Date: 08/29/2024 12:32
Analysis Date: 08/29/2024 12:49
Analysis Date: 08/29/2024 13:06
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013

Results by **SW8270E**

		Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzo[b]Fluoranthene	0.210U	4.92	3.55	72	4.98	4.52	91	45-132	24.10 *	(< 20)
Benzo[g,h,i]perylene	0.210U	4.92	3.33	68	4.98	3.87	78	43-134	15.00	(< 20)
Benzo[k]fluoranthene	0.210U	4.92	3.02	62	4.98	3.66	73	47-132	19.00	(< 20)
Benzoic acid	1.26U	9.82	5.91	60	9.97	7.36	74	53-124	21.70 *	(< 20)
Benzyl alcohol	0.210U	4.92	3.01	61	4.98	3.43	69	29-122	13.30	(< 20)
Bis(2chloro1methylethyl)Ether	0.210U	4.92	2.96	60	4.98	3.42	69	33-131	14.20	(< 20)
Bis(2-Chloroethoxy)methane	1.68U	4.92	2.95	60	4.98	3.43	69	36-121	15.00	(< 20)
Bis(2-Chloroethyl)ether	0.210U	4.92	2.63	54	4.98	3.00	60	31-120	13.00	(< 20)
bis(2-Ethylhexyl)phthalate	0.210U	4.92	3.43	70	4.98	4.10	82	51-133	17.50	(< 20)
Butylbenzylphthalate	0.210U	4.92	3.29	67	4.98	3.96	80	48-132	18.70	(< 20)
Carbazole	0.210U	4.92	3.33	68	4.98	3.95	79	50-123	17.00	(< 20)
Chrysene	0.210U	4.92	3.40	69	4.98	4.05	81	50-124	17.60	(< 20)
Dibenzo[a,h]anthracene	0.210U	4.92	3.51	72	4.98	4.06	82	45-134	14.40	(< 20)
Dibenzofuran	0.210U	4.92	3.11	63	4.98	3.74	75	44-120	18.30	(< 20)
Diethylphthalate	0.210U	4.92	3.27	67	4.98	4.05	81	50-124	21.30 *	(< 20)
Dimethylphthalate	0.210U	4.92	3.25	66	4.98	3.96	79	48-124	19.40	(< 20)
Di-n-butylphthalate	0.210U	4.92	3.46	70	4.98	4.05	81	51-128	15.80	(< 20)
di-n-Octylphthalate	0.420U	4.92	3.76	77	4.98	4.46	89	45-140	16.80	(< 20)
Fluoranthene	0.210U	4.92	3.46	70	4.98	4.09	82	50-127	16.70	(< 20)
Fluorene	0.210U	4.92	3.22	66	4.98	3.86	78	43-125	18.20	(< 20)
Hexachlorobenzene	0.210U	4.92	3.27	67	4.98	4.04	81	45-122	21.00 *	(< 20)
Hexachlorobutadiene	0.210U	4.92	2.84	58	4.98	3.39	68	32-123	17.50	(< 20)
Hexachlorocyclopentadiene	0.587U	4.92	2.21	45	4.98	2.45	49	45-107	9.80	(< 20)
Hexachloroethane	0.210U	4.92	2.50	51	4.98	2.88	58	28-117	14.00	(< 20)
Indeno[1,2,3-c,d] pyrene	0.210U	4.92	3.45	70	4.98	3.98	80	45-133	14.40	(< 20)
Isophorone	0.210U	4.92	3.04	62	4.98	3.55	71	30-122	15.20	(< 20)
Naphthalene	0.210U	4.92	2.78	57	4.98	3.22	65	35-123	14.70	(< 20)
Nitrobenzene	0.210U	4.92	2.84	58	4.98	3.25	65	34-122	13.50	(< 20)
N-Nitrosodimethylamine	0.210U	4.92	2.54	52	4.98	2.87	58	23-120	12.60	(< 20)
N-Nitroso-di-n-propylamine	0.210U	4.92	2.88	59	4.98	3.31	66	36-120	14.00	(< 20)
N-Nitrosodiphenylamine	0.210U	4.92	3.33	68	4.98	3.93	79	38-127	16.50	(< 20)
Pentachlorophenol	3.36U	9.82	6.21	63	9.97	7.55	76	25-133	19.50	(< 20)
Phenanthrene	0.210U	4.92	3.32	68	4.98	3.93	79	50-121	16.50	(< 20)
Phenol	0.210U	4.92	2.63	54	4.98	3.01	60	34-121	13.30	(< 20)
Pyrene	0.210U	4.92	3.03	62	4.98	3.69	74	47-127	19.60	(< 20)
Surrogates										
2,4,6-Tribromophenol (surr)		9.82	7.28	74	9.97	8.89	89	35-125	19.80	

Print Date: 08/30/2024 5:15:32PM

Matrix Spike Summary

Original Sample ID: 1243789002
MS Sample ID: 1776944 MS
MSD Sample ID: 1776945 MSD

Analysis Date:
Analysis Date: 08/29/2024 12:49
Analysis Date: 08/29/2024 13:06
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787011, 1243787012, 1243787013

Results by **SW8270E**

		Matrix Spike (%)			Spike Duplicate (%)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
2-Fluorobiphenyl (surr)		4.92	3.18	65	4.98	3.64	73	44-115	13.50	
2-Fluorophenol (surr)		9.82	5.17	53	9.97	5.95	60	35-115	14.00	
Nitrobenzene-d5 (surr)		4.92	2.91	59	4.98	3.36	67	37-122	14.40	
Phenol-d6 (surr)		9.82	5.54	57	9.97	6.37	64	33-122	13.90	
Terphenyl-d14 (surr)		4.92	3.33	68	4.98	4.07	82	54-127	20.10	

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Instrument: HP 6890/5973 SSA
Analyst: NGG
Analytical Date/Time: 8/29/2024 12:49:00PM

Prep Batch: XXX49918
Prep Method: Sonication Extraction Soil SW8270
Prep Date/Time: 7/26/2024 4:19:00PM
Prep Initial Wt./Vol.: 22.86g
Prep Extract Vol: 1.00mL

Print Date: 08/30/2024 5:15:32PM

Method Blank

Blank ID: MB for HBN 1895931 [XXX/49920]
Blank Lab ID: 1777089

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787014, 1243787017

Results by **AK102**

Parameter	Results	LOQ/CL	DL	LOD	Units
Diesel Range Organics	15.0U	20.0	9.00	15.0	mg/kg
Surrogates					
5a Androstane (surr)	102	60-120		0	%

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK102
Instrument: Agilent 7890B F
Analyst: KFC
Analytical Date/Time: 7/28/2024 10:05:00AM

Prep Batch: XXX49920
Prep Method: SW3550C
Prep Date/Time: 7/27/2024 9:29:00AM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:35PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49920]
Blank Spike Lab ID: 1777090
Date Analyzed: 07/28/2024 10:15

Spike Duplicate ID: LCSD for HBN 1243787 [XXX49920]
Spike Duplicate Lab ID: 1777091
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017

Results by **AK102**

	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Diesel Range Organics	1110	1220	110	1110	1200	108	(75-125)	1.60	(< 20)
Surrogates									
5a Androstane (surr)	22.2		105	22.2		104	(60-120)	0.91	

Batch Information

Analytical Batch: **XFC16966**
Analytical Method: **AK102**
Instrument: **Agilent 7890B F**
Analyst: **KFC**

Prep Batch: **XXX49920**
Prep Method: **SW3550C**
Prep Date/Time: **07/27/2024 09:29**
Spike Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:38PM

