

Horsley Witten Group

*Sustainable Environmental Solutions*

90 Route 6A, Unit 1 • Sandwich, MA • 02563

Phone - 508-833-6600 • Fax - 508-833-3150 • [www.horsleywitten.com](http://www.horsleywitten.com)



# ASTM Phase I Environmental Site Assessment and Phase II Limited Subsurface Investigation

## Sand Pit and Undeveloped Property

2 Sand Pit Road and 9 Noons Drive

Truro, Massachusetts

May 2023



Prepared by:  
Horsley Witten Group, Inc.

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**PHASE I ENVIRONMENTAL SITE ASSESSMENT AND  
PHASE II LIMITED SUBSURFACE INVESTIGATION**

**Sand Pit and Undeveloped Property  
2 Sand Pit Road and 9 Noons Drive  
Truro, Massachusetts**

**EXECUTIVE SUMMARY**

The Horsley Witten Group (“HW”) has completed this Phase I Environmental Site Assessment (“Phase I”) and Phase II Limited Subsurface Investigation (Phase II LSI) documenting the observed conditions of the sand pit/undeveloped property located on a portion of 2 Sand Pit Road and 9 Noons Drive in Truro, Massachusetts (the “Subject Property”).

The Subject Property consists of the following areas:

- An approximate 27-acre portion of the 38.73-acre parcel located at 2 Sand Pit Road and identified by the Truro Assessor as parcel 39-107; and
- The 17.2-acre parcel located at 9 Noons Drive and identified by the Truro Assessor as parcel 39-108.

Refer to Figures 1 and 2 for regional location and general layout of the Subject Property, respectively.

The Subject Property is located within a mixed commercial and residential area of Truro. Approximately 80 percent of the Subject Property is cleared and utilized as a sandpit with the remaining 20 percent undeveloped and wooded. Several piles (Photo log, Appendix A) of asphalt millings, sand, mulch (made from local landscaped debris brought to the Subject Property), shells, and aggregate are stored throughout the cleared areas. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the soil piles. No visual or olfactory indication of a significant release of oil and/or hazardous materials (OHM) was observed on the ground surface in the vicinity of the piles.

As indicated on Figure 3, four areas at the Subject Property are rented to local fisherman for the storage (photo log, Appendix A) of lobster traps, boats and other fishing related gear (i.e., rope and nets typically stored in plastic 55-gallon drums). According to Ms. Linda Noons-Rose (Owner of the Subject Property), boat maintenance is not permitted in the rented areas. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the

rented areas. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the rented areas.

A pile of utility poles (Photo log, Appendix A, and Figure 3) was observed on the ground surface. Utility poles are typically treated with various coatings such as creosote, pentachlorophenol, and various metals to preserve the wood. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the utility poles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the utility poles.

Several pieces of equipment including excavators, loaders, dump trucks and spare part vehicles were observed in the northern portion of the Subject Property (photo logs, Appendix A). No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the equipment or spare part vehicles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the equipment or spare part vehicles.

A horse obstacle area is located in the northwestern portion of the Subject Property (Figure 3). The obstacles include several empty plastic 55-gallon barrels that the horses jump over. The horses live in a stable located to the northeast and off the Subject Property. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the barrels. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the barrels.

The Subject Property is abutted to the north by residences and commercial properties including a store and motel. The Subject Property is abutted to the south by residences with Noons Drive beyond. The Subject Property is abutted to the east by residences and commercial properties including Pleasant View Autobody and John F. Noons trucking with Route 6 and Noons Drive beyond. The Subject Property is abutted to the west by residences and Great Swamp with Cormorant Road beyond.

There are no buildings at the Subject Property and vehicle maintenance and fueling are completed at the property to the east (not on the Subject Property). No OHM was observed at the Subject Property. Utilities at the Subject Property include a private water well (approximately 80 feet deep, Photo Log, Appendix A and Figure 3) that was reportedly used for dust suppression and to rinse dirt off of vehicle truck beds. The well was reported by the Subject Property owner as no longer in use.

No records relating to the storage, usage or releases of OHM at the Subject Property were reported to HW or on file at the Town of Truro Board of Health, Fire Department, Building Department, Conservation Commission, Planning Department or Town Clerk.

As indicated on the document titled *Settlement of Land Use Agreement*, dated August 27, 2013, Appendix B, The Subject Property has been used as sand pit since the 1950's for the excavation of sand/soil. Abutters have alleged that target shooting has historically occurred at the Subject Property. According to the Owner, "target shooting was occasionally conducted into sand piles that have long since been removed from the Subject Property". Target practice ceased at the Subject Property prior to August 27, 2013.

In February 2023, HW completed a Phase II Limited Subsurface Investigation (LSI) to determine if a release of OHM had occurred at the Subject Property. The Phase II LSI included the collection of nine soil samples and four groundwater samples for laboratory analysis. The laboratory analysis included per and polyfluoroalkyl substances (PFAS), volatile organic compounds (VOCs), semi-volatile organic compounds, Massachusetts Contingency Plan (MCP) 14 metals, extractable petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PAHs), and/or polychlorinated biphenyls (PCBs).

As indicated on Tables 1 and 2, with the exception of PFAS detected in groundwater, no other analytes were detected above the applicable MCP Reportable Concentrations for category S-1 soils or GW-1 groundwater. Refer to Figure 3 for sampling locations. Additional details regarding the Phase II LSI are set forth in Section 7.

Several releases of OHM have occurred at sites located within a 1.0-mile radius of the Subject Property. Based on the regulatory status, distance from the Subject Property, and/or groundwater flow direction, these release sites appear unlikely to significantly impact the Subject Property.

Based on HW's review and interpretation of reasonably ascertainable information and observations made during the Subject Property reconnaissance, HW offers the following regarding Recognized Environmental Conditions ("RECs"), Historical Recognized Environmental Conditions ("HRECs") Controlled Recognized Environmental Conditions ("CRECs"), and Business Environmental Risks ("BERs"):

- The following RECs as defined in Section 1.1 were identified at the Subject Property:
  - The Phase II LSI concluded that groundwater at the Subject Property is impacted with PFAS above the applicable Reportable Concentration for category GW-1 groundwater. PFAS was not detected in any of the soil samples collected at the Subject Property above the laboratory Reporting Limit or the applicable Reportable Concentration for category S-1 soils. Considering that the analytical data and groundwater flow direction support the conclusion that the PFAS impacts are related to an unknown

source located hydraulically upgradient of the Subject Property, the Subject Property appears to be eligible for Downgradient Property Status Pursuant to 310 CMR 40.0180.

It should be noted that drinking water is not provided to the Subject Property. Consideration should be made for connection to the municipal drinking water supply in the future to limit groundwater pre-treatment and laboratory testing requirements should groundwater at the Subject Property be utilized.

- No Historical Recognized Environmental Conditions (“HRECs”) as defined in Section 1.1 were identified at the Subject Property;
- No Controlled Recognized Environmental Conditions (“CRECs”) as defined in Section 1.1 were identified at the Subject Property; and
- No Business Environmental Risks (“BERs”) as defined in section 1.1 were identified at the Subject Property.

## 1.0 INTRODUCTION

HW has completed this Phase I in conformance with the scope and limitations of the ASTM International Publication E1527–21 on behalf of the Town of Truro (the “Client”). This report documents the results of a Phase I and Phase II LSI of the sand pit/undeveloped property located on a portion of 2 Sand Pit Road and 9 Noons Drive in Truro, Massachusetts.

The Phase I was performed in accordance with the guidelines set forth in the ASTM International Publication E1527–21, and the elements of “All Appropriate Inquiries” (“AAI”) within Code of Federal Regulations 40 C.F.R. Part 312, established by the Small Business Liability Relief and Brownfields Revitalization Act of 2002 (“Brownfields Amendments”) and Comprehensive Environmental Response, Conservation, and Liability Act of 1980 (“CERCLA”). The United States Environmental Protection Agency (“EPA”) has determined that ASTM International E1527–21 is consistent with the requirements of and may be used to comply with the provisions of AAI.

HW’s evaluation of the Subject Property was performed using standard protocols and technical judgment within the scope of services of this assignment. Conclusions and/or opinions are based on the conditions observed at the time of the Subject Property visit. Past conditions that could not be observed were established based on reasonably available and attainable documents and accounts from personnel contacted.

## 1.1 PURPOSE AND SCOPE OF WORK

The objective of the Phase I was to identify RECs associated with current and historic use of the Subject Property, the physical conditions of adjacent grounds, and present operational practices. ASTM E1527–21 defines RECs as: “(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition.”. Opinions regarding RECs at the Subject Property are based upon the work described herein.

If applicable, the Phase I will also identify HRECs, CRECs, and BERs. ASTM Publication E1527–21 defines these as follows:

- HRECs: “a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).”
- CRECs: “recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations).”
- BERs: “a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice.”

## 1.2 DETAILED SCOPE OF SERVICES

The following Phase I Scope of Work was completed during this assessment:

- Reconnaissance to observe and document present conditions at the Subject Property and on the portions of abutting properties visible from the Subject Property and/or right-of-way for indications of RECs;
- Reconnaissance of the general vicinity of the Subject Property from the right-of-

way, within approximately a 500-foot radius of the Subject Property, for indications of RECs (i.e., potential off-site contaminant source areas);

- Interviews with the designated Subject Property contact and local regulatory agencies to document current and former operations and uses of the Subject Property. Subject Property personnel interviewed as part of the assessment included:
  - Ms. Linda Noons-Rose, Subject Property Owner
- Review of available environmental reports and other relevant documents regarding previously conducted assessments and/or investigations of the Subject Property (if available);
- Review of relevant federal, state, and local regulatory files, records, and databases to identify RECs, HRECs, CRECs, and BERs at the Subject Property;
- Contact with local regulatory agencies to request information regarding the environmental and regulatory history of the Subject Property;
- General review of environmental conditions including geology, hydrology, topography, wetlands, flood plains; and
- Preparation of this report to summarize the findings of the Phase I.

### **1.3 SIGNIFICANT ASSUMPTIONS**

While this Phase I provides an overview of potential environmental concerns, both past and present, it is limited by the availability of information at the time of the assessment. It is possible that unreported disposal of waste or illegal activities impairing the environmental status of the Subject Property may have occurred which could not be identified. The conclusions regarding environmental conditions that are presented in this Phase I are based on a scope of work authorized by the Client.

### **1.4 LIMITATIONS AND EXCEPTIONS**

The Phase I has been prepared in accordance with generally accepted environmental methodologies referred to in ASTM E1527–21 and contains all the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report. The conclusions of this Phase I are based in part, on information provided by others. The possibility remains that unexpected environmental conditions may be encountered at the Subject Property in locations not specifically investigated. Should such an event occur, HW must be notified to determine if modifications to our conclusions are necessary.

The substance, content, and findings of documents and/or other deliverables made to the Client including but not limited to reports, data, memorandums, and facsimiles, are for the sole use of the Client. No reliance on the data or findings contained in these deliverables may be extended to any third party without the express written consent of HW. Any unauthorized use or distribution of HW's work shall be at the Client and recipient's sole risk and without liability to HW.

This Phase I and Phase II LSI describe conditions observed at the Subject Property at the time of the Subject Property reconnaissance only. HW makes no conclusions regarding areas of the Subject Property that were inaccessible or obstructed from view during the reconnaissance.

The information presented in this report is based on HW's observations in the field at the time of the Subject Property reconnaissance, a review of reasonably ascertainable documents and data, interviews with certain designated personnel, and a review of available agency files as referenced herein. HW does not warrant or guarantee the accuracy, completeness, and/or current status of the information contained in the environmental record sources for this Phase I. Such information is the product of independent investigation by parties other than HW and/or information maintained by government agencies. Therefore, no representation concerning agency records, other than those described herein, is expressed or implied.

The scope of this Phase I and Phase II LSI did not include determining the current compliance status of the Subject Property regarding all environmental regulations and/or permitting requirements. Any comments in the report regarding compliance with environmental regulations are provided for the Client and should not be considered as a thorough review of all environmental regulatory requirements.

This Phase I was a limited and non-exclusive assessment that was intended to evaluate whether reasonably ascertainable information reveals the evidence of RECs, HRECs, CRECs, and BERs as defined by ASTM E1527-21.

HW did not assess for the non-scope considerations identified in Section X6 of ASTM E1527-21 unless otherwise noted including but not limited to testing or analysis to determine the presence of asbestos containing materials ("ACM"), radon, mold, lead-based paint, lead in drinking water, or PCBs in building materials at the Subject Property. Any comments in the report regarding these substances or materials are limited to the obvious presence of certain miscellaneous materials that are readily accessible and apparent, are provided for the Client's information only, and cannot be used to determine the actual presence of the contaminants and/or compliance with applicable regulations. Further, studies of indoor air quality, regulatory compliance, occupational health and safety, and wetlands, which require specialized expertise, were not requested and were

not included as part of this study. As a result, without a comprehensive sampling and analysis program or implementation of services beyond the original scope of work, certain potential conditions may not be revealed.

Any qualitative or quantitative information regarding the Subject Property that was not available to HW at the time of this Phase I may result in a modification of the representations made in this report.

HW interviewed the Client about the Subject Property including the six questions included on the User Questionnaire identified in Section X3 of ASTM E1527-21. The six questions include the presence of Environmental liens, Activity and Use Limitations, specialized knowledge or experience, relationship of the purchase price to the fair market value, commonly known or reasonably ascertainable information, the degree of obviousness of the presence or likely presence of contamination and the ability to detect contamination by appropriate investigation at the Subject Property. Information about the Subject Property obtained from the Client has been incorporated into this report. A copy of the User Questionnaire is included in Appendix C.

The following limitations and exceptions to ASTM E1527-21 associated with the Phase I are set forth below:

- HW did not obtain any historical information prior to 1889 for the Subject Property;
- HW did not interview historic occupants or owners of the Subject Property. The Subject Property was utilized as a sand pit at the time of reconnaissance;
- HW did not evaluate the purchase price of the Subject Property in relation to the fair market value;
- Observations of select areas of the Subject Property were limited due to the presence of dense vegetation and material piles (i.e., soil, mulch, asphalt millings and/or aggregate);
- Current title records were obtained on-line from the Barnstable County Registry of Deeds; and
- Activity and Use Limitations (AUL) were searched for on-line using the Massachusetts Department of Environmental Protection (“MassDEP”) Activity and Use Limitation searchable sites database. Additionally, the Client was unaware of any AULs implemented at the Subject Property.

None of the limitations and exceptions documented above are considered a significant data gap. Information provided by others is assumed to be accurate and complete.

### **1.5 SPECIAL TERMS AND CONDITIONS**

No special terms or conditions were included in the Phase I or Phase II LSI.

### **1.6 USER RELIANCE**

This report may be distributed and relied upon by the Client, its successors, and assignees. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the written consent of HW.

## 2.0 SUBJECT PROPERTY DESCRIPTION

### 2.1 LOCATION AND LEGAL DESCRIPTION

The Subject Property is identified by the Town of Truro Assessor's Office as follows:

Address	Town of Provincetown Assessor's ID	Land Area (Acres)
2 Sand Pit Road	39-107-0	38.73*
9 Noons Drive	39-108-0	17.2

\* It should be noted that only a 27-acre portion of this parcel is included in the Subject Property as indicated on Figure 2.

Refer to Figures 1 and 2 for regional location and general layout of the Subject Property, respectively.

### 2.2 SUBJECT PROPERTY AND VICINITY GENERAL CHARACTERISTICS

The Subject Property is located within a mixed commercial and residential area of Truro. Approximately 80 percent of the Subject Property is cleared and utilized as a sandpit with the remaining 20 percent undeveloped and wooded.

The Subject Property is abutted to the north by residences and commercial properties including a store and motel. The Subject Property is abutted to the south by residences with Noons Drive beyond. The Subject Property is abutted to the east by residences and commercial properties including Pleasant View Autobody and John F. Noons trucking with Route 6 and Noons Drive beyond. The Subject Property is abutted to the west by residences and Great Swamp with Cormorant Road beyond.

#### 2.2.1 TOPOGRAPHY

According to the EDR Radius Map™ Report (the "EDR Report"), published by Environmental Data Resources Inc. ("EDR"), the topography of the Subject Property slopes towards the west northwest with an elevation of 46 feet above mean sea level. A topographical map is included as Figure 1.

#### 2.2.2 SOILS/GEOLOGY

According to the Commonwealth of Massachusetts Bureau of Geographical Information ("MassGIS"), soils underlying the Subject Property are classified as Carver, Freetown and Pits (Figure 4). According to the EDR Report, Carver soils are classified as coarse sands with high infiltration rates and Freetown is muck with very slow infiltration rates. Pits are areas which have been modified and soil type and infiltration rates are not given.

### 2.2.3 HYDROLOGY AND CONSTRAINTS

According to the MassGIS Existing Constraints data layer, the Subject Property is located within an EPA Sole Source Aquifer and a medium yield aquifer. A portion of the property is located within a MassDEP Wellhead Zone II Area (Figure 5). As indicated in Section 7.0, depth to groundwater varies from approximately 36 to 82 feet below grade and flows in a southwesterly direction as indicated on Figure 3.

### 2.2.4 WETLANDS

According to the MassGIS Existing Constraints Data layer, wetlands are located within 500 feet west of the Subject Property (Figure 5).

### 2.2.5 AREAS OF CRITICAL ENVIRONMENTAL CONCERN

According to the MassGIS Areas of Critical Environmental Concern (“ACEC”) data layer, there are no ACECs within 500 feet of the Subject Property. ACECs are places in Massachusetts that receive special recognition because of the quality, uniqueness, and significance of their natural and cultural resources (Figure 5). These areas are identified and nominated at the community level and are reviewed and designated by the Massachusetts Secretary of Energy and Environmental Affairs.

### 2.2.6 SURFACE WATER BODIES

The nearest surface water body is Great Swamp which is located approximately 300 feet west of the Subject Property (Figure 1).

### 2.2.7 FLOOD PLAINS

According to the Mass GIS Flood Zone Map (Figure 5), the Subject Property is located within an area designated as Zone X (area of minimal flood hazard) and an area of 0.2% Annual Chance of Flooding immediately west of the Subject Property.

### 2.2.8 POTENTIAL FOR RADON GAS

According to the U.S. Environmental Protection Agency’s (“EPA”) Map of Radon Zones for Massachusetts (<https://www.epa.gov/sites/production/files/2014-08/documents/massachusetts.pdf>), Barnstable County is considered to have a moderate potential for the presence of indoor radon gas, with the most common concentration range being 2 Pico Curies per liter (pCi/L) to 4 pCi/L).

## 2.3 CURRENT USE OF THE PROPERTY

The Subject Property is currently a sand pit and commercial property utilized by the trucking/site development contractor, John F. Noons.

## **2.4 DESCRIPTIONS OF STRUCTURES, ROADS, OTHER IMPROVEMENTS ON THE SUBJECT PROPERTY**

Approximately 80 percent of the Subject Property is cleared and utilized as a sandpit with the remaining 20 percent undeveloped and wooded. Several piles (Photo log, Appendix A) of asphalt millings, sand, mulch (made from local landscaped debris brought to the Subject Property), shells, and aggregate are stored throughout the cleared areas.

There are no buildings at the Subject Property and vehicle maintenance and fueling are completed at the property to the east (not on the Subject Property). No OHM was observed at the Subject Property. Utilities at the Subject Property include a private water well (approximately 80 feet deep, Photo Log, Appendix A) that was reportedly used for dust suppression and to rinse dirt off of vehicle truck beds. The well was reported by the Subject Property Owner as no longer in use.

## **2.5 CURRENT USE OF ADJOINING PROPERTIES**

The Subject Property is abutted to the north by residences and commercial properties including a store and motel. The Subject Property is abutted to the south by residences with Noons Drive beyond. The Subject Property is abutted to the east by residences and commercial properties including Pleasant View Autobody and John F. Noons trucking with Route 6 and Noons Drive beyond. The Subject Property is abutted to the west by residences and Great Swamp with Cormorant Road beyond.

## **3.0 USER PROVIDED INFORMATION**

### **3.1 LAND TITLE RECORDS**

Chains of title were established based on information from the property field card obtained from the Town of Truro Assessor's Department and on-line records available from the Barnstable County Registry of Deeds. Ownership for the Subject Property is as follows:

- The Estate of Donald Noons, Book 279 Page 34, dated February 8, 2007 (2 Sand Pit Road).
- The Estate of Donald Noons, Book 10833 Page 307, dated February 8, 2007 (9 Noons Drive).

Copies of the Town of Truro Assessor's Office property field card and deed references are included in Appendix B.

### **3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS**

Pursuant to the guidelines set forth in the ASTM International Publication E1527 – 21, it is the user’s responsibility to search for environmental liens and AULs. Neither the study nor the user identified any environmental liens or Activity and Use Limitations associated with the Subject Property.

### **3.3 SPECIALIZED KNOWLEDGE**

No other specialized knowledge of RECs or other potential environmental concerns were reported by the Client.

### **3.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION**

Information provided in the Phase I is based on interviews with Subject Property contacts and research of local, state, and federal databases. Commonly known or reasonably ascertainable information was utilized in conducting background research for the Subject Property but was not relied upon to support the findings, opinions, or conclusions of the Study.

### **3.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES**

No property valuation reduction relating to environmental concerns was identified or reported by the Client to HW.

### **3.6 OWNER, PROPERTY MANAGER AND OCCUPANT INFORMATION**

According to the Town of Truro Assessor’s Office, the Estate of Donald W Noons is the current owners of the Subject Property. At the time of reconnaissance, approximately 80 percent of the Subject Property was cleared and utilized as a sandpit with the remaining 20 percent undeveloped and wooded. HW was escorted by the current Owner, Ms. Linda Noons-Rose, who manages the sand pit operations conducted at the Subject Property.

### **3.7 REASON FOR PERFORMING THE STUDY**

The Phase I and Phase II LSI was performed for due diligence purposes by the Client in anticipation of purchasing the Subject Property.

### **4.0 RECORDS REVIEW**

To evaluate environmental conditions at and abutting the Subject Property, federal, state, and local information resources were reviewed. Initial screening of regulatory records was conducted by obtaining an EDR Report. A copy of the EDR Report dated January 19, 2023 is included as Appendix C.

HW staff also performed a review of available files and/or contacted personnel at the Town of Truro Assessor's Office, Town Clerk, Fire Department, Conservation Commission, Planning Department, Board of Health, and Building Department regarding underground storage tanks (USTs), above ground storage tanks (ASTs) and the storage, usage and/or release(s) of OHM at the Subject Property.

#### **4.1 STANDARD ENVIRONMENTAL RECORD SOURCES**

##### **NPL (Superfund)**

The National Priorities List ("NPL") is a listing of confirmed disposal sites identified by the EPA that are a priority for cleanup under the Superfund Program. The NPL is a subset of Comprehensive Environmental Response Compensation and Liability Information System ("CERCLIS") maintained by the EPA. No NPL sites were identified within a 1.0-mile radius of the Subject Property.

##### **Delisted NPL**

Delisted NPL sites are no longer active under the Superfund Program. An archived status indicates that EPA has determined that no further steps are required at a site to protect human health or the environment. The area within a 0.5-mile radius of the Subject Property was searched for Delisted NPL sites. Based on a review of the listings obtained from the EDR Report, there are no Delisted NPL sites located within the 0.5-mile search radius.

##### **CERCLA-SEMS**

CERCLA-Superfund Enterprise Management System ("SEMS") tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program. The area within a 0.5-mile radius of the Subject Property was searched for CERCLA-SEMS sites. Based on a review of the listings obtained from the EDR Report, there were no CERCLA-SEMS sites located within a 0.5-mile radius of the Subject Property.

##### **SEMS-ARCHIVE**

SEMS-Archive tracks sites that are no longer active under the Superfund Program. An archived status indicates that to the best of EPA's knowledge, site assessment has been completed and EPA has determined no further steps will be taken to list the site on the NPL. The area within a 0.5-mile radius of the Subject Property was searched for SEMS-Archive sites. Based on a review of the listings obtained from the EDR Report, there is one SEMS-Archive site located within the 0.5-mile search radius. The identified SEMS-

Archive site is Watts Service CTR/S Hollow Wellfield located at 372 Route 6, approximately 1,424 feet north, northeast of the Subject Property. The site is listed as no further remedial action planned and does not qualify for the NPL based on existing information; however, it is associated with a release (RTN 4-170) as a result of a leaking underground storage tank (LUST) and is discussed in additional detail below. This site does not qualify for the National Priority List (NPL) based on existing information.

### **RCRA Corrective Action (CA) Sites with Known Contamination**

Based on a review of the EDR Report, there are no Resource Conservation and Recovery Act (“RCRA”) CA site listed within 1.0-mile of the Subject Property.

### **Federal RCRA Generators**

#### *Resource Conservation and Recovery Act (“RCRA”) - Large Quantity Generators (LQGs)*

Based on a review of the EDR Report, there are no RCRA-LQG site located within 0.25-miles of the Subject Property.

#### *RCRA-Small Quantity Generators (SQGs)*

Based on a review of the EDR Report, there are no RCRA-SQG site located within 0.25-miles of the Subject Property.

#### *RCRA-Very Small Quantity Generators (VSQGs)*

Based on a review of the EDR Report, there is one RCRA-VSQG site located within 0.25-miles of the Subject Property. The identified RCRA-VSQG site is Tow Boat US Provincetown/Chatham/Bass River located at 352 Route 6, approximately 596 feet east of the Subject Property. According to the EDR Report, the site has not received any violation notices.

### **RCRA Treatment, Storage, and Disposal (TSD) Sites for Hazardous Materials**

Based on a review of the EDR Report, there are no RCRA TSD sites listed within 0.5-miles of the Subject Property.

### **State Landfills and Solid Waste Disposal Facilities (SWL)**

Based on a review of the EDR Report, there are no active SWL sites listed within 0.5-miles of the Subject Property.

### **State List of Leaking Aboveground Storage Tanks (LAST)**

Based on a review of the EDR Report, there is one LAST site listed within 0.5-miles of the Subject Property. The identified LAST site is identified as North Truro Post Office. Details regarding the release site are set forth below.

**North Truro Post Office  
34 Shore Road**

**2,363 feet north  
RTN: 4-11029**

According to the report titled *Response Action Outcome Statement* dated July 1995 and Immediate Response Action (IRA) Completion Statement dated August 1995, both prepared by EMCON, a release of approximately 190 gallons of No 2. fuel oil occurred from an above-ground storage tank (AST) at the site. Response actions included removing the AST, excavation of 160-cubic yards of contaminated soil, extraction of 3,700-gallons of petroleum impacted groundwater and the collection of soil and groundwater samples for laboratory analysis. Groundwater at the site was determined to flow in a northwesterly direction. The reports concluded that levels of OHM at the site have been remediated to background and that a condition of No Significant Risk of harm to health, safety, public welfare and the environment has been achieved. Considering the regulatory status, distance, and the groundwater flow direction, the release associated with RTN 4-11029 is unlikely to significantly impact the Subject Property.

#### **State List of Leaking Underground Storage Tanks (LUST)**

Based on a review of the EDR Report, there is one LUST site listed within a 0.5-mile radius of the Subject Property. The identified LUST site is Watts Service Ctr/R Hollow Wellfield. Details regarding the release site are set forth below.