Method Blank

Blank ID: MB for HBN 1895931 [XXX/49920]
Blank Lab ID: 1777089

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787014, 1243787017

Results by **AK103**

Parameter	Results	LOQ/CL	DL	LOD	Units
Residual Range Organics	75.0U	100	43.0	75.0	mg/kg
Surrogates					
n-Triacontane-d62 (surr)	103	60-120		0	%

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK103
Instrument: Agilent 7890B F
Analyst: KFC
Analytical Date/Time: 7/28/2024 10:05:00AM

Prep Batch: XXX49920
Prep Method: SW3550C
Prep Date/Time: 7/27/2024 9:29:00AM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:41PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49920]
Blank Spike Lab ID: 1777090
Date Analyzed: 07/28/2024 10:15

Spike Duplicate ID: LCSD for HBN 1243787 [XXX49920]
Spike Duplicate Lab ID: 1777091
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017

Results by **AK103**

	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Residual Range Organics	1110	1170	105	1110	1150	103	(60-120)	1.60	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	22.2		104	22.2		101	(60-120)	3.10	

Batch Information

Analytical Batch: **XFC16966**
Analytical Method: **AK103**
Instrument: **Agilent 7890B F**
Analyst: **KFC**

Prep Batch: **XXX49920**
Prep Method: **SW3550C**
Prep Date/Time: **07/27/2024 09:29**
Spike Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:45PM

Method Blank

Blank ID: MB for HBN 1895934 [XXX/49923]
Blank Lab ID: 1777099

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787019, 1243787022, 1243787024

Results by **AK102**

Parameter	Results	LOQ/CL	DL	LOD	Units
Diesel Range Organics	15.0U	20.0	9.00	15.0	mg/kg
Surrogates					
5a Androstane (surr)	104	60-120		0	%

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK102
Instrument: Agilent 7890B F
Analyst: KFC
Analytical Date/Time: 7/28/2024 5:09:00PM

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 7/27/2024 1:31:00PM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:48PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49923]
Blank Spike Lab ID: 1777100
Date Analyzed: 07/28/2024 17:19

Spike Duplicate ID: LCSD for HBN 1243787 [XXX49923]
Spike Duplicate Lab ID: 1777101
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787019, 1243787022, 1243787024

Results by **AK102**

	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Diesel Range Organics	1110	1260	114	1110	1260	114	(75-125)	0.05	(< 20)
Surrogates									
5a Androstane (surr)	22.2		107	22.2		107	(60-120)	0.44	

Batch Information

Analytical Batch: **XFC16966**
Analytical Method: **AK102**
Instrument: **Agilent 7890B F**
Analyst: **KFC**

Prep Batch: **XXX49923**
Prep Method: **SW3550C**
Prep Date/Time: **07/27/2024 13:31**
Spike Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:51PM

Method Blank

Blank ID: MB for HBN 1895934 [XXX/49923]
Blank Lab ID: 1777099

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787019, 1243787022, 1243787024

Results by **AK103**

Parameter	Results	LOQ/CL	DL	LOD	Units
Residual Range Organics	75.0U	100	43.0	75.0	mg/kg
Surrogates					
n-Triacontane-d62 (surr)	104	60-120		0	%

Batch Information

Analytical Batch: XFC16966
Analytical Method: AK103
Instrument: Agilent 7890B F
Analyst: KFC
Analytical Date/Time: 7/28/2024 5:09:00PM

Prep Batch: XXX49923
Prep Method: SW3550C
Prep Date/Time: 7/27/2024 1:31:00PM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:55PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49923]
Blank Spike Lab ID: 1777100
Date Analyzed: 07/28/2024 17:19

Spike Duplicate ID: LCSD for HBN 1243787 [XXX49923]
Spike Duplicate Lab ID: 1777101
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787019, 1243787022, 1243787024

Results by **AK103**

	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Residual Range Organics	1110	1220	110	1110	1220	110	(60-120)	0.03	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	22.2		105	22.2		104	(60-120)	0.93	

Batch Information

Analytical Batch: **XFC16966**
Analytical Method: **AK103**
Instrument: **Agilent 7890B F**
Analyst: **KFC**

Prep Batch: **XXX49923**
Prep Method: **SW3550C**
Prep Date/Time: **07/27/2024 13:31**
Spike Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: 22.2 mg/kg Extract Vol: 5 mL

Print Date: 08/30/2024 5:15:59PM

Method Blank

Blank ID: MB for HBN 1896140 [XXX/49926]
Blank Lab ID: 1777206

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

Parameter	Results	LOQ/CL	DL	LOD	Units
1,2,4-Trichlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
1,2-Dichlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
1,3-Dichlorobenzene	0.750U	1.00	0.300	0.750	mg/kg
1,4-Dichlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
1-Chloronaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
1-Methylnaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
2,4,5-Trichlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2,4,6-Trichlorophenol	0.750U	1.00	0.300	0.750	mg/kg
2,4-Dichlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2,4-Dimethylphenol	0.375U	0.500	0.125	0.375	mg/kg
2,4-Dinitrophenol	3.75U	5.00	1.50	3.75	mg/kg
2,4-Dinitrotoluene	0.188U	0.250	0.0780	0.188	mg/kg
2,6-Dichlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2,6-Dinitrotoluene	0.188U	0.250	0.0780	0.188	mg/kg
2-Chloronaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
2-Chlorophenol	0.188U	0.250	0.0780	0.188	mg/kg
2-Methyl-4,6-dinitrophenol	1.50U	2.00	0.620	1.50	mg/kg
2-Methylnaphthalene	0.188U	0.250	0.0780	0.188	mg/kg
2-Methylphenol (o-Cresol)	0.188U	0.250	0.0780	0.188	mg/kg
2-Nitroaniline	0.188U	0.250	0.0780	0.188	mg/kg
2-Nitrophenol	0.188U	0.250	0.0780	0.188	mg/kg
3&4-Methylphenol (p&m-Cresol)	0.750U	1.00	0.310	0.750	mg/kg
3,3-Dichlorobenzidine	0.750U	1.00	0.300	0.750	mg/kg
3-Nitroaniline	0.375U	0.500	0.150	0.375	mg/kg
4-Bromophenyl-phenylether	0.188U	0.250	0.0780	0.188	mg/kg
4-Chloro-3-methylphenol	0.188U	0.250	0.0780	0.188	mg/kg
4-Chloroaniline	0.750U	1.00	0.310	0.750	mg/kg
4-Chlorophenyl-phenylether	0.188U	0.250	0.0780	0.188	mg/kg
4-Nitroaniline	2.25U	3.00	0.940	2.25	mg/kg
4-Nitrophenol	1.50U	2.00	0.620	1.50	mg/kg
Acenaphthene	0.188U	0.250	0.0780	0.188	mg/kg
Acenaphthylene	0.188U	0.250	0.0780	0.188	mg/kg
Aniline	3.00U	4.00	1.00	3.00	mg/kg
Anthracene	0.188U	0.250	0.0780	0.188	mg/kg
Azobenzene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo(a)Anthracene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[a]pyrene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[b]Fluoranthene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[g,h,i]perylene	0.188U	0.250	0.0780	0.188	mg/kg
Benzo[k]fluoranthene	0.188U	0.250	0.0780	0.188	mg/kg
Benzoic acid	1.13U	1.50	0.470	1.13	mg/kg
Benzyl alcohol	0.188U	0.250	0.0780	0.188	mg/kg