**Watts Service Ctr/S Hollow Wellfield  
372 Route 6**

**1,424 feet north northeast  
RTN: 4-170**

According to the letter report titled *Field Investigation Services Report* dated December 1996 and prepared by ABB Environmental Services, Inc., an “old leaking gasoline tank” was removed from the site in 1978 and at the request of the MassDEP, the former tank location was assessed to determine if a release of OHM has occurred. Response actions included the collection of soil and groundwater samples for laboratory analysis. Groundwater was determined to flow in a northeasterly direction. The MassDEP subsequently issued a response action outcome indicating that a permanent solution has been achieved at the site and a level of No Significant Risk exists. Considering the regulatory status and the groundwater flow direction, the release associated with RTN 4-170 is unlikely to significantly impact the Subject Property.

**State Registered Underground Storage Tank (UST)**

Based on a review of the EDR Report, there are no State Registered USTs at the Subject Property or within 0.25-miles of the Subject Property.

**State Registered Above Ground Storage Tank (AST)**

Based on a review of the EDR Report, there are no State Registered ASTs at the Subject Property or listed within 0.25-miles of the Subject Property.

**Emergency Response Notification System Files**

The Emergency Response Notification System (“ERNS”) database includes incidents reported to the National Response Center for the Subject Property only. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. The National Response Center is operated by the U.S. Coast Guard and has become the central point of contact used for the reporting of many different kinds of incidents involving hazardous materials. The Subject Property is not identified as an ERNS site.

**State and Tribal Brownfields**

The Brownfields Act of 1998 established significant liability relief and financial incentives to spur the redevelopment of Brownfields, while ensuring that MassDEP standards are met. According to the EDR Report, there are no State and Tribal Brownfields sites listed within 0.5-miles of the Subject Property.

**State Institutional Control/Engineering Control Registries Sites (INST/ECR)**

According to the EDR Report, there is one INST/ECR site listed within 0.5-miles of the Subject Property. The site is identified as South Highland Road Landfill. Details regarding the release site is set forth below.

**South Highland Road Landfill  
Highland Rd**

**2,548 feet east, northeast  
RTN: 4-897**

According to the report titled *Phase IV As-Built and Final Inspection Report* dated April 2005 and prepared by East Cape Engineering, Inc., this release site was previously operated as a municipal open burn dump from 1940 until 1964. Investigation and

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Phase I Environmental Site Assessment  
Sand Pit and Undeveloped Property  
Truro, Massachusetts

Horsley Witten Group, Inc.  
May 10, 2023

response actions included test pits, groundwater monitoring and soil sampling, and ultimately an engineered barrier was used to cap the former dump. The cap consisted of sand fill, obtained from the Subject Property, Claymax 200 liner, organic material, and hydroseed. Groundwater was not substantially impacted and an AUL was implemented to limit contact with soil and to maintain a level of No Significant Risk. Considering the regulatory status, distance, at that groundwater was not significantly impacted, the release associated with RTN 4-897 is unlikely to significantly impact the Subject Property.

#### 4.1.1 STATE-LISTED SITES

##### **State-and Tribal-equivalent CERCLA and/or Hazardous Waste Facilities (SHWS)**

HW reviewed information from the EDR Report, dated January 19, 2023, and the MassDEP website to gather information, including documented releases of OHM at the Subject Property and surrounding properties. The Subject Property is not listed as a release site. According to the EDR Report, seven State-equivalent SHWS release sites with documented releases of OHM were identified within a 1.0-mile radius of the Subject Property. Details regarding select release sites are set forth below.

##### **Roadway – Vehicle Accident In Front 350 Route 6**

**628 feet east  
RTN: 4-20912**

According to the report titled *Immediate Response Action Completion Statement* dated January 2008 and prepared by Bennett O’Reilly, Inc., approximately 35 gallons of diesel fuel was released onto the asphalt paved roadway on the northbound lane of Route 6. Response actions included the application of absorbents, catch basin cleaning and soil sample collection. Groundwater was reportedly not impacted by the release. A Method 1 Risk Assessment determined that a level of “No Significant Risk” exists for the site. Considering the extent of the release and that groundwater was not reportedly impacted, the release associated with RTN 4-20912 is unlikely to significantly impact the Subject Property.

##### **WTP So. Hollow Wellfield 11 South Hollow Road**

**2,852 feet northeast  
RTN: 4-18962**

According to the report titled *Immediate Response Action Completion* dated May 2005 and prepared by Bennett O’Reilly, Inc., a release of 5-8 gallons of Potassium Hydroxide (KOH) occurred to the ground surface and interior walls, as a result of a failure in the fill line from a tank. Response actions included the recovery and removal of approximately 75+/- gallons of KOH and safety shower rinse water, soil excavation and sampling, and additional spraying, containerizing, and disposal of the corrosive liquid. A Method 1 Risk

Assessment determined that the site has reached a level of “No Significant Risk”. Considering the extent of the release and that groundwater was not reportedly impacted, the release associated with RTN 4-18962 is unlikely to significantly impact the Subject Property.

## 4.2 ADDITIONAL ENVIRONMENTAL RECORDS

### RCRA NonGen/NLR

RCRA NonGen/NLRs are facilities, which do not presently generate hazardous waste or are no longer regulated under RCRA. Based on a review of these records, there is one RCRA NonGen/NLR site listed within 0.25-miles of the Subject Property. The identified RCRA NonGen/NLR site is Provincetown Water located at the Junction of Route 6 and 6A, approximately 1,043 feet east, northeast of the Subject Property. According to the EDR Report, the site has not received any violation notices.

### Hazardous Waste Generator (HW GEN)

A HW GEN is a generator of hazardous waste and waste oil that registered or notified MassDEP. Based on a review of these records, there is one HW GEN site located within 0.25-miles of the Subject Property. The identified HW GEN site is Tow Boat US located at 352 Route 6, approximately 596 feet east of the Subject Property. According to the EDR Report, the site has not received any violation notices.

#### 4.2.1 MUNICIPAL RECORDS

Readily available records relating to the past and present use of the Subject Property were obtained from select municipal offices provided by the Client (the Town of Truro). Information gathered is presented below and copies of relevant information are available in Appendix B.

### Truro Assessor’s Office

The Subject Property is identified by the Town of Truro Assessor’s Office as follows:

Address	Town of Provincetown Assessor’s ID	Land Area (Acres)
2 Sand Pit Road	39-107-0	38.73*
9 Noons Drive	39-108-0	17.2

\* It should be noted that only a 27-acre portion of this parcel is included in the Subject Property as indicated on Figure 2.

Assessor cards obtained from the Town of Truro Assessor's Office are located in Appendix B.

**Truro Fire Department**

According to the Town of Truro, there are records relating to the Subject Property at the Fire Department.

**Truro Board of Health**

According to the Town of Truro, there are records relating to the Subject Property at the Board of Health.

**Truro Town Clerk**

According to the Town of Truro, there are records relating to the Subject Property at the Town Clerk.

**Truro Building Department**

Records obtained from the Truro Building Department included the document titled *Settlement of Land Use Agreement*, dated August 27, 2013, Appendix B. This document detailed the use of the Subject Property as a sand pit since the 1950's for the excavation of sand/soil. Abutters have alleged that target shooting has historically occurred at the Subject Property. According to the Owner, "target shooting was occasionally conducted into sand piles that have long since been removed from the Subject Property". Target practice ceased at the Subject Property prior to August 27, 2013. Other files included in the record were not related to the current or historic use of OHM at the Subject Property.

**Truro Planning Department**

According to the Town of Truro, there are records relating to the Subject Property at the Planning Department.

**Truro Conservation Commission**

According to the Town of Truro, there are records relating to the Subject Property at the Conservation Commission.

### **4.3 HISTORICAL RESEARCH**

#### **Sanborn Fire Insurance Maps**

According to EDR, the Subject Property is located within an unmapped area. A copy of the EDR Report including the Sanborn Fire Insurance Map report dated December 19, 2022, is included as Appendix C.

#### **USGS Topographical Maps**

USGS topographic maps dated 1889, 1898, 1944, 1948/1949, 1958, 1972, 1977, 2012, 2015, and 2018 were reviewed. The 1889 and 1898 depict an unimproved road transecting the Subject Property in an east/west direction and then centrally to the north. No buildings are depicted on the Subject Property. The 1944 through 1958 maps depict the unimproved road transecting the property in an east/west direction. No buildings are indicated on the Subject Property. The Subject Property is labeled as "Sandpit" in the 1972 topographical map. The 1977 map is depicted as an aerial and does not show topography. A roadway (Sand Pit Road) is depicted as transecting the northeast portion and the southern portion (Noons Drive) of the Subject Property on the 2012 and 2018 maps. A copy of the EDR Report including topographical maps dated December 19, 2022 is included as Appendix C.

#### **Aerial Photographs**

Aerial Photographs dated 1938, 1952, 1960, 1971, 1977, 1985, 1991, 1995, 2010, 2014, and 2018 were reviewed. The 1938 aerial photograph depicts the Subject Property as mostly vegetated with the exception of some roads/paths and several localized cleared areas. The 1952 aerial indicates substantial clearing of vegetation has occurred in the central portion of the Subject Property. The 1960 and 1971 aerial photograph depicts a majority of the Subject Property has been cleared. The 1977 through 2018 aerial depict a clearing in the central portion of the Subject Property. What appear to be soil stockpiles and containers/vehicles are evident in the 1985 through 2018 aerial photographs. Due to the scale and quality of the aerials, additional features of the Subject Property are not discernable. A copy of the EDR Report including aerial photographs dated December 20, 2022 is included as Appendix C.

#### **City Directories**

City Directories dated 1984, 1989, 1992, 1995, 2000, 2005, 2010, 2014, and 2017 were reviewed for the Subject Property. The Subject Property address of 2 Sand Pit Road was not included in any of the city directories reviewed.

#### **4.4 HISTORICAL USE RESEARCH FOR ADJOINING PROPERTIES**

Topographic maps and aerial photographs depict the area surrounding the Subject Property developed with roads as early as 1889 and with structures in 1938. More substantial developments, including both commercial and residential properties, appear in the aerial maps between 1971 and 2010. Due to the scale and quality of the aerial photographs, additional features of the adjoining properties are not discernable.

#### **4.5 PREVIOUS INVESTIGATIONS/ASSESSMENTS**

HW was not provided with any previous investigations or assessments.

#### **5.0 SUBJECT PROPERTY RECONNAISSANCE**

The purpose of the Subject Property reconnaissance was to observe and document features and conditions at the Subject Property and in the immediately surrounding areas. Emphasis was placed on observing any conditions that indicate the potential for RECs. Select photographs of the Subject Property are included as Appendix A.

##### **5.1 METHODOLOGY AND LIMITING CONDITIONS**

On January 18, 2023, Bryan Massa of HW conducted a Subject Property reconnaissance during daylight hours. The purpose of the reconnaissance was to visually and/or physically observe features and conditions at the Subject Property and within the surrounding areas with particular focus on areas that may be the cause of RECs, such as OHM storage areas. Mr. Massa was escorted by the Owner and Client. Questions regarding the Subject Property were answered by the Owner. Observations of the Subject Property in select areas were limited due to dense wooded areas and dense vegetation. A copy of Mr. Massa's resume is included in Appendix B.

##### **5.2 GENERAL SUBJECT PROPERTY OBSERVATIONS**

The Subject Property is located within a mixed commercial and residential area of Truro. Approximately 80 percent of the Subject Property is cleared and utilized as a sandpit with the remaining 20 percent undeveloped and wooded.

###### **5.2.1 STRUCTURES AND OTHER IMPROVEMENTS AT THE SUBJECT PROPERTY**

With the exception of a shed used to cover a water well (approximately 80 feet deep, Photo Log, Appendix A) that was reportedly used for dust suppression and to rinse dirt off of vehicle truck beds and that is reported by the Subject Property Owner as no longer in use, no structures or improvements were observed at the Subject Property during the reconnaissance.

### 5.2.2 ROADS

Several unpaved roads transect the Subject Property that are used for the sand pit operation. Access to the Subject Property is from Sand Pit Road and Noons Drive.

### 5.2.3 STRONG, PUNGENT, OR NOXIOUS ODORS AND THEIR SOURCES

No strong, pungent, or noxious odors were observed at the Subject Property during the reconnaissance.

### 5.2.4 POOL OF LIQUID

No pools of liquid were observed at the Subject Property during the reconnaissance.

### 5.2.5 DRUMS, TOTES, AND INTERMEDIATE BULK CONTAINERS

As indicated on Figure 3, four areas at the Subject Property are rented to local fisherman for the storage (photo log, Appendix A) of lobster traps, boats and other fishing related gear (i.e., rope and nets typically stored in plastic 55-gallon drums). According to the Subject Property Owner, boat maintenance and not permitted in rented areas. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the rented areas. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the rented areas.

A horse obstacle area (Figure 3) is located in the northwestern portion of the Subject Property. The obstacles include several empty plastic 55-gallon barrels that the horses jump over. The horses live in a stable located to the northeast and off the Subject Property. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the barrels. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the barrels.

Additionally, as indicated in Section 7.0, testing of the soil at the Subject Property for various contaminants of concern (COCs) including PFAS, VOCs, SVOCs, EPH, MCP 14 metals, PAHs and/or PCBs, did not detect any COCs in soil above the applicable regulatory thresholds.

### 5.2.6 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

A pile of utility poles (Photo log, Appendix A) was observed on the ground surface at the location indicated on Figure 3. Utility poles are typically treated with various coatings such as creosote, pentachlorophenol, and various metals to preserve the wood. No stressed vegetation (with the exception of typical weather-related stresses) or stained

soil was observed in the vicinity of the utility poles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the utility poles.

Several pieces of equipment including excavators, loaders, dump trucks and spare part vehicles were observed in the northern portion of the Subject Property as depicted on the photo logs, Appendix A. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the equipment or spare part vehicles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the equipment or spare part vehicles.

No other indications of OHM were observed at the Subject Property. Additionally, as indicated in Section 7.0, testing of the soil at the Subject Property for various COCs including PFAS, VOCs, SVOCs, EPH, MCP 14 metals, PAHs and/or PCBs, did not detect any COCs in soil above the applicable regulatory thresholds.