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Method Blank

Blank ID: MB for HBN 1896140 [XXX/49926]
Blank Lab ID: 1777206

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

Parameter	Results	LOQ/CL	DL	LOD	Units
Bis(2chloro1methylethyl)Ether	0.188U	0.250	0.0780	0.188	mg/kg
Bis(2-Chloroethoxy)methane	1.50U	2.00	0.600	1.50	mg/kg
Bis(2-Chloroethyl)ether	0.188U	0.250	0.0780	0.188	mg/kg
bis(2-Ethylhexyl)phthalate	0.188U	0.250	0.0780	0.188	mg/kg
Butylbenzylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
Carbazole	0.188U	0.250	0.0780	0.188	mg/kg
Chrysene	0.188U	0.250	0.0780	0.188	mg/kg
Dibenzo[a,h]anthracene	0.188U	0.250	0.0780	0.188	mg/kg
Dibenzofuran	0.188U	0.250	0.0780	0.188	mg/kg
Diethylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
Dimethylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
Di-n-butylphthalate	0.188U	0.250	0.0780	0.188	mg/kg
di-n-Octylphthalate	0.375U	0.500	0.150	0.375	mg/kg
Fluoranthene	0.188U	0.250	0.0780	0.188	mg/kg
Fluorene	0.188U	0.250	0.0780	0.188	mg/kg
Hexachlorobenzene	0.188U	0.250	0.0780	0.188	mg/kg
Hexachlorobutadiene	0.188U	0.250	0.0780	0.188	mg/kg
Hexachlorocyclopentadiene	0.525U	0.700	0.200	0.525	mg/kg
Hexachloroethane	0.188U	0.250	0.0780	0.188	mg/kg
Indeno[1,2,3-c,d] pyrene	0.188U	0.250	0.0780	0.188	mg/kg
Isophorone	0.188U	0.250	0.0780	0.188	mg/kg
Naphthalene	0.188U	0.250	0.0780	0.188	mg/kg
Nitrobenzene	0.188U	0.250	0.0780	0.188	mg/kg
N-Nitrosodimethylamine	0.188U	0.250	0.0780	0.188	mg/kg
N-Nitroso-di-n-propylamine	0.188U	0.250	0.0780	0.188	mg/kg
N-Nitrosodiphenylamine	0.188U	0.250	0.0780	0.188	mg/kg
Pentachlorophenol	3.00U	4.00	1.00	3.00	mg/kg
Phenanthrene	0.188U	0.250	0.0780	0.188	mg/kg
Phenol	0.188U	0.250	0.0780	0.188	mg/kg
Pyrene	0.188U	0.250	0.0780	0.188	mg/kg
Surrogates					
2,4,6-Tribromophenol (surr)	87.4	35-125		0	%
2-Fluorobiphenyl (surr)	70.7	44-115		0	%
2-Fluorophenol (surr)	60.7	35-115		0	%
Nitrobenzene-d5 (surr)	61.4	37-122		0	%
Phenol-d6 (surr)	65.9	33-122		0	%
Terphenyl-d14 (surr)	92	54-127		0	%

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Method Blank

Blank ID: MB for HBN 1896140 [XXX/49926]
Blank Lab ID: 1777206

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

Parameter	Results	LOQ/CL	DL	LOD	Units

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Instrument: HP 6890/5973 SSA
Analyst: NGG
Analytical Date/Time: 8/29/2024 11:59:00AM

Prep Batch: XXX49926
Prep Method: SW3550C
Prep Date/Time: 7/29/2024 9:46:00AM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 1 mL

Print Date: 08/30/2024 5:16:03PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49926]
Blank Spike Lab ID: 1777207
Date Analyzed: 08/29/2024 12:16

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

Blank Spike (mg/kg)

Parameter	Spike	Result	Rec (%)	CL
1,2,4-Trichlorobenzene	4.44	3.10	70	(34-118)
1,2-Dichlorobenzene	4.44	2.77	62	(33-117)
1,3-Dichlorobenzene	4.44	2.71	61	(30-115)
1,4-Dichlorobenzene	4.44	2.72	61	(31-115)
1-Chloronaphthalene	4.44	3.24	73	(48-115)
1-Methylnaphthalene	4.44	3.37	76	(40-119)
2,4,5-Trichlorophenol	4.44	3.75	84	(41-124)
2,4,6-Trichlorophenol	4.44	3.64	82	(39-126)
2,4-Dichlorophenol	4.44	3.37	76	(40-122)
2,4-Dimethylphenol	4.44	3.17	71	(30-127)
2,4-Dinitrophenol	8.89	8.27	93	(62-113)
2,4-Dinitrotoluene	4.44	4.11	92	(48-126)
2,6-Dichlorophenol	4.44	3.36	76	(41-117)
2,6-Dinitrotoluene	4.44	3.93	88	(46-124)
2-Chloronaphthalene	4.44	3.39	76	(41-114)
2-Chlorophenol	4.44	2.87	65	(34-121)
2-Methyl-4,6-dinitrophenol	13.3	11.7	88	(29-132)
2-Methylnaphthalene	4.44	3.35	75	(38-122)
2-Methylphenol (o-Cresol)	4.44	3.06	69	(32-122)
2-Nitroaniline	4.44	3.80	86	(44-127)
2-Nitrophenol	8.89	6.39	72	(36-123)
3&4-Methylphenol (p&m-Cresol)	8.89	6.12	69	(34-119)
3,3-Dichlorobenzidine	4.44	3.70	83	(22-121)
3-Nitroaniline	4.44	3.83	86	(33-119)
4-Bromophenyl-phenylether	4.44	3.95	89	(46-124)
4-Chloro-3-methylphenol	4.44	3.79	85	(45-122)
4-Chloroaniline	4.44	3.23	73	(17-106)
4-Chlorophenyl-phenylether	4.44	3.87	87	(45-121)
4-Nitroaniline	4.44	3.95	89	(77-120)
4-Nitrophenol	8.89	7.76	87	(30-132)
Acenaphthene	4.44	3.48	78	(40-123)
Acenaphthylene	4.44	3.56	80	(32-132)
Aniline	8.89	5.77	65	(24-89)

Print Date: 08/30/2024 5:16:06PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49926]
Blank Spike Lab ID: 1777207
Date Analyzed: 08/29/2024 12:16

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

Blank Spike (mg/kg)

Parameter	Spike	Result	Rec (%)	CL
Anthracene	4.44	3.85	87	(47-123)
Azobenzene	4.44	3.66	82	(39-125)
Benzo(a)Anthracene	4.44	3.99	90	(49-126)
Benzo[a]pyrene	4.44	4.07	92	(45-129)
Benzo[b]Fluoranthene	4.44	4.05	91	(45-132)
Benzo[g,h,i]perylene	4.44	4.84	109	(43-134)
Benzo[k]fluoranthene	4.44	3.87	87	(47-132)
Benzoic acid	8.89	7.34	83	(53-124)
Benzyl alcohol	4.44	3.35	75	(29-122)
Bis(2chloro1methylethyl)Ether	4.44	3.30	74	(33-131)
Bis(2-Chloroethoxy)methane	4.44	3.31	75	(36-121)
Bis(2-Chloroethyl)ether	4.44	2.92	66	(31-120)
bis(2-Ethylhexyl)phthalate	4.44	4.07	92	(51-133)
Butylbenzylphthalate	4.44	3.92	88	(48-132)
Carbazole	4.44	4.02	91	(50-123)
Chrysene	4.44	4.01	90	(50-124)
Dibenzo[a,h]anthracene	4.44	4.94	111	(45-134)
Dibenzofuran	4.44	3.66	82	(44-120)
Diethylphthalate	4.44	4.04	91	(50-124)
Dimethylphthalate	4.44	3.96	89	(48-124)
Di-n-butylphthalate	4.44	4.16	94	(51-128)
di-n-Octylphthalate	4.44	4.30	97	(45-140)
Fluoranthene	4.44	4.19	94	(50-127)
Fluorene	4.44	3.82	86	(43-125)
Hexachlorobenzene	4.44	3.95	89	(45-122)
Hexachlorobutadiene	4.44	3.09	70	(32-123)
Hexachlorocyclopentadiene	4.44	2.53	57	(45-107)
Hexachloroethane	4.44	2.74	62	(28-117)
Indeno[1,2,3-c,d] pyrene	4.44	4.84	109	(45-133)
Isophorone	4.44	3.46	78	(30-122)
Naphthalene	4.44	3.06	69	(35-123)
Nitrobenzene	4.44	3.10	70	(34-122)
N-Nitrosodimethylamine	4.44	2.76	62	(23-120)

Print Date: 08/30/2024 5:16:06PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX49926]
Blank Spike Lab ID: 1777207
Date Analyzed: 08/29/2024 12:16

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

	Blank Spike (mg/kg)			
Parameter	Spike	Result	Rec (%)	CL
N-Nitroso-di-n-propylamine	4.44	3.29	74	(36-120)
N-Nitrosodiphenylamine	4.44	3.83	86	(38-127)
Pentachlorophenol	8.89	7.40	83	(25-133)
Phenanthrene	4.44	3.89	88	(50-121)
Phenol	4.44	2.95	66	(34-121)
Pyrene	4.44	3.67	83	(47-127)
Surrogates				
2,4,6-Tribromophenol (surr)	8.89		96	(35-125)
2-Fluorobiphenyl (surr)	4.44		78	(44-115)
2-Fluorophenol (surr)	8.89		63	(35-115)
Nitrobenzene-d5 (surr)	4.44		71	(37-122)
Phenol-d6 (surr)	8.89		68	(33-122)
Terphenyl-d14 (surr)	4.44		89	(54-127)

Batch Information

Analytical Batch: **XMS14457**
Analytical Method: **SW8270E**
Instrument: **HP 6890/5973 SSA**
Analyst: **NGG**

Prep Batch: **XXX49926**
Prep Method: **SW3550C**
Prep Date/Time: **07/29/2024 09:46**
Spike Init Wt./Vol.: 4.44 mg/kg Extract Vol: 1 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/30/2024 5:16:06PM

Matrix Spike Summary

Original Sample ID: 1243859014
MS Sample ID: 1784831 MS
MSD Sample ID: 1784832 MSD

Analysis Date: 08/29/2024 20:06
Analysis Date: 08/29/2024 20:23
Analysis Date: 08/29/2024 20:40
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

		Matrix Spike (mg/kg)				Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,2,4-Trichlorobenzene	0.196U	4.61	2.60	56		4.63	3.22	70	34-118	21.80 *	(< 20)
1,2-Dichlorobenzene	0.196U	4.61	2.24	49		4.63	2.83	61	33-117	23.50 *	(< 20)
1,3-Dichlorobenzene	0.780U	4.61	2.14	46		4.63	2.79	60	30-115	26.30 *	(< 20)
1,4-Dichlorobenzene	0.196U	4.61	2.13	46		4.63	2.79	60	31-115	26.70 *	(< 20)
1-Chloronaphthalene	0.196U	4.61	2.92	63		4.63	3.36	72	48-115	13.90	(< 20)
1-Methylnaphthalene	0.196U	4.61	2.87	62		4.63	3.34	72	40-119	15.10	(< 20)
2,4,5-Trichlorophenol	0.196U	4.61	3.46	75		4.63	3.75	81	41-124	8.30	(< 20)
2,4,6-Trichlorophenol	0.780U	4.61	3.33	72		4.63	3.69	80	39-126	10.30	(< 20)
2,4-Dichlorophenol	0.196U	4.61	2.93	63		4.63	3.43	74	40-122	15.80	(< 20)
2,4-Dimethylphenol	0.392U	4.61	2.71	59		4.63	3.11	67	30-127	13.70	(< 20)
2,4-Dinitrophenol	3.92U	9.23	6.64	72		9.27	6.98	75	62-113	5.10	(< 20)
2,4-Dinitrotoluene	0.196U	4.61	3.65	79		4.63	3.88	84	48-126	6.40	(< 20)
2,6-Dichlorophenol	0.196U	4.61	2.86	62		4.63	3.41	74	41-117	17.40	(< 20)
2,6-Dinitrotoluene	0.196U	4.61	3.39	74		4.63	3.72	80	46-124	9.20	(< 20)
2-Chloronaphthalene	0.196U	4.61	2.87	62		4.63	3.29	71	41-114	13.50	(< 20)
2-Chlorophenol	0.196U	4.61	2.30	50		4.63	2.91	63	34-121	23.00 *	(< 20)
2-Methyl-4,6-dinitrophenol	1.57U	13.9	9.68	70		13.9	10.2	73	29-132	5.00	(< 20)
2-Methylnaphthalene	0.196U	4.61	2.86	62		4.63	3.41	74	38-122	17.40	(< 20)
2-Methylphenol (o-Cresol)	0.196U	4.61	2.43	53		4.63	2.93	63	32-122	18.50	(< 20)
2-Nitroaniline	0.196U	4.61	3.33	72		4.63	3.64	79	44-127	8.90	(< 20)
2-Nitrophenol	0.196U	9.23	5.21	56		9.27	6.35	69	36-123	19.90	(< 20)
3&4-Methylphenol (p&m-Cresol)	0.780U	9.23	4.88	53		9.27	5.75	62	34-119	16.40	(< 20)
3,3-Dichlorobenzidine	0.780U	4.61	2.81	61		4.63	2.95	64	22-121	4.80	(< 20)
3-Nitroaniline	0.392U	4.61	3.38	73		4.63	3.56	77	33-119	5.30	(< 20)
4-Bromophenyl-phenylether	0.196U	4.61	3.62	78		4.63	3.91	84	46-124	7.90	(< 20)
4-Chloro-3-methylphenol	0.196U	4.61	3.41	74		4.63	3.68	80	45-122	7.70	(< 20)
4-Chloroaniline	0.780U	4.61	2.60	56		4.63	2.96	64	17-106	13.00	(< 20)
4-Chlorophenyl-phenylether	0.196U	4.61	3.53	76		4.63	3.86	83	45-121	9.00	(< 20)
4-Nitroaniline	2.35U	4.61	3.43	74	*	4.63	3.62	78	77-120	5.30	(< 20)
4-Nitrophenol	1.57U	9.23	6.61	72		9.27	6.88	74	30-132	4.00	(< 20)
Acenaphthene	0.196U	4.61	3.04	66		4.63	3.47	75	40-123	12.80	(< 20)
Acenaphthylene	0.196U	4.61	3.01	65		4.63	3.37	73	32-132	11.40	(< 20)
Aniline	3.13U	9.23	3.97J	43		9.27	4.91	53	24-89	21.20 *	(< 20)
Anthracene	0.196U	4.61	3.41	74		4.63	3.65	79	47-123	6.70	(< 20)
Azobenzene	0.196U	4.61	3.21	70		4.63	3.48	75	39-125	7.90	(< 20)
Benzo(a)Anthracene	0.196U	4.61	3.72	81		4.63	3.90	84	49-126	4.70	(< 20)
Benzo[a]pyrene	0.196U	4.61	3.64	79		4.63	3.86	83	45-129	6.00	(< 20)