#### 5.2.7 STORAGE TANKS

No storage tanks were observed at the Subject Property during the reconnaissance.

#### 5.2.8 FLOOR DRAINS AND SUMPS

No floor drains or sumps were observed at the Subject Property during the reconnaissance.

#### 5.2.9 PITS, PONDS, AND LAGOONS

The Subject Property is an active sand pit where native soil is mined for resale purposes. No ponds or lagoons were observed at the Subject Property during the reconnaissance.

#### 5.2.10 STAINED SOIL AND STRESSED VEGETATION

No stained soil or stressed vegetation (with the exception of typical weather-related stresses) was observed at the Subject Property during the reconnaissance.

Several piles (Photo log, Appendix A) of asphalt millings, sand, mulch (made from local landscaped debris brought to the Subject Property), shells, and aggregate are stored throughout the cleared areas. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the soil piles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the piles. Additionally, testing of the soil at the Subject Property for various COCs) including PFAS, VOCs, SVOCs, EPH, MCP 14 metals, PAHs and/or PCBs, did not detect any COCs in soil above the applicable regulatory thresholds.

#### 5.2.11 PCB CONTAINING ITEMS

No indication of transformers, capacitors or light ballasts were identified at the Subject Property. The hydraulic equipment utilized at the Subject Property for sand pit operations is unlikely to contain PCBs. Additionally, testing of the surface soil as detailed in Section 7.0 did not detect any PCBs above the laboratory reporting limits.

#### 5.2.12 SOLID WASTE

No indication of significant solid waste disposal was observed on the ground surface at the Subject Property.

#### 5.2.13 SUBJECT PROPERTY UTILITIES

Utilities at the Subject Property include a private water well (approximately 80 feet deep, Photo Log, Appendix A) that was reportedly used for dust suppression and to rinse dirt off of vehicle truck beds. The well was reported by the Subject Property Owner as no longer in use.

### 5.3 INTERIOR OBSERVATIONS

With the exception of a shed used to cover a water well (approximately 80 feet deep, Photo Log, Appendix A) that was reportedly used for dust suppression and to rinse dirt off of vehicle truck beds and that is reported by the Subject Property Owner as no longer in use, no structures or improvements were observed at the Subject Property during the reconnaissance.

### 5.4 EXTERIOR OBSERVATIONS

- The Subject Property is located within a mixed commercial and residential area of Truro. Approximately 80 percent of the Subject Property is cleared and utilized as a sandpit with the remaining 20 percent undeveloped and wooded. Several piles (Photo log, Appendix A) of asphalt millings, sand, mulch (made from local landscaped debris brought to the Subject Property), shells, and aggregate are stored throughout the cleared areas. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the soil piles. No visual or olfactory indication of a significant release OHM was observed on the ground surface in the vicinity of the piles.
- As indicated on Figure 3, four areas at the Subject Property are rented to local fisherman for the storage (photo log, Appendix A) of lobster traps, boats and other fishing related gear (i.e., rope and nets typically stored in plastic 55-gallon drums). According to the Subject Property Owner, boat maintenance and not permitted in rented areas. No stressed vegetation (with the exception of typical

weather-related stresses) or stained soil was observed in the vicinity of the rented areas. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the rented areas.

- A pile of utility poles (Photo log, Appendix A) was observed on the ground surface at the location indicated on Figure 3. Utility poles are typically treated with various coatings such as creosote, pentachlorophenol, and various metals to preserve the wood. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the utility poles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the utility poles.
- Several pieces of equipment including excavators, loaders, dump trucks and spare part vehicles were observed in the northern portion of the Subject Property as depicted on the photo logs, Appendix A. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the equipment or spare part vehicles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the equipment or spare part vehicles.
- A horse obstacle area (Figure 3) is located in the northwestern portion of the Subject Property. The obstacles include several empty plastic 55-gallon barrels that the horses jump over. The horses live in a stable located to the northeast and off the Subject Property. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the barrels. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the barrels.
- The Subject Property is abutted to the north by residences and commercial properties including a store and motel. The Subject Property is abutted to the south by residences with Noons Drive beyond. The Subject Property is abutted to the east by residences and commercial properties including Pleasant View Autobody and John F. Noons trucking with Route 6 and Noons Drive beyond. The Subject Property is abutted to the west by residences and Great Swamp with Cormorant Road beyond.
- A photo log of observations is included in Appendix A.

## **5.5 ADJOINING PROPERTIES AND THE SURROUNDING AREA**

Surrounding properties include Pleasant View Autobody, John F. Noons trucking/site development, a motel, store, residences, and wooded land. No visual observations of RECs were observed on these properties from the right-of-way.

## **6.0 OWNER/OPERATOR/OCCUPANT INTERVIEWS**

### **6.1 OWNER OR OPERATOR INTERVIEWS**

On January 18, 2023, HW conducted a reconnaissance of the Subject Property. The following people associated with the Subject Property were interviewed:

- Ms. Linda Noons-Rose, Owner of the Subject Property

Information provided by the Subject Property contact is included in other sections of this report. A user questionnaire completed by the Client is included in Attachment B.

### **6.2 LOCAL GOVERNMENT OFFICIALS INTERVIEWS**

The Client (Town of Truro) provided records when available from the Assessor's Office, Fire Department, Board of Health, Town Clerk, Planning Department, Conservation Commission, and the Building Department to review records associated with the Subject Property. Details concerning the municipal records review is set forth above.

### **6.3 INTERVIEWS WITH OTHERS**

No other interviews were conducted in connection with this Phase I report.

## **7.0 PHASE II LIMITED SUBSURFACE INVESTIGATION**

HW completed a Phase II LSI at the request of the Client to determine if a reportable release of OHM consistent with the MCP has occurred as a result of the following:

- The historic operation of the Subject Property as a sand pit where off-site soils were potentially brought onto the Subject Property and then sold.
- The potential for lead impacts related to the historic use of portions of the Subject Property for target shooting.
- The potential for wood treatment chemicals to have leached from stockpiled utility poles to the subsurface.
- The potential for incidental spillage from several pieces of equipment including excavators, loaders, dump trucks, boats and spare part vehicles over the last 70 years.
- The potential for groundwater to be impacted from historic operations at the Subject Property or from an unknown off-site source.

Details of the Phase II LSI are presented below.

### **7.1 SELECTION OF APPLICABLE SOIL AND GROUNDWATER THRESHOLDS**

The Massachusetts Contingency Plan (MCP) identifies two reporting categories for soil (RCS-1 and RCS-2) and two for groundwater (RCGW-1 and RCGW-2). Details for each reporting category is set forth below.

#### Soil Reporting Categories

The MCP defines RCS-1 as soil samples obtained:

- *At or within 500 feet of a residential dwelling, a residentially-zoned property, school, playground, recreational area or park; or*
- *Within the geographic boundaries of a groundwater resource area categorized as RCGW- 1 in 310 CMR 40.0362(1)(a).*

The MCP defines RCS-2 as soil samples:

- *That are not obtained from category RCS-1 areas.*

#### Groundwater Reporting Categories

The MCP defines RCGW-1 as groundwater samples obtained:

- *within a Current Drinking Water Source Area; or*
- *within a Potential Drinking Water Source Area.*

The MCP defines RCGW-2 as groundwater samples:

- *That are not obtained from category RCGW-1 areas.*

Considering that the Subject Property is located with 500-feet of a residential dwelling and is located within a Current or Potential Drinking Water Source Area, RCS-1 and RCGW-1 are the appropriate reporting categories for the Subject Property.

### **7.2 TEST PIT ADVANCEMENT**

On February 2, 2023, 11 test pits were excavated at the Subject Property (TP-1 through TP-11) to a maximum depth of ten feet below grade at the locations indicated on Figure 3. Soil samples were continuously collected in 2-foot intervals and field screened for total organic vapors (TOV) using a photoionization detector (PID) using the jar headspace method. TOV PID values ranged from less than the detection limit of the equipment (<0.1 parts per million volume ppmv] to a maximum of 2.3 ppmv.

While no significant visual or olfactory evidence of a release of OHM was noted in any of the test pit locations, trace evidence of plastic, brick and/or wood debris were identified in TP-5 (4-6 feet below grade) and TP-6 (0.5 to 2 feet below grade and 4 to 6 feet below grade). Groundwater was not encountered in any of the test pits. Test pit logs are included in Appendix D.

### **7.3 SOIL BORING ADVANCEMENT**

Between February 10 and 15, 2023 three soil borings were advanced at the Subject Property (SB-1 through SB-3) to a maximum depth of 77 feet below grade at the locations indicated on Figure 3. Soil samples were continuously collected in 2-foot intervals and field screened for TOV with a PID using the jar headspace method. TOV PID values ranged from less than the detection limit of the equipment (<0.1 ppmv) to a maximum of 0.6 ppmv.

No significant visual or olfactory evidence of a release of OHM was noted in any of the boring locations. Groundwater was encountered in the borings at depths ranging from 28 to 72 feet below grade. Soil boring logs are included in Appendix D

### **7.4 MONITORING WELL CONSTRUCTION**

Soil borings SB-1 through SB-3 (Figure 3) were completed as permanent groundwater monitoring wells MW-1 through MW-3, respectively. The monitoring wells were constructed of 2-inch diameter PVC casing with 10 feet of 0.010-inch slotted screen positioned to roughly bisect the groundwater table. Prior to sampling, depth to groundwater was determined using a water level and the monitoring wells were developed with a submersible pump.

The monitoring wells were then purged of five well volumes with a peristaltic pump utilizing low flow sampling methodologies. After purging was complete, groundwater samples were collected in laboratory provided sample containers and placed on ice under chain of custody procedures. Groundwater samples collected for VOCs were collected with a disposable bailer, and groundwater samples for dissolved metals analysis were field filtered with a 0.45-micron filter prior to preservation.

HW returned to the Subject Property on February 22, 2023 to survey the location and elevation of the wells. Based on the survey data, groundwater was determined to flow in a southwesterly direction as indicated on Figure 3.

### **7.5 LABORATORY RESULTS FOR SOIL SAMPLES**

During test pit excavation, soil samples were selected based on a combination of factors including visual/olfactory observations, TOV PID and/or representative depth and

surficial distribution. Soil samples were submitted to a Massachusetts certified laboratory for PFAS, VOCs, SVOCs, MCP 14 metals, VOCs, EPH, PAHs, and/or PCBs. Soil boring logs and test pit logs are included in Appendix D and the location of the soil borings and test pits are included on Figure 3. Details of the soil laboratory results are set forth below.

#### PFAS

PFAS was not detected above the laboratory reporting limit in any of the four soil samples submitted for analysis. All laboratory reporting limits were below the applicable RCS-1 threshold. Tabulated soil analytical data is included on Table 1, and the laboratory analytical report is included in Appendix E.

#### VOCs

VOCs were not detected above the laboratory reporting limit in any of the two soil samples submitted for analysis. All laboratory reporting limits were below the applicable RCS-1 threshold. Tabulated soil analytical data is included on Table 1, and the laboratory analytical report is included in Appendix E.

#### SVOCs

SVOCs were not detected above the laboratory reporting limit in any of the two soil samples submitted for analysis. All laboratory reporting limits were below the applicable RCS-1 threshold with the exception of biphenyl. biphenyl is not a contaminant of concern, and the elevated laboratory reporting limit is not considered a concern. Tabulated soil analytical data is included on Table 1, and the laboratory analytical report is included in Appendix E.

#### MCP 14 Metals

Select MCP 14 metals were detected in all nine soil samples above the laboratory reporting limit and below the applicable RCS-1. All laboratory reporting limits were below the applicable RCS-1 threshold. Tabulated soil analytical data is included on Table 1, and the laboratory analytical report is included in Appendix E.

#### EPH

EPH was detected in two of the nine soil samples above the laboratory reporting limit and below the applicable RCS-1. All laboratory reporting limits were below the applicable RCS-1 threshold. Tabulated soil analytical data is included on Table 1, and the laboratory analytical report is included in Appendix E.

## PAHs

PAHs were detected in three of the nine soil samples above the laboratory reporting limit and below the applicable RCS-1. All laboratory reporting limits were below the applicable RCS-1 threshold. Tabulated soil analytical data is included on Table 1, and the laboratory analytical report is included in Appendix E.

## PCBs

PCBs were not detected above the laboratory reporting limit in any of the two soil samples submitted for analysis. All laboratory reporting limits were below the applicable RCS-1 threshold. Tabulated soil analytical data is included on Table 1, and the laboratory analytical report is included in Appendix E.

## **7.6 LABORATORY RESULTS FOR GROUNDWATER**

SB-1 through SB-3 were completed as permanent 2-inch diameter groundwater monitoring well MW-1 through MW-3, respectively. Groundwater samples were submitted to a Massachusetts certified laboratory for PFAS, VOCs, SVOCs, MCP 14 metals, VOCs, EPH, PAHs, and/or PCBs. Monitoring well construction logs are included in Appendix D and the location of the monitoring wells are included on Figure 3. Details of the groundwater laboratory results are set forth below.

## PFAS

PFAS was detected above the laboratory reporting limit in all three groundwater samples submitted for laboratory analysis and above the RCGW-1 threshold in sample MW-1. All laboratory reporting limits were below the applicable RCGW-1 threshold. Tabulated groundwater analytical data is included on Table 2 and the laboratory analytical report is included in Appendix E.

To verify the detection of PFAS in groundwater sample MW-1, the sample was recollected one month later and reanalyzed by the laboratory for PFAS. The sample contained a similar concentration of PFAS that was above the RCGW-1.

## VPH

VPH was not detected above the laboratory reporting limit in any of the three groundwater samples submitted for laboratory analysis. All laboratory reporting limits were below the applicable RCGW-1 threshold. Tabulated groundwater analytical data is included on Table 2 and the laboratory analytical report is included in Appendix E.

## VOCs

VOCs were not detected above the laboratory reporting limit in any of the three groundwater samples submitted for laboratory analysis. With the exception of 1,2-dibromoethane and 1,4-dioxane, all laboratory reporting limits were below the applicable RCGW-1 threshold. Considering no petroleum related VOCs or chlorinated solvents were detected in any of the groundwater samples submitted for laboratory analysis, the elevated laboratory reporting limit for 1,2-dibromoethane and 1,4-dioxane are not considered a concern. Tabulated groundwater analytical results are included on Table 2 and the laboratory analytical report is included in Appendix E.

## Dissolved MCP 14 Metals

Dissolved barium was detected in two of the three groundwater samples submitted for laboratory analysis above the laboratory reporting limit and below the applicable RCGW-1. All laboratory reporting limits were below the applicable RCGW-1 threshold. Tabulated groundwater analytical data is included on Table 2 and the laboratory analytical report is included in Appendix E.

## EPH

EPH was not detected above the laboratory reporting limit in any of the three groundwater samples submitted for laboratory analysis. All laboratory reporting limits were below the applicable RCGW-1 threshold. Tabulated groundwater analytical data is included on Table 2 and the laboratory analytical report is included in Appendix E.

## PAHs

PAHs were not detected above the laboratory reporting limit in any of the three groundwater samples submitted for laboratory analysis. All laboratory reporting limits were below the applicable RCGW-1 threshold. Tabulated groundwater analytical data is included on Table 2 and the laboratory analytical report is included in Appendix E.

## **7.7 CONCLUSION OF THE LSI**

Based on the analytical results documented above, a reportable release of OHM consistent with MCP has occurred at the Subject Property. The release is consistent with the notification requirements of 310 CMR 40.0315 "Releases which Require Notification within 120 days". As indicated above, the Subject Property does not have a drinking water well, there are no known drinking water wells located within 500 feet and as indicated on Figure 3, the Subject Property is not located within a Zone I.

Pursuant to 310 CMR 40.0331, the following persons shall notify the MassDEP in accordance with 310 CMR 40.0300 of a release or threat of release of OHM:

- The owner or operator of a vessel or a site from or at which there is or has been a release or threat of release of oil and/or hazardous material;
- Any person who at the time of storage or disposal of any hazardous material owned or operated any site at or upon which such hazardous material was stored or disposed of and from which there is or has been a release or threat of release of hazardous material;
- Any person who by contract, agreement, or otherwise, directly or indirectly, arranged for the transport, disposal, storage or treatment of hazardous material to or in a site or vessel from or at which there is or has been a release or threat of release of hazardous material;
- Any person who, directly or indirectly, transported any hazardous material to transport, disposal, storage or treatment vessels or sites from or at which there is or has been a release or threat of release of such material;
- Any person who otherwise caused or is legally responsible for a release or threat of release of oil and/or hazardous material from a site or vessel;
- Any fiduciary who holds title to or possession of a site or vessel from or at which there is or has been a release or threat of release of oil and/or hazardous material;
- Any secured lender who holds title to or possession of a site or vessel from or at which there is or has been a release or threat of release of oil and/or hazardous material;
- Any agency of the Commonwealth or any public utility company that owns a right of way that is a site from or at which there is or has been a release or threat of release of oil and/or hazardous material; and
- Any person otherwise required to notify the Department of a release or threat of release pursuant to M.G.L. c. 21E.

Based on the notification requirements above, the Client would become a person required to notify within 120 days of taking ownership of the Subject Property. Considering that PFAS was not detected in any of the soil samples collected at the Subject Property above the laboratory Reporting Limit and that the analytical data and groundwater flow direction support the conclusion that the PFAS impacts are related to an unknown source located hydraulically upgradient of the Subject Property, the Subject

Property appears to be eligible for Downgradient Property Status Pursuant to 310 CMR 40.0180.

It should be noted that drinking water is not provided to the Subject Property. Consideration should be made for connection to the municipal drinking water supply in the future to limit groundwater pre-treatment and laboratory testing requirements should groundwater at the Subject Property be utilized for consumption.

## 8.0 FINDINGS AND OPINIONS

- HW has completed this Phase I and Phase II LSI documenting the observed conditions of the sand pit/undeveloped property located on a portion of 2 Sand Pit Road and 9 Noons Drive in Truro, Massachusetts.
- The Subject Property is located within a mixed commercial and residential area of Truro. Approximately 80 percent of the Subject Property is cleared and utilized as a sandpit with the remaining 20 percent undeveloped and wooded. Several piles (Photo log, Appendix A) of asphalt millings, sand, mulch (made from local landscaped debris brought to the Subject Property), shells, and aggregate are stored throughout the cleared areas. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the soil piles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the piles.
- As indicated on Figure 3, four areas at the Subject Property are rented to local fisherman for the storage (photo log, Appendix A) of lobster traps, boats and other fishing related gear (i.e., rope and nets typically stored in plastic 55-gallon drums). According to Ms. Linda Noons-Rose (Owner of the Subject Property), boat maintenance is not permitted in the rented areas. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the rented areas. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the rented areas.
- A pile of utility poles (Photo log, Appendix A, and Figure 3) was observed on the ground surface. Utility poles are typically treated with various coatings such as creosote, pentachlorophenol, and various metals to preserve the wood. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the utility poles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the utility poles.
- Several pieces of equipment including excavators, loaders, dump trucks and spare part vehicles were observed in the northern portion of the Subject

Property (photo logs, Appendix A). No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the equipment or spare part vehicles. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the equipment or spare part vehicles.

- A horse obstacle area is located in the northwestern portion of the Subject Property (Figure 3). The obstacles include several empty plastic 55-gallon barrels that the horses jump over. The horses live in a stable located to the northeast and off the Subject Property. No stressed vegetation (with the exception of typical weather-related stresses) or stained soil was observed in the vicinity of the barrels. No visual or olfactory indication of a significant release of OHM was observed on the ground surface in the vicinity of the barrels.
- The Subject Property is abutted to the north by residences and commercial properties including a store and motel. The Subject Property is abutted to the south by residences with Noons Drive beyond. The Subject Property is abutted to the east by residences and commercial properties including Pleasant View Autobody and John F. Noons trucking with Route 6 and Noons Drive beyond. The Subject Property is abutted to the west by residences and Great Swamp with Cormorant Road beyond.
- There are no buildings at the Subject Property and vehicle maintenance and fueling are completed at the property to the east (not on the Subject Property). No OHM was observed at the Subject Property. Utilities at the Subject Property include a private water well (approximately 80 feet deep, Photo Log, Appendix A and Figure 3) that was reportedly used for dust suppression and to rinse dirt off of vehicle truck beds. The well was reported by the Subject Property owner as no longer in use.
- No records relating to the storage, usage or releases of OHM at the Subject Property were reported to HW or on file at the Town of Truro Board of Health, Fire Department, Building Department, Conservation Commission, Planning Department or Town Clerk.
- As indicated on the document titled *Settlement of Land Use Agreement*, dated August 27, 2013, Appendix B, The Subject Property has been used as sand pit since the 1950's for the excavation of sand/soil. Abutters have alleged that target shooting has historically occurred at the Subject Property. According to the Owner, "target shooting was occasionally conducted into sand piles that have long since been removed from the Subject Property". Target practice ceased at the Subject Property prior to August 27, 2013.

- In February 2023, HW completed a Phase II Limited Subsurface Investigation (LSI) to determine if a release of OHM had occurred at the Subject Property. The Phase II LSI included the collection of nine soil samples and four groundwater samples for laboratory analysis. The laboratory analysis included PFAS, VOCs, SVOCs, VPH, MCP 14 metals, EPH, PAHs, and/or PCBs.
- As indicated on Tables 1 and 2, with the exception of PFAS detected in groundwater, no other analytes were detected above the applicable MCP Reportable Concentrations for category S-1 soils or GW-1 groundwater. Refer to Figure 3 for sampling locations. Additional details regarding the Phase II LSI are set forth in Section 7 including details on the required MassDEP release notification requirements.
- Several releases of OHM have occurred at sites located within a 1.0-mile radius of the Subject Property. Based on the regulatory status, distance from the Subject Property, and/or groundwater flow direction, these release sites appear unlikely to significantly impact the Subject Property.

## 9.0 CONCLUSION

HW offers no opinion on unreported releases which may have occurred on or adjacent to the Subject Property, releases that occurred prior to reliable documentation of releases, or releases for which no additional records or information was readily available.

## 9.1 RECOGNIZED ENVIRONMENTAL CONDITIONS

HW has performed a Phase I Environmental assessment in general conformance with the scope and limitations of ASTM International E 1527-21 of the Subject Property. Any exceptions to this practice are described in Section 1.4. This assessment has revealed no evidence of the Recognized Environmental Conditions in connection with the Subject Property with the exception of the following:

- The Phase II LSI concluded that groundwater at the Subject Property is impacted with PFAS above the applicable Reportable Concentration for category GW-1 groundwater. PFAS was not detected in any of the soil samples collected at the Subject Property above the laboratory Reporting Limit or the applicable Reportable Concentration for category S-1 soils. Considering that the analytical data and groundwater flow direction support the conclusion that the PFAS impacts are related to an unknown source located hydraulically upgradient of the Subject Property, the Subject Property appears to be eligible for Downgradient Property Status Pursuant to 310 CMR 40.0180.

It should be noted that drinking water is not provided to the Subject Property. Consideration should be made for connection to the municipal drinking water supply in the future to limit groundwater pre-treatment and laboratory testing requirements should groundwater at the Subject Property be utilized.

## **9.2 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS**

HW has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM International E 1527-21 of the Subject Property. Any exceptions to this practice are described in Section 1.4. This assessment has revealed no evidence of Historical Recognized Environmental Conditions in connection with the Subject Property.

## **9.3 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS**

HW has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM International E 1527-21 of the Subject Property. Any exceptions to this practice are described in Section 1.4. This assessment has revealed no evidence of controlled Recognized Environmental Conditions in connection with the Subject Property.

## **9.4 BUSINESS ENVIRONMENTAL RISK**

This assessment has revealed no evidence of Business Environmental Risk in connection with the Subject Property except for the following:

- Several releases of OHM have occurred at sites located within a 1.0-mile radius of the Subject Property. Based on the regulatory status, distance from the Subject Property, and/or groundwater flow direction, these release sites appear unlikely to significantly impact the Subject Property.

## 10.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

I declare that to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in Code of Federal Regulations 40 C.F.R. 312.10, and, I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. 312.

A handwritten signature in blue ink, appearing to read "Bryan Massa", with a long horizontal flourish extending to the right.

---

Bryan Massa, LSP  
Senior Environmental Professional

## FIGURES

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Figure 1 – USGS Locus

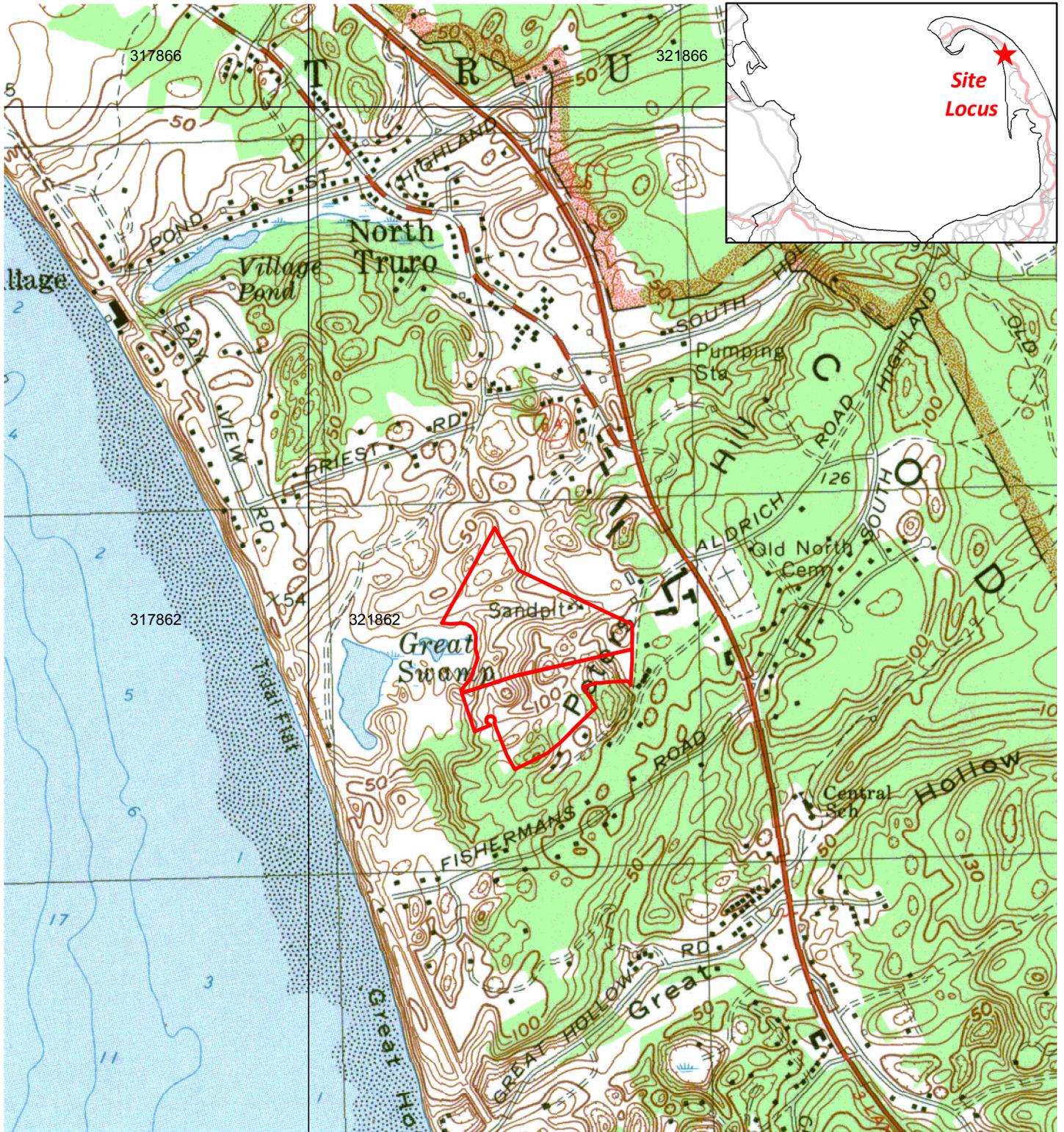
Figure 2 – Aerial Photograph

Figure 3 – Sample Locations and Groundwater Contour

Figure 4 – Soil Survey Map

Figure 5 – Existing Constraints

Figure 6 – FEMA's National Flood Hazard Layer



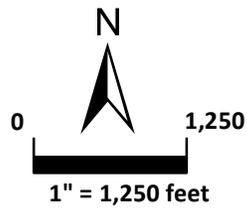
Document Path: H:\Projects\2022\22129 Sand Pit Road Truro\GIS\Maps\USGS\_Locus 2023.mxd