Print Date: 08/30/2024 5:16:08PM

Matrix Spike Summary

Original Sample ID: 1243859014
MS Sample ID: 1784831 MS
MSD Sample ID: 1784832 MSD

Analysis Date: 08/29/2024 20:06
Analysis Date: 08/29/2024 20:23
Analysis Date: 08/29/2024 20:40
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

		Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzo[b]Fluoranthene	0.196U	4.61	4.11	89	4.63	4.26	92	45-132	3.30	(< 20)
Benzo[g,h,i]perylene	0.196U	4.61	3.88	84	4.63	4.19	91	43-134	7.70	(< 20)
Benzo[k]fluoranthene	0.196U	4.61	3.46	75	4.63	3.71	80	47-132	7.20	(< 20)
Benzoic acid	1.18U	9.23	6.61	72	9.27	7.12	77	53-124	7.50	(< 20)
Benzyl alcohol	0.196U	4.61	2.67	58	4.63	3.28	71	29-122	20.10 *	(< 20)
Bis(2chloro1methylethyl)Ether	0.196U	4.61	2.60	56	4.63	3.30	71	33-131	23.70 *	(< 20)
Bis(2-Chloroethoxy)methane	1.57U	4.61	2.67	58	4.63	3.22	70	36-121	18.50	(< 20)
Bis(2-Chloroethyl)ether	0.196U	4.61	2.23	48	4.63	2.82	61	31-120	23.40 *	(< 20)
bis(2-Ethylhexyl)phthalate	0.196U	4.61	4.07	88	4.63	4.36	94	51-133	6.80	(< 20)
Butylbenzylphthalate	0.196U	4.61	3.96	86	4.63	4.16	90	48-132	4.90	(< 20)
Carbazole	0.196U	4.61	3.48	75	4.63	3.73	81	50-123	7.10	(< 20)
Chrysene	0.196U	4.61	3.71	80	4.63	3.87	84	50-124	4.40	(< 20)
Dibenzo[a,h]anthracene	0.196U	4.61	3.88	84	4.63	4.21	91	45-134	8.10	(< 20)
Dibenzofuran	0.196U	4.61	3.23	70	4.63	3.59	78	44-120	10.70	(< 20)
Diethylphthalate	0.196U	4.61	3.62	78	4.63	3.93	85	50-124	8.30	(< 20)
Dimethylphthalate	0.196U	4.61	3.45	75	4.63	3.80	82	48-124	9.50	(< 20)
Di-n-butylphthalate	0.196U	4.61	3.69	80	4.63	3.99	86	51-128	7.90	(< 20)
di-n-Octylphthalate	0.392U	4.61	3.98	86	4.63	4.33	93	45-140	8.50	(< 20)
Fluoranthene	0.196U	4.61	3.58	78	4.63	3.88	84	50-127	7.90	(< 20)
Fluorene	0.196U	4.61	3.36	73	4.63	3.68	79	43-125	8.90	(< 20)
Hexachlorobenzene	0.196U	4.61	3.61	78	4.63	3.87	83	45-122	6.90	(< 20)
Hexachlorobutadiene	0.196U	4.61	2.59	56	4.63	3.27	71	32-123	23.10 *	(< 20)
Hexachlorocyclopentadiene	0.548U	4.61	0.752	16 *	4.63	0.883	19 *	45-107	16.10	(< 20)
Hexachloroethane	0.196U	4.61	2.07	45	4.63	2.66	58	28-117	25.30 *	(< 20)
Indeno[1,2,3-c,d] pyrene	0.196U	4.61	3.86	84	4.63	4.19	90	45-133	8.20	(< 20)
Isophorone	0.196U	4.61	2.84	62	4.63	3.35	72	30-122	16.30	(< 20)
Naphthalene	0.196U	4.61	2.52	55	4.63	3.09	67	35-123	20.10 *	(< 20)
Nitrobenzene	0.196U	4.61	2.46	53	4.63	3.06	66	34-122	21.70 *	(< 20)
N-Nitrosodimethylamine	0.196U	4.61	2.14	47	4.63	2.82	61	23-120	27.20 *	(< 20)
N-Nitroso-di-n-propylamine	0.196U	4.61	2.53	55	4.63	3.06	66	36-120	18.90	(< 20)
N-Nitrosodiphenylamine	0.196U	4.61	3.43	74	4.63	3.68	79	38-127	7.00	(< 20)
Pentachlorophenol	3.13U	9.23	6.72	73	9.27	7.08	77	25-133	5.30	(< 20)
Phenanthrene	0.196U	4.61	3.53	76	4.63	3.72	80	50-121	5.20	(< 20)
Phenol	0.196U	4.61	2.32	50	4.63	2.85	62	34-121	20.60 *	(< 20)
Pyrene	0.196U	4.61	3.69	80	4.63	3.72	80	47-127	1.10	(< 20)
Surrogates										
2,4,6-Tribromophenol (surr)		9.23	7.82	85	9.27	8.38	90	35-125	7.00	

Print Date: 08/30/2024 5:16:08PM

Matrix Spike Summary

Original Sample ID: 1243859014
MS Sample ID: 1784831 MS
MSD Sample ID: 1784832 MSD

Analysis Date:
Analysis Date: 08/29/2024 20:23
Analysis Date: 08/29/2024 20:40
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787014, 1243787017, 1243787019, 1243787022, 1243787024

Results by **SW8270E**

		Matrix Spike (%)			Spike Duplicate (%)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
2-Fluorobiphenyl (surr)		4.61	2.96	64	4.63	3.39	73	44-115	13.80	
2-Fluorophenol (surr)		9.23	4.32	47	9.27	5.72	62	35-115	27.90	
Nitrobenzene-d5 (surr)		4.61	2.52	55	4.63	3.13	67	37-122	21.10	
Phenol-d6 (surr)		9.23	4.76	52	9.27	6.02	65	33-122	23.40	
Terphenyl-d14 (surr)		4.61	4.06	88	4.63	4.17	90	54-127	2.70	

Batch Information

Analytical Batch: XMS14457
Analytical Method: SW8270E
Instrument: HP 6890/5973 SSA
Analyst: NGG
Analytical Date/Time: 8/29/2024 8:23:00PM

Prep Batch: XXX49926
Prep Method: Sonication Extraction Soil SW8270
Prep Date/Time: 7/29/2024 9:46:00AM
Prep Initial Wt./Vol.: 22.98g
Prep Extract Vol: 1.00mL

Print Date: 08/30/2024 5:16:08PM

Method Blank

Blank ID: MB for HBN 1898135 [XXX/50134]
Blank Lab ID: 1782410

Matrix: Soil/Solid (dry weight)

QC for Samples:
1243787017, 1243787021

Results by **SW8082A**

Parameter	Results	LOQ/CL	DL	LOD	Units
Aroclor-1016	37.5U	50.0	12.5	37.5	ug/kg
Aroclor-1221	75.0U	100	25.0	75.0	ug/kg
Aroclor-1232	37.5U	50.0	12.5	37.5	ug/kg
Aroclor-1242	37.5U	50.0	12.5	37.5	ug/kg
Aroclor-1248	37.5U	50.0	12.5	37.5	ug/kg
Aroclor-1254	37.5U	50.0	12.5	37.5	ug/kg
Aroclor-1260	37.5U	50.0	12.5	37.5	ug/kg
Surrogates					
Decachlorobiphenyl (surr)	97.5	60-125		0	%

Batch Information

Analytical Batch: XGC11547
Analytical Method: SW8082A
Instrument: Agilent 7890B GC ECD SW R
Analyst: OZH
Analytical Date/Time: 8/23/2024 8:27:00PM