**Legend**

 Subject Property

\*2016 NAIP imagery service

**Horsley Witten Group**  
 Sustainable Environmental Solutions  
 90 Route 6A • Unit 1 • Sandwich, MA 02563  
 508-533-8600 • horsleywitten.com

USGS Locus  
 2 Sand Pit Road and  
 9 Noons Drive  
 Truro, MA

Date: 1/19/2023

Figure 1



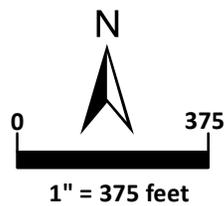
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**Legend**

 Subject Property

\*2021 NAIP imagery service

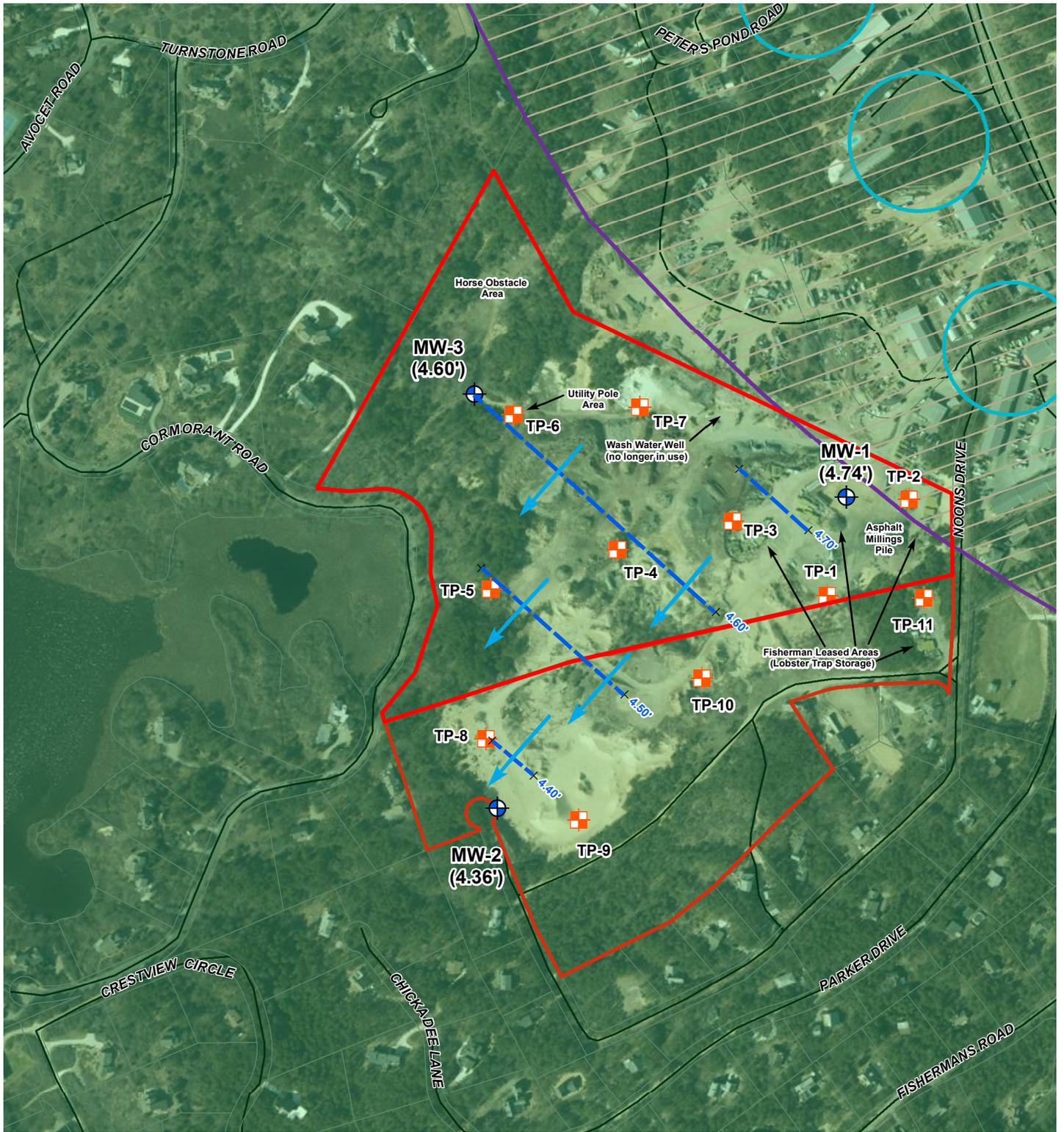
**Horsley Witten Group**  
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 508-533-8600 • horsleywitten.com

Aerial Photograph  
 2 Sand Pit Road and  
 9 Noon's Drive  
 Truro, MA

Date: 1/19/2023

Figure 2



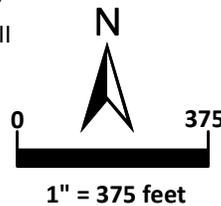
Document Path: H:\Projects\2022\22129 Sand Pit Road Truro\GIS\Maps\Sample Locations\_GW.mxd

**Legend**

\*2021 NAIP imagery service

- Subject Property
- Parcels
- Test Pits
- Groundwater Monitoring Wells
- 4.40' Groundwater Contour
- Groundwater Elevation Based on a Level Survey and Depth to Groundwater Gauging Completed on 3/22/2023

- Groundwater Flow Direction
- DEP Approved Zone I
- DEP Approved Zone II
- Medium Yield Aquifer



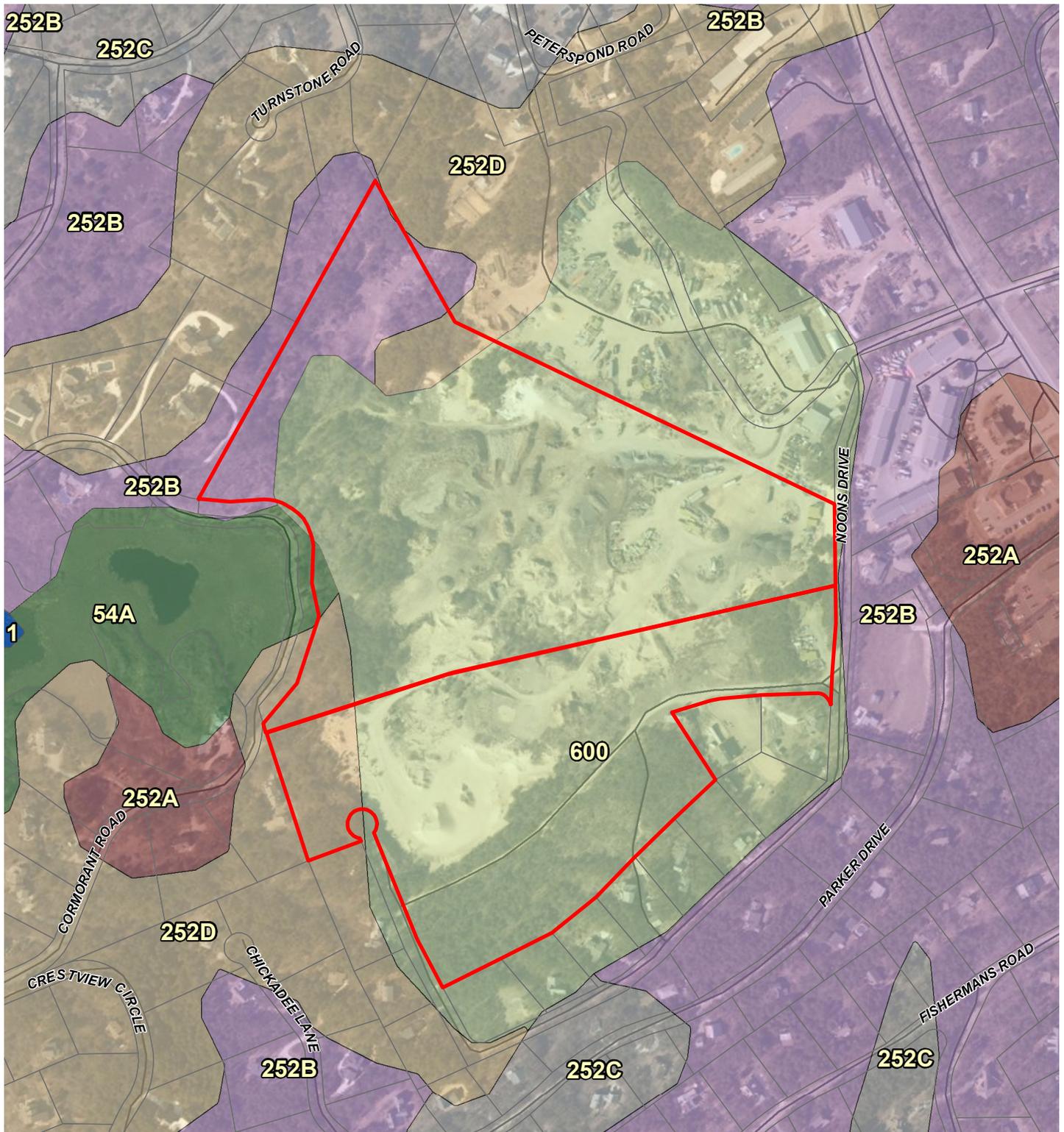
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Sample Locations and  
 Groundwater Contour Map  
 2 Sand Pit Road and  
 9 Noons Drive  
 Truro, MA

Date: 5/3/2023

Figure 3

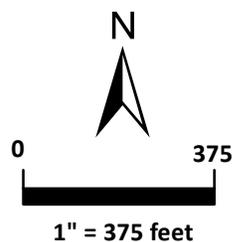


Document Path: H:\Projects\2022\22129 Sand Pit Road Truro\GIS\Maps\NRSC Soils 2023.mxd

\*2021 NAIP imagery service

**Legend**

- |  |                          |   |                   |
|--|--------------------------|---|-------------------|
|  | Subject Property 9 Noons |  | 252B, Carver, A   |
|  | Parcels                  |  | 252C, Carver, A   |
| <b>Barnstable County Soils</b>   |                          |   |                   |
| <b>MUSYM, compname, hydgrp</b>   |                          |   |                   |
|  | 1, Water, <Null>         |  | 54A, Freetown, D  |
|  | 252A, Carver, A          |  | 600, Pits, <Null> |



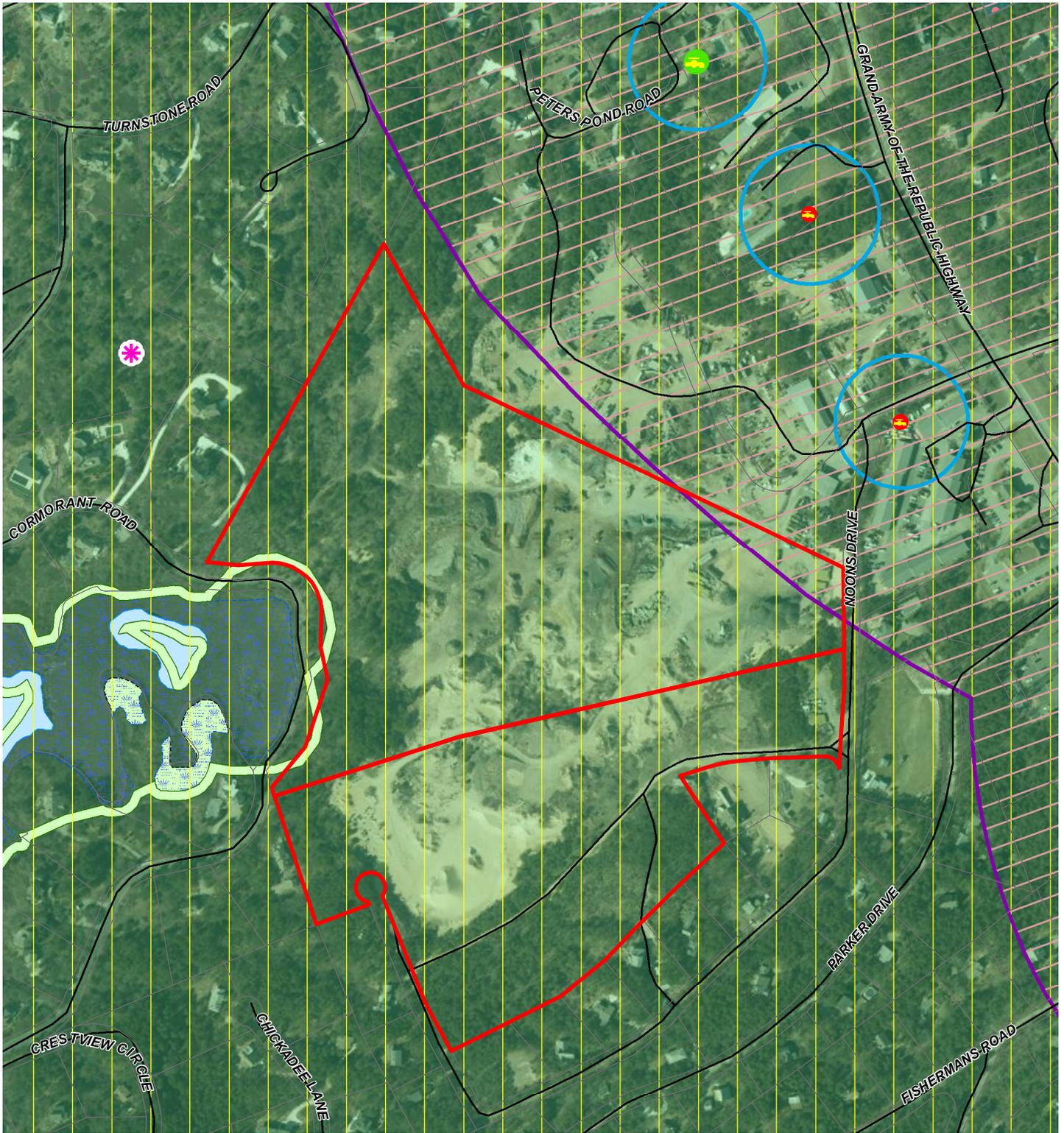
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Soil Survey Map  
 2 Sand Pit Road and  
 9 Noons Drive  
 Truro, MA

Date: 1/19/2023

Figure 4



Document Path: K:\Projects\2022\22129 Sand Pit Road Truro\GIS\Maps\Existing Constraints 2023.mxd

**Legend**

- Subject Property
- Parcels
- Potential Vernal Pools
- Community Groundwater Source
- Non-Community Groundwater Source
- DEP Approved Zone I
- DEP Approved Zone II

**DEP Wetlands**

- Marsh/Bog
- Wooded marsh
- Cranberry Bog
- Open Water

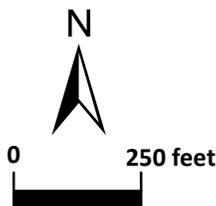
**NHESP**

- Priority Habitats of Rare Species
- Estimated Habitats of Rare Wildlife

**Aquifers**

- Medium Yield Aquifer
- Sole Source Aquifer

\*2021 NAIP imagery service



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Existing Constraints  
 2 Sand Pit Road and  
 9 Noons Drive  
 Truro, MA

Date: 5/3/2023

Figure 5



**Zone X - Area of Minimal Flood Hazard**

Document Path: H:\Projects\2022\22129 Sand Pit Road Truro\GIS\Maps\FEMA.mxd

\*2021 NAIP imagery service

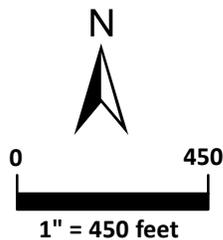
**Legend**

-  Subject Property 9 Noons
-  Parcels

**FEMA National Flood Hazard Layer**

**Flood Zone Designations**

-  VE: High Risk Coastal Area
-  X: 0.2% Annual Chance of Flooding



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FEMA's National Flood Hazard Layer  
2 Sand Pit Road and  
9 Noons Drive, Truro, MA

Date: 1/19/2023

Figure 6

## TABLES

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### TABLES

Table 1- Soil Analytical Results

Table 2- Groundwater Analytical Results

**Table 1 - Soil Analytical Results**  
**Sand Pit Road, Truro MA**

Sample Designation		TP-2 (2-4')	TP-3 (0-2')	TP-5 (0-2')	TP-5 (6-8')	TP-6 (0-2')	TP-8 (2-4')	TP-9 (0-2')	TP-10 (6-8')	TP-11 (0-2')	
Sample Date		2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	
Sample Depth		2-4'	0-2'	0-2'	6-8'	0-2'	2-4'	0-2'	6-8'	0-2'	
TOV PID		0.3	0.1	0.2	0.3	0.3	2.3	0.1	0.1	0.1	
Soil Standards		MCP RCS-1		Sample Results							
<b>PFAS</b>											
Perfluorobutanoic acid (PFBA)	µg/kg	NA	0.19 U	NS	0.19 U	NS	0.18 U	NS	0.17 U	NS	NS
Perfluorobutanesulfonic acid (PFBS)	µg/kg	NA	0.17 U	NS	0.16 U	NS	0.15 U	NS	0.15 U	NS	NS
Perfluoropentanoic acid (PFPeA)	µg/kg	NA	0.16 U	NS	0.16 U	NS	0.15 U	NS	0.15 U	NS	NS
Perfluorohexanoic acid (PFHxA)	µg/kg	NA	0.17 U	NS	0.16 U	NS	0.16 U	NS	0.15 U	NS	NS
8:2 Fluorotelomersulfonic acid (8:2FTS A)	µg/kg	NA	0.21 U	NS	0.2 U	NS	0.19 U	NS	0.19 U	NS	NS
4:2 Fluorotelomersulfonic acid (4:2FTS A)	µg/kg	NA	0.17 U	NS	0.17 U	NS	0.16 U	NS	0.16 U	NS	NS
6:2 Fluorotelomer sulfonate (6:2 FTS)	µg/kg	NA	0.24 U	NS	0.23 U	NS	0.22 U	NS	0.21 U	NS	NS
Perfluorodecanesulfonic acid (PFDS)	µg/kg	NA	0.23 U	NS	0.22 U	NS	0.21 U	NS	0.2 U	NS	NS
Perfluoroundecanoic acid (PFUnA)	µg/kg	NA	0.16 U	NS	0.16 U	NS	0.15 U	NS	0.14 U	NS	NS
Perfluoroheptanoic acid (PFHpA)	µg/kg	0.5	0.16 U	NS	0.15 U	NS	0.15 U	NS	0.14 U	NS	NS
Perfluorohexanesulfonic acid (PFHxS)	µg/kg	0.3	0.22 U	NS	0.21 U	NS	0.2 U	NS	0.2 U	NS	NS
Perfluorononanoic acid (PFNA)	µg/kg	0.32	0.16 U	NS	0.16 U	NS	0.15 U	NS	0.15 U	NS	NS
Perfluorooctanoic acid (PFOA)	µg/kg	0.72	0.16 U	NS	0.15 U	NS	0.15 U	NS	0.14 U	NS	NS
Perfluorooctane sulfonate (PFOS)	µg/kg	NA	0.29 U	NS	0.29 U	NS	0.27 U	NS	0.26 U	NS	NS
Perfluorodecanoic Acid (PFDA)	µg/kg	0.3	0.17 U	NS	0.17 U	NS	0.16 U	NS	0.15 U	NS	NS
Sum of Six	µg/kg	NA	ND	NS	ND	NS	ND	NS	ND	NS	NS
Total PFAS	µg/kg	NA	ND	NS	ND	NS	ND	NS	ND	NS	NS
<b>Volatile Organic Compounds (VOCs)</b>											
1,1,1,2-Tetrachloroethane	mg/kg	0.1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	30	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.005	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,1-Dichloroethane	mg/kg	0.4	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,1-Dichloroethylene	mg/kg	3	NS	NS	<0.0044	NS	NS	<0.0043	NS	NS	NS
1,1-Dichloropropene	mg/kg	500	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	100	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	1,000	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	10	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2-Dibromoethane (EDB)	mg/kg	0.1	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	9	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,2-Dichloropropane	mg/kg	0.1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	3	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,3-Dichloropropane	mg/kg	500	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
1,4-Dioxane	mg/kg	0.2	NS	NS	<0.11	NS	NS	<0.11	NS	NS	NS
2,2-Dichloropropane	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
2-Butanone (MEK)	mg/kg	4	NS	NS	<0.044	NS	NS	<0.043	NS	NS	NS
2-Chlorotoluene	mg/kg	100	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
2-Hexanone (MBK)	mg/kg	100	NS	NS	<0.022	NS	NS	<0.022	NS	NS	NS
4-Chlorotoluene	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	mg/kg	0.4	NS	NS	<0.022	NS	NS	<0.022	NS	NS	NS
Acetone	mg/kg	6	NS	NS	<0.11	NS	NS	<0.11	NS	NS	NS
Benzene	mg/kg	2	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Bromobenzene	mg/kg	100	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Bromochloromethane	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Bromodichloromethane	mg/kg	0.1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Bromoform	mg/kg	0.1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Bromomethane	mg/kg	0.5	NS	NS	<0.011	NS	NS	<0.011	NS	NS	NS
Carbon Disulfide	mg/kg	100	NS	NS	<0.011	NS	NS	<0.011	NS	NS	NS
Carbon Tetrachloride	mg/kg	5	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Chlorobenzene	mg/kg	1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Chlorodibromomethane	mg/kg	0.005	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
Chloroethane	mg/kg	100	NS	NS	<0.022	NS	NS	<0.022	NS	NS	NS
Chloroform	mg/kg	0.2	NS	NS	<0.0044	NS	NS	<0.0043	NS	NS	NS
Chloromethane	mg/kg	100	NS	NS	<0.011	NS	NS	<0.011	NS	NS	NS
cis-1,2-Dichloroethylene	mg/kg	0.1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.01	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
Dibromomethane	mg/kg	500	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Dichlorodifluoromethane	mg/kg	1,000	NS	NS	<0.022	NS	NS	<0.022	NS	NS	NS
Diethyl Ether	mg/kg	100	NS	NS	<0.022	NS	NS	<0.022	NS	NS	NS
Diisopropyl Ether	mg/kg	100	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
Ethylbenzene	mg/kg	40	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Hexachlorobutadiene	mg/kg	30	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Isopropylbenzene	mg/kg	1,000	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
m+p Xylene	mg/kg	NA	NS	NS	<0.0044	NS	NS	<0.0043	NS	NS	NS
Methyl tert Butyl Ether	mg/kg	0.1	NS	NS	<0.0044	NS	NS	<0.0043	NS	NS	NS
Methylene Chloride	mg/kg	0.1	NS	NS	<0.022	NS	NS	<0.022	NS	NS	NS
Naphthalene	mg/kg	4	NS	NS	<0.0044	NS	NS	<0.0043	NS	NS	NS
n-Butylbenzene	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
n-Propylbenzene	mg/kg	100	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
o-Xylene	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
p-Isopropyltoluene	mg/kg	100	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
sec-Butylbenzene	mg/kg	NA	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Styrene	mg/kg	3	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
tert-Amyl Methyl Ether (TAME)	mg/kg	NA	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
tert-Butyl Ethyl Ether (TBEE)	mg/kg	NA	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
tert-Butylbenzene	mg/kg	100	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Tetrachloroethylene	mg/kg	1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Tetrahydrofuran	mg/kg	500	NS	NS	<0.011	NS	NS	<0.011	NS	NS	NS
Toluene	mg/kg	30	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
trans-1,2-Dichloroethylene	mg/kg	1	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.01	NS	NS	<0.0011	NS	NS	<0.0011	NS	NS	NS
Trichloroethylene	mg/kg	0.3	NS	NS	<0.0022	NS	NS	<0.0022	NS	NS	NS
Trichlorofluoromethane	mg/kg	1,000	NS	NS	<0.011	NS	NS	<0.011	NS	NS	NS
Vinyl Chloride	mg/kg	0.7	NS	NS	<0.011	NS	NS	<0.011	NS	NS	NS