Prep Batch: XXX50134
Prep Method: SW3546
Prep Date/Time: 8/20/2024 12:00:00PM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

Print Date: 08/30/2024 5:16:10PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1243787 [XXX50134]
Blank Spike Lab ID: 1782411
Date Analyzed: 08/23/2024 20:38

Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787017, 1243787021

Results by **SW8082A**

Blank Spike (ug/kg)

Parameter	Spike	Result	Rec (%)	CL
Aroclor-1016	222	164	74	(47-134)
Aroclor-1260	222	184	83	(53-140)
Surrogates				
Decachlorobiphenyl (surr)	88.9		95	(60-125)

Batch Information

Analytical Batch: **XGC11547**
Analytical Method: **SW8082A**
Instrument: **Agilent 7890B GC ECD SW R**
Analyst: **OZH**

Prep Batch: **XXX50134**
Prep Method: **SW3546**
Prep Date/Time: **08/20/2024 12:00**
Spike Init Wt./Vol.: 222 ug/kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/30/2024 5:16:13PM

Matrix Spike Summary

Original Sample ID: 1243518015
MS Sample ID: 1782412 MS
MSD Sample ID: 1782413 MSD

Analysis Date: 08/24/2024 4:20
Analysis Date: 08/23/2024 23:32
Analysis Date: 08/23/2024 23:53
Matrix: Soil/Solid (dry weight)

QC for Samples: 1243787017, 1243787021

Results by **SW8082A**

		Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Aroclor-1016	40.4U	237	171	72	239	162	68	47-134	4.68	(< 30)
Aroclor-1260	14.4J	237	185	78	239	172	72	53-140	6.97	(< 30)
Surrogates										
Decachlorobiphenyl (surr)		94.5	87.5	93	95.5	81.2	85	60-125	7.42	

Batch Information

Analytical Batch: XGC11547
Analytical Method: SW8082A
Instrument: Agilent 7890B GC ECD SW R
Analyst: OZH
Analytical Date/Time: 8/23/2024 11:32:00PM

Prep Batch: XXX50134
Prep Method: Microwave Extraction Soil SW8082 PCB
Prep Date/Time: 8/20/2024 12:00:00PM
Prep Initial Wt./Vol.: 22.85g
Prep Extract Vol: 5.00mL

Print Date: 08/30/2024 5:16:21PM

Whisman, Curtis (Anchorage)

From: Qureshi, Nabi A (DEC) <nabi.qureshi@alaska.gov>
Sent: Monday, July 22, 2024 3:17 PM
To: Whisman, Curtis (Anchorage)
Cc: Waldo, Nick B (DEC); Ballard, Flannery (DEC)
Subject: RE: [EXTERNAL] RE: 1243787: Percent Solids

Follow Up Flag: Follow up
Flag Status: Completed

Thanks for the clarification, Curtis, we would prefer to have the dry weight for these samples. For sample 18, please use the DRO/RRO containers from sample 17 to calculate percent solids. For sample 20, please use the DRO/RRO containers from sample 19. Please make note of this in the final lab report as well.

Thank you. Best,

Nabi Qureshi

From: Whisman, Curtis (Anchorage) <Curtis.Whisman@sgs.com>
Sent: Monday, July 22, 2024 1:15 PM
To: Qureshi, Nabi A (DEC) <nabi.qureshi@alaska.gov>
Cc: Waldo, Nick B (DEC) <nick.waldo@alaska.gov>; Ballard, Flannery (DEC) <flannery.ballard@alaska.gov>
Subject: RE: [EXTERNAL] RE: 1243787: Percent Solids

Nabi,

I apologize, the affected samples are 18 and 20, not 14 and 20. And you are correct, we can run the percent solids out of the DRO/RRO containers, but these two samples were the only ones to not have the DRO/RRO requested. I apologize for the confusion.

Please let me know if you have any more questions.

Curtis Whisman
Industries & Environment
Project Manager
SGS North America Inc.

Phone: (907) 562-2343

From: Qureshi, Nabi A (DEC) <nabi.qureshi@alaska.gov>
Sent: Monday, July 22, 2024 1:05 PM
To: Whisman, Curtis (Anchorage) <Curtis.Whisman@sgs.com>

Cc: Waldo, Nick B (DEC) <nick.waldo@alaska.gov>; Ballard, Flannery (DEC) <flannery.ballard@alaska.gov>
Subject: [EXTERNAL] RE: 1243787: Percent Solids

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi Curtis,

We called SGS when in the field last week and were told that we wouldn't need a specified sample for percent solids and the DRO/RRO sample could be used in the case of us not specifying a MS/MSD. If that's not possible, then please run the analysis regardless and report the wet weight results. Please describe the discrepancies in the final report as well.

Best,

Nabi Qureshi

From: Whisman, Curtis (Anchorage) <Curtis.Whisman@sgs.com>
Sent: Monday, July 22, 2024 12:05 PM
To: Qureshi, Nabi A (DEC) <nabi.qureshi@alaska.gov>
Cc: Waldo, Nick B (DEC) <nick.waldo@alaska.gov>
Subject: 1243787: Percent Solids

CAUTION: This email originated from outside the State of Alaska mail system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Nabi,

For the attached workorder we have run into a problem. We did not receive unpreserved containers for samples 14 (2407ELIM-TANK02SUB) , and 20 (2407ELIM-TANK0755). We need this container to perform the percent solids analysis so we can do a dry weight correction for the results. We currently have these logged into our system to run the analysis and report the wet weight results.

Let me know if you have any questions.

Curtis Whisman
Industries & Environment
Project Manager
SGS North America Inc.
200 W Potter Dr.
Anchorage, AK 99518
Phone: (907) 562-2343
Email: curtis.whisman@sgs.com

Alaska Department of Environmental Conservation
Contaminated Sites Program

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1243787
Elim Old AVEC Tank Farm APA

Profile #: 429267 Int.: GW www.us.sgs.com

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Page 1 of 3

Section 1

CLIENT: ADEC Contaminated Sites	
CONTACT: Nabi Qureshi	PHONE #: 907-269-1099
PROJECT NAME: Norton Sound	Project/Permit Number: NPDL Number(DOD):
REPORTS TO: Nick Waldo	E-MAIL: nabi.qureshi@alaska.gov
INVOICE TO: ADEC	QUOTE #: P.O. #:

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Sample Type Comp Grab MI	Preservative: MeOH +BFB	None	None	MeOH +BFB	None	None	None	Analysis* AK101 +BTEX	AK102	AK103	EPA 8260	EPA 8270	EPA 6020	EPA 8082				REMARKS/LOC ID
1AB	2407GOL-TP1	7/17/24	12:48pm	S	2	G								X	X	X								
2AB	2407GOL-TP2	7/17/24	12:56pm	S	2	G								X	X	X								
3AB	2407GOL-TP3	7/17/24	1:01 pm	S	2	G								X	X	X								
4AB	2407GOL-TP4	7/17/24	1:08pm	S	2	G								X	X	X								
5AB	2407GOL-TP5	7/17/24	1:13 pm	S	2	G								X	X	X								
6A	2407 GOL-backg	7/17/24	12:28pm	S	1	G													X					
7A	2407 GOL-met01	7/17/24	12:29pm	S	1	G													X					
8A	2407 GOL-met02	7/17/24	12:31 pm	S	1	G													X					
9A	2407ELM-METBACK	7/18/24	1:04pm	S	1	G													X					
10AL	2407ELIM-CON0955	7/18/24	1:09pm	S	3	G								X	X	X			X					

NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Comments:

Section 4

DOD Project? YES (NO)

Data Deliverables Requested: DataView, Level 4, SEDD, ERPIMS, EQUIS, Other:_____

Turnaround Time Requested
Standard
Rush
Requested Rush Report Date:_____

SGS Sample Receipt (Lab Use Only)
Delivery Method: (Client) Commercial
Did each cooler have a corresponding COC? (Yes) No
Chain of Custody Seal Condition: (INTACT) BROKEN ABSENT
COC Seal Location(s): 2I - 2F

Section 5

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
JBallmer	7/19/24	9:25am	
	7/19/24	1612	RECEIVED BY

Cooler ID	Temperature (°C)	Therm. ID
1. 1	2.4	D55
2. 2	2.2	D21
3.		

If more than three coolers are received, or for documentation of non-compliant coolers, use form FS-0029.

Note: If temp. is outside 0-6° and samples were not taken <8 hours ago OR are waste samples, Client or PM should initial here or attach an email change order to proceed with analysis. If ice is present, note on form F102B.

Intials:_____

Laboratory Use Only

http://www.sgs.com/terms-and-conditions

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1243787

Profile #: Int.:

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Page 2 of 3

Section 1

CLIENT: ADEC Contaminated Sites
CONTACT: Nabi Qureshi — PHONE #: 907-269-1099
PROJECT NAME: Norton Sound — Project/Permit Number: — NPDL Number(DOD):
REPORTS TO: Nick Waldo — E-MAIL: nabi.qureshi@alaska.gov
INVOICE TO: ADEC — QUOTE #: — P.O. #:

Section 3 — Preservative: MeOH +BFB | None | None | MeOH +BFB | None | None | None

NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Sample Type (Comp Grab MI)	AK101 + BTEX	AK102	AK103	EPA 8260	EPA 8270	EPA 6020	EPA 8082				REMARKS/LOC ID
11AE	2407ELIM-STAIN08SS	7/18/24	1:19pm	S	5	G	X	X	X	X	X	X					
12AB	2407ELIM-TANK01SS	7/18/24	1:32pm	S	5	G	X	X	X	X	X	X					
13AE	2407ELIM-TANK02SS	7/18/24	1:39pm	S	5	G	X	X	X	X	X	X					
14AE	2407ELIM-TANK02SUB	7/18/24	1:48pm	S	5	G	X	X	X	X	X	X					
15AC	2407ELIM-TANK03SS	7/18/24	1:56pm	S	3	G	X	X	X	X							
16AC	2407ELIM-TANK03SUB	7/18/24	2:00pm	S	3	G	X	X	X	X							
17AF	2407ELIM-TANK04SS	7/18/24	2:10pm	S	6	G	X	X	X	X	X	X	X				
18AB	2407ELIM-TANK05SS	7/18/24	2:10pm	S	2	G	X			X							
19AD	2407ELIM-TANK06SS	7/18/24	2:37pm	S	4	G	X	X	X	X	X						
20A	2407ELIM-TANK07SS	7/18/24	2:37pm	S	1	G	X										

Comments:

Section 4

DOD Project? YES NO
Data Deliverables Requested
DataView Level 4 | SEDD ERPIMS | EQUIS Other:

Turnaround Time Requested
Standard
Rush
Requested Rush Report Date:

SGS Sample Receipt (Lab Use Only)
Delivery Method: Client Commercial
Did each cooler have a corresponding COC? Yes No
Chain of Custody Seal Condition: INTACT BROKEN ABSENT
COC Seal Location(s): 2F2F

Section 5

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
	7/19/24	1612	RECEIVED BY

	Cooler ID	Temperature (°C)	Therm. ID
1.	1	2.4	D55
2.	2	2.2	D21
3.			

If more than three coolers are received, or for documentation of non-compliant coolers, use form FS-0029.

Note: If temp. is outside 0-6° and samples were not taken <8 hours ago OR are waste samples, Client or PM should initial here or attach an email change order to proceed with analysis. If ice is present, note on form F102B.

Intials:

Laboratory Use Only

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F083-Blank_COC_20181228

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1243787

Profile #: Int.:

Page 3 of 3

Section 1

CLIENT: ADEC Contaminated Sites

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

CONTACT: Nabi Qureshi

PHONE #: 907-269-1099

PROJECT NAME: Norton Sound

Project/Permit Number:

NPDL Number(DOD):

REPORTS TO: Nick Waldo

E-MAIL: nabi.qureshi@alaska.gov

INVOICE TO: ADEC

QUOTE #:

P.O. #:

Section 3

Preservative: MeOH +BFB | None | None | MeOH +BFB | None | None | None

NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Sample Type (Comp Grab MI)	AK101 +BTEX	AK102	AK103	EPA 8260	EPA 8270	EPA 6020	EPA 8082				REMARKS/LOC ID
21A	2407ELIM-TF10SS	7/18/24	2:30pm	S	1	G							X				
22AD	2407ELIM-DRUM11SS	7/18/24	3:00pm	S	4	G	X	X	X	X	X						
23A	2407ELIM-DRUM12SS	7/18/24	3:20pm	S	1	G						X					
24AE	2407ELIM-TANK13SS	7/18/24	2:48pm	S	5	G	X	X	X	X	X	X					
25AB	Trip Blank																

Comments:

Section 4

DOD Project? YES NO

Data Deliverables Requested: DataView, Level 4, SEDD, ERPIMS, EQUIS, Other:

Turnaround Time Requested: Standard, Rush, Requested Rush Report Date:

SGS Sample Receipt (Lab Use Only)

Delivery Method: Client (circled) Commercial

Did each cooler have a corresponding COC? Yes (circled) No

Chain of Custody Seal Condition: INTACT (checked) BROKEN ABSENT

COC Seal Location(s): 2F 2F

Section 5

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
	7/19/24	1021	RECEIVED BY

Laboratory Use Only

Cooler ID	Temperature (°C)	Therm. ID
1. 1	2.4	D55
2. 2	2.2	D21
3.		

If more than three coolers are received, or for documentation of non-compliant coolers, use form FS-0029.

Note: If temp. is outside 0-6° and samples were not taken <8 hours ago OR are waste samples, Client or PM should initial here or attach an email change order to proceed with analysis. If ice is present, note on form F102B.

Intials:

http://www.sgs.com/terms-and-conditions

F083-Blank COC 20181228

1243787

SGS

SAMPLE RECEIPT FORM

Project Manager Completion				
Was all necessary information recorded on the COC upon receipt? (temperature, COC seals, etc.?)	Yes (circled)	No	N/A	
Was temperature between 0-6° C?	Yes (circled)	No	N/A	If "No", are the samples either exempt* or sampled <8 hours prior to receipt?
Were all analyses received within holding time*?	Yes (circled)	No	N/A	
Was a method specified for each analysis, where applicable? If no, please note correct methods.	Yes (circled)	No	N/A	
Are compound lists specified, where applicable? For project specific or special compound lists please note correct analysis code.	Yes	No	N/A (circled)	
If rush was requested by the client, was the requested TAT approved?	Yes	No	N/A (circled)	If "NO", what is the approved TAT?
If SEDD Deliverables are required, were Location ID's and an NPDL Number provided?	Yes	No	N/A (circled)	*If "NO", contact client for information.*
Sample Login Completion				
Do ID's on sample containers match COC?	Yes (circled)	No	N/A	
If provided on containers, do dates/times collected match COC?	Yes (circled)	No	N/A EV	Note: If times differ <1 hr., record details below and login per COC.
Were all sample containers received in good condition? Yes EV	~~Yes~~	~~No~~	N/A	See notes
Were proper containers (type/mass/volume/preservative) received for all samples? **See form F-083 "Sample Guide"*	Yes	No	N/A	*Note: If 200.8/6020 Total Metals are received unpreserved, preserve and note HNO3 lot here:* *If 200.8/6020 Dissolved Metals are received unpreserved, log in for LABFILTER and do not preserve.* *For all non-metals methods, inform Project Manager.*
Were Trip Blanks (VOC, GRO, Low-Level Hg, etc.) received with samples, where applicable*?	Yes (circled)	No	N/A	
Were all VOA vials free of headspace >6mm?	Yes	No	N/A (circled)	
Were all soil VOA samples received field extracted with Methanol?	Yes (circled)	No	N/A	
Did all soil VOA samples have an accompanying unpreserved container for % solids?	Yes	No (circled)	N/A	See notes
If special handling is required, were containers labelled appropriately? e.g. MI/ISM, foreign soils, lab filter, Ref Lab, limited volume	Yes	No	N/A (circled)	
For Rush/Short Holding time, was the lab notified?	Yes	No	N/A (circled)	
For any question answered "NO", was the Project Manager notified?	Yes	No	N/A	PM Initials:
Was Peer Review of sample numbering/labelling completed?	Yes (circled)	No	N/A	Reviewer Initials: [signature]

Additional Notes/Clarification where Applicable, including resolution of "No" answers when a change order is not attached:

No % solids for Tank 0544 and Tank 0744

~~Tank 1344 is missing a container~~ ignore - Proceed

EV

F102B_SRF_10202022

Sample Containers and Preservatives

Container Id	Preservative	Container Condition
1243787001-A	No Preservative Required	OK
1243787001-B	Methanol field pres. 4 C	OK
1243787002-A	No Preservative Required	OK
1243787002-B	Methanol field pres. 4 C	OK
1243787003-A	No Preservative Required	OK
1243787003-B	Methanol field pres. 4 C	OK
1243787004-A	No Preservative Required	OK
1243787004-B	Methanol field pres. 4 C	OK
1243787005-A	No Preservative Required	OK
1243787005-B	Methanol field pres. 4 C	OK
1243787006-A	No Preservative Required	OK
1243787007-A	No Preservative Required	OK
1243787008-A	No Preservative Required	OK
1243787009-A	No Preservative Required	OK
1243787010-A	No Preservative Required	OK
1243787010-B	No Preservative Required	OK
1243787010-C	Methanol field pres. 4 C	OK
1243787011-A	No Preservative Required	OK
1243787011-B	No Preservative Required	OK
1243787011-C	No Preservative Required	OK
1243787011-D	Methanol field pres. 4 C	OK
1243787011-E	Methanol field pres. 4 C	OK
1243787012-A	No Preservative Required	OK
1243787012-B	No Preservative Required	OK
1243787012-C	No Preservative Required	OK
1243787012-D	Methanol field pres. 4 C	OK
1243787012-E	Methanol field pres. 4 C	OK
1243787013-A	No Preservative Required	OK
1243787013-B	No Preservative Required	OK
1243787013-C	No Preservative Required	OK
1243787013-D	Methanol field pres. 4 C	OK
1243787013-E	Methanol field pres. 4 C	OK
1243787014-A	No Preservative Required	OK
1243787014-B	No Preservative Required	OK
1243787014-C	No Preservative Required	OK
1243787014-D	Methanol field pres. 4 C	OK
1243787014-E	Methanol field pres. 4 C	OK
1243787015-A	No Preservative Required	OK
1243787015-B	Methanol field pres. 4 C	OK
1243787015-C	Methanol field pres. 4 C	OK
1243787016-A	No Preservative Required	OK
1243787016-B	Methanol field pres. 4 C	OK
1243787016-C	Methanol field pres. 4 C	OK
1243787017-A	No Preservative Required	OK
1243787017-B	No Preservative Required	OK
1243787017-C	No Preservative Required	OK
1243787017-D	No Preservative Required	OK
1243787017-E	Methanol field pres. 4 C	OK
1243787017-F	Methanol field pres. 4 C	OK
1243787018-A	Methanol field pres. 4 C	OK
1243787018-B	Methanol field pres. 4 C	OK
1243787019-A	No Preservative Required	OK
1243787019-B	No Preservative Required	OK
1243787019-C	Methanol field pres. 4 C	OK
1243787019-D	Methanol field pres. 4 C	OK
1243787020-A	Methanol field pres. 4 C	OK
1243787021-A	No Preservative Required	OK
1243787022-A	No Preservative Required	OK
1243787022-B	No Preservative Required	OK
1243787022-C	Methanol field pres. 4 C	OK
1243787022-D	Methanol field pres. 4 C	OK
1243787023-A	No Preservative Required	OK
1243787024-A	No Preservative Required	OK
1243787024-B	No Preservative Required	OK
1243787024-C	No Preservative Required	OK
1243787024-D	Methanol field pres. 4 C	OK
1243787024-E	Methanol field pres. 4 C	OK
1243787025-A	Methanol field pres. 4 C	OK
1243787025-B	Methanol field pres. 4 C	OK

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
QN - Insufficient sample quantity provided.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Nabi Qureshi	**CS Site Name:**	Elim Old AVEC Tank Farm; Golovin Old Reindeer Processing Plant	**Lab Name:**	SGS North America Inc.
Title:	Norton Sound ANCSA	**ADEC File No.:**	600.38.006; N/A	**Lab Report No.:**	1243787
Consulting Firm:		**Hazard ID No.:**	25432; N/A	**Lab Report Date:**	08.30.2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: Samples were not transferred

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: Click or tap here to enter text.
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

CS Site Name: Elim Old AVEC Tank Farm; Golovin Old Reindeer Processing Plant
Lab Report No.: 1243787

Cooler temperature(s): Click or tap here to enter text.
Sample temperature(s): Click or tap here to enter text.
Comments: Click or tap here to enter text.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Were all the corrective actions documented?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

d. What is the effect on data quality/usability according to the case narrative?
Comments: No effect on data quality and usability according to the case narrative.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐

CS Site Name: Elim Old AVEC Tank Farm; Golovin Old Reindeer Processing Plant
Lab Report No.: 1243787

Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☒ N/A ☐
Comments: Two samples (2407ELIM-TANK05SS and 2407ELIM-TANK07SS were reported on a wet weight basis.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

CS Site Name: Elim Old AVEC Tank Farm; Golovin Old Reindeer Processing Plant
Lab Report No.: 1243787

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☐ No ☒ N/A ☐
Comments: Some percent recoveries are reported outside of laboratory limits, however data quality and usability are not affected.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: Click or tap here to enter text.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐

CS Site Name: Elim Old AVEC Tank Farm; Golovin Old Reindeer Processing Plant
Lab Report No.: 1243787

Comments: Click or tap here to enter text.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: Some percent recoveries are reported outside of laboratory limits, however data quality and usability are not affected.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: Click or tap here to enter text.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☒ N/A ☐

CS Site Name: Elim Old AVEC Tank Farm; Golovin Old Reindeer Processing Plant
Lab Report No.: 1243787

Comments: Some percent recoveries are reported outside of laboratory limits, however data quality and usability are not affected.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality and usability are not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

CS Site Name: Elim Old AVEC Tank Farm; Golovin Old Reindeer Processing Plant
Lab Report No.: 1243787

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☐ No ☒ N/A ☐
Comments: Decontamination or equipment blanks were not collected.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: Decontamination or equipment blanks were not collected.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Click or tap here to enter text.

iv. Are data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.