Table 1 - Soil Analytical Results  
Sand Pit Road, Truro MA

Sample Designation		TP-2 (2-4')	TP-3 (0-2')	TP-5 (0-2')	TP-5 (6-8')	TP-6 (0-2')	TP-8 (2-4')	TP-9 (0-2')	TP-10 (6-8')	TP-11 (0-2')
Sample Date		2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023
Sample Depth		2-4'	0-2'	0-2'	6-8'	0-2'	2-4'	0-2'	6-8'	0-2'
TOV PID		0.3	0.1	0.2	0.3	0.3	2.3	0.1	0.1	0.1
Soil Standards		MCP RCS-1	Sample Results							
Semivolatile Organic Compounds (SVOCs)										
1,2,4-Trichlorobenzene	mg/kg	2	NS	NS	<0.37	NS	<0.36	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	9	NS	NS	<0.37	NS	<0.36	NS	NS	NS
1,2-Diphenylhydrazine	mg/kg	NA	NS	NS	<0.37	NS	<0.36	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	3	NS	NS	<0.37	NS	<0.36	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2,4,5-Trichlorophenol	mg/kg	4	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2,4,6-Trichlorophenol	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2,4-Dichlorophenol	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2,4-Dimethylphenol	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2,4-Dinitrophenol	mg/kg	3	NS	NS	<0.72	NS	<0.7	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	100	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2-Chloronaphthalene	mg/kg	1,000	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2-Chlorophenol	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2-Methylnaphthalene	mg/kg	0.7	NS	NS	<0.19	NS	<0.18	NS	NS	NS
2-Methylphenol	mg/kg	500	NS	NS	<0.37	NS	<0.36	NS	NS	NS
2-Nitrophenol	mg/kg	100	NS	NS	<0.37	NS	<0.36	NS	NS	NS
3,3-Dichlorobenzidine	mg/kg	3	NS	NS	<0.19	NS	<0.18	NS	NS	NS
3/4-Methylphenol	mg/kg	500	NS	NS	<0.37	NS	<0.36	NS	NS	NS
4-Bromophenylphenylether	mg/kg	100	NS	NS	<0.37	NS	<0.36	NS	NS	NS
4-Chloroaniline	mg/kg	1	NS	NS	<0.72	NS	<0.7	NS	NS	NS
4-Nitrophenol	mg/kg	100	NS	NS	<0.72	NS	<0.7	NS	NS	NS
Acenaphthene	mg/kg	4	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Acenaphthylene	mg/kg	1	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Acetophenone	mg/kg	1,000	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Aniline	mg/kg	1,000	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Anthracene	mg/kg	1,000	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Benzo(a)anthracene	mg/kg	7	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Benzo(a)pyrene	mg/kg	2	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Benzo(b)fluoranthene	mg/kg	7	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Benzo(g,h,i)perylene	mg/kg	1,000	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Benzo(k)fluoranthene	mg/kg	70	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Biphenyl	mg/kg	0.05	NS	NS	<0.073	NS	<0.071	NS	NS	NS
Bis(2-chloroethoxy)methane	mg/kg	500	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Bis(2-chloroethyl)ether	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Bis(2-chloroisopropyl)ether	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Bis(2-Ethylhexyl)phthalate	mg/kg	90	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Butylbenzylphthalate	mg/kg	100	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Chrysene	mg/kg	70	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Dibenz(a,h)anthracene	mg/kg	0.7	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Dibenzofuran	mg/kg	100	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Diethylphthalate	mg/kg	10	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Dimethylphthalate	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Di-n-butylphthalate	mg/kg	50	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Di-n-octylphthalate	mg/kg	1,000	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Fluoranthene	mg/kg	1,000	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Fluorene	mg/kg	1,000	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Hexachlorobenzene	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Hexachlorobutadiene	mg/kg	30	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Hexachloroethane	mg/kg	0.7	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Indeno(1,2,3-cd)pyrene	mg/kg	7	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Isophorone	mg/kg	100	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Naphthalene	mg/kg	4	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Nitrobenzene	mg/kg	500	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Pentachlorophenol	mg/kg	3	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Phenanthrene	mg/kg	10	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Phenol	mg/kg	1	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Pyrene	mg/kg	1,000	NS	NS	<0.19	NS	<0.18	NS	NS	NS
Pyridine	mg/kg	500	NS	NS	<0.37	NS	<0.36	NS	NS	NS
Metals										
Antimony	mg/kg	20	<1.8	<1.7	<1.8	<1.8	<1.7	<2.0	<1.7	<1.7
Arsenic	mg/kg	20	<3.6	<3.4	<3.6	<3.6	<3.4	<4.0	<3.4	<3.4
Barium	mg/kg	1,000	8.2	2.2	7.2	9.8	6.2	9.6	2.3	3.6
Beryllium	mg/kg	90	0.19	<0.17	<0.18	0.22	0.17	0.27	<0.17	<0.17
Cadmium	mg/kg	70	<0.36	<0.34	<0.36	<0.36	<0.34	<0.40	<0.34	<0.34
Chromium	mg/kg	100	6.5	1.4	3	6.1	5.4	6	1.7	1.7
Lead	mg/kg	200	4.5	5.0	8.3	6.4	3.4	3	1.2	1.4
Mercury	mg/kg	20	<0.028	0.041	<0.028	<0.027	<0.026	<0.031	<0.026	<0.027
Nickel	mg/kg	600	3.5	0.74	1.9	2.8	3	4	1.8	2.4
Selenium	mg/kg	400	<3.6	<3.4	<3.6	<3.6	<3.4	<4.0	<3.4	<3.4
Silver	mg/kg	100	<0.36	<0.34	<0.36	<0.36	<0.34	<0.40	<0.34	<0.34
Thallium	mg/kg	8	<1.8	<1.7	<1.8	<1.8	<1.7	<2.0	<1.7	<1.7
Vanadium	mg/kg	400	6.9	2.0	4	8.9	6.7	7.4	2.6	2.5
Zinc	mg/kg	1,000	47	3.8	14	9.7	8.9	11	5.8	6.6

**Table 1 - Soil Analytical Results  
Sand Pit Road, Truro MA**

Sample Designation			TP-2 (2-4')	TP-3 (0-2')	TP-5 (0-2')	TP-5 (6-8')	TP-6 (0-2')	TP-8 (2-4')	TP-9 (0-2')	TP-10 (6-8')	TP-11 (0-2')
Sample Date			2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023	2/2/2023
Sample Depth			2-4'	0-2'	0-2'	6-8'	0-2'	2-4'	0-2'	6-8'	0-2'
TOV PID			0.3	0.1	0.2	0.3	0.3	2.3	0.1	0.1	0.1
Soil Standards		MCP RCS-1	Sample Results								
<b>Extractable Petroleum Hydrocarbons</b>											
C9-C18 Aliphatics	mg/kg	1,000	<11	<11	<11	<11	<11	<12	<10	<11	<10
C19-C36 Aliphatics	mg/kg	3,000	<11	<11	<11	<11	<11	<12	<10	<11	<10
C11-C22 Aromatics	mg/kg	1,000	<11	13	15	<11	<11	<12	<10	<11	<10
<b>Polycyclic Aromatic Hydrocarbons</b>											
2-Methylnaphthalene	mg/kg	0.7	<0.11	<0.11	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Acenaphthene	mg/kg	4	<0.11	<0.11	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Naphthalene	mg/kg	4	<0.11	<0.11	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Phenanthrene	mg/kg	10	<0.11	0.22	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Acenaphthylene	mg/kg	1	<0.11	0.18	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Anthracene	mg/kg	1,000	<0.11	<0.11	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Benzo(a)anthracene	mg/kg	7	<0.11	0.21	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Benzo(a)pyrene	mg/kg	2	<0.11	0.23	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Benzo(b)fluoranthene	mg/kg	7	<0.11	0.39	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Benzo(g,h,i)perylene	mg/kg	1,000	<0.11	0.18	0.14	0.17	<0.11	<0.12	<0.10	<0.11	<0.10
Benzo(k)fluoranthene	mg/kg	70	<0.11	0.14	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Chrysene	mg/kg	70	<0.11	0.29	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Dibenzo(a,h)Anthracene	mg/kg	0.7	<0.11	<0.11	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Fluoranthene	mg/kg	1,000	<0.11	0.46	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Fluorene	mg/kg	1,000	<0.11	<0.11	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Indeno(1,2,3-cd)Pyrene	mg/kg	7	<0.11	0.2	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
Pyrene	mg/kg	1,000	<0.11	0.46	<0.11	<0.11	<0.11	<0.12	<0.10	<0.11	<0.10
<b>Polychlorinated Biphenyls (PCBs)</b>											
PCB 1016	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1221	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1232	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1242	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1248	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1254	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1260	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1262	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS
PCB 1268	mg/kg	1	NS	NS	<0.088	NS	<0.085	NS	NS	NS	NS

Notes:

1. µg/kg = Micrograms per kilogram
2. mg/kg = Milligrams per kilogram
3. MCP = Massachusetts Contingency Plan
4. RCS-1 = The Reportable Concentration for category S-1 soils as documented in the 2019 MCP
5. **Bold** indicates concentration exceeds applicable Method 1 Standard.
6. **Bold and underlined** concentrations were Not Detected but reporting limits exceed Method 1 standard
7. < = Not detected by the laboratory above the reporting limit. Laboratory reporting limit shown.
8. U = Not detected by the laboratory above the method detection limit. Laboratory method detection limit shown.
9. TOV PID = Total Organic Vapors, Photoionization Detector Calibrated to Benzene
10. ND = Not Detected
11. NA = Not Applicable
12. NS = Not Sampled
13. Sum of six includes estimated values and does not include non-detects (U or <). SUM of Six PFAS includes *PFUnA*, PFHpA, PFHxS, PFNA, PFOA, PFOS AND PFDA.
14. Total PFAS is the sum of all laboratory detected PFAS analytes including estimated values and does not include non-detects (U or <).

Table 2 - Groundwater Analytical Results  
Sand Pit Road, Truro MA

Sample Designation			MW-1		MW-2	MW-3
Sample Date			2/15/2023	3/15/2023	2/15/2023	2/15/2023
Depth to Water (ft)			73.34	73.13	52.35	28
Total Well Depth (ft)			82.0	82.0	60.64	36.35
Groundwater Standards		MCP RCGW-1	Sample Results			
<b>Per- and Polyfluoroalkyl Substances</b>						
Perfluorobutanoic acid (PFBA)	µg/L	NA	0.0059	0.00548	0.00234	0.00576
Perfluoroheptanesulfonic Acid (PFHpS)	µg/L	NA	0.00511	0.00362	0.000628 U	0.000646 U
Perfluorobutanesulfonic acid (PFBS)	µg/L	NA	0.0109	0.00962	0.000336 J	0.00112 J
Perfluoropentanoic acid (PFPeA)	µg/L	NA	0.005	0.006	0.00105 J	0.000372 U
Perfluorohexanoic acid (PFHxA)	µg/L	NA	0.0158	0.0203	0.00128 J	0.000308 U
8:2 Fluorotelomersulfonic acid (8:2FTS A)	µg/L	NA	0.00118 U	0.00107 U	0.00111 U	0.00114 U
Perfluoropentanesulfonic Acid (PFPeS)	µg/L	NA	0.0106	0.013	0.000224 U	0.000237 J
4:2 Fluorotelomersulfonic acid (4:2FTS A)	µg/L	NA	0.000441 U	0.000399 U	0.000413 U	0.000424 U
6:2 Fluorotelomer sulfonate (6:2 FTS)	µg/L	NA	0.0013 U	0.00118 U	0.00122 U	0.00125 U
Perfluorodecanesulfonic acid (PFDS)	µg/L	NA	0.000956 U	0.000865 U	0.000895 U	0.00092 U
Perfluoroundecanoic acid (PFUnA)	µg/L	NA	0.000254 U	0.000229 U	0.000238 U	0.000244 U
Perfluoroheptanoic acid (PFHpA)	µg/L	NA	0.0326	0.0438	0.00113 J	0.000212 U
Perfluorohexanesulfonic acid (PFHxS)	µg/L	NA	0.0488	0.0332	0.0008 J	0.00129 J
Perfluorononanoic acid (PFNA)	µg/L	NA	0.00062 J	0.000791 J	0.000285 U	0.000293 U
Perfluorooctanoic acid (PFOA)	µg/L	NA	0.00918	0.00936	0.00151 J	0.000639 J
Perfluorooctane sulfonate (PFOS)	µg/L	NA	0.248	0.238	0.00046 U	0.000473 U
Perfluorodecanoic Acid (PFDA)	µg/L	NA	0.000296 U	0.000268 U	0.000278 U	0.000286 U
Sum of Six	µg/L	0.02	<b>0.3392</b>	<b>0.325151</b>	0.00344	0.001929
Total PFAS	µg/L	NA	0.39297	0.383511	0.008446	0.009046
<b>Volatile Petroleum Hydrocarbons</b>						
C5-C8 Aliphatics	µg/L	300	<100	NS	<100	<100
C9-C12 Aliphatics	µg/L	700	<100	NS	<100	<100
C9-C10 Aromatics	µg/L	50,000	<100	NS	<100	<100
<b>Target Volatile Organic Compounds</b>						
Benzene	µg/L	5	<2	NS	<2	<2
Ethylbenzene	µg/L	700	<2	NS	<2	<2
Methyl tert-Butyl Ether	µg/L	70	<3	NS	<3	<3
Naphthalene	µg/L	140	<4	NS	<4	<4
Toluene	µg/L	1,000	<2	NS	<2	<2
o-Xylene	µg/L	NA	<2	NS	<2	<2
p,m-Xylene	µg/L	NA	<2	NS	<2	<2
<b>Volatile Organic Compounds (VOCs)</b>						
1,1,1,2-Tetrachloroethane	µg/L	5	<1	NS	<1	<1
1,1,1-Trichloroethane	µg/L	200	<1	NS	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	2	<1	NS	<1	<1
1,1,2-Trichloroethane	µg/L	5	<1	NS	<1	<1
1,1-Dichloroethane	µg/L	70	<1	NS	<1	<1
1,1-Dichloroethylene	µg/L	7	<1	NS	<1	<1
1,1-Dichloropropene	µg/L	5,000	<2	NS	<2	<2
1,2,3-Trichlorobenzene	µg/L	NA	<2	NS	<2	<2
1,2,3-Trichloropropane	µg/L	1,000	<2	NS	<2	<2
1,2,4-Trichlorobenzene	µg/L	70	<2	NS	<2	<2
1,2,4-Trimethylbenzene	µg/L	10,000	<2	NS	<2	<2
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	100	<2	NS	<2	<2
1,2-Dibromoethane (EDB)	µg/L	0.02	<b>&lt;2</b>	NS	<b>&lt;2</b>	<b>&lt;2</b>
1,2-Dichlorobenzene	µg/L	600	<1	NS	<1	<1
1,2-Dichloroethane	µg/L	5	<1	NS	<1	<1
1,2-Dichloroethane, Total	µg/L	5	<1	NS	<1	<1
1,2-Dichloropropane	µg/L	3	<1	NS	<1	<1
1,3,5-Trimethylbenzene	µg/L	NA	<2	NS	<2	<2
1,3-Dichlorobenzene	µg/L	100	<1	NS	<1	<1
1,3-Dichloropropane	µg/L	NA	<2	NS	<2	<2
1,3-Dichloropropane, Total	µg/L	NA	<0.4	NS	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	5	<1	NS	<1	<1
1,4-Dioxane	µg/L	0.3	<b>&lt;250</b>	NS	<b>&lt;250</b>	<b>&lt;250</b>
2,2-Dichloropropane	µg/L	NA	<2	NS	<2	<2
2-Butanone (MEK)	µg/L	4,000	<5	NS	<5	<5
2-Hexanone (MBK)	µg/L	1,000	<5	NS	<5	<5

Table 2 - Groundwater Analytical Results  
Sand Pit Road, Truro MA

Sample Designation			MW-1		MW-2	MW-3
Sample Date			2/15/2023	3/15/2023	2/15/2023	2/15/2023
Depth to Water (ft)			73.34	73.13	52.35	28
Total Well Depth (ft)			82.0	82.0	60.64	36.35
Groundwater Standards		MCP RCGW-1	Sample Results			
<b>VOCs-Continued</b>						
4-Methyl-2-pentanone (MIBK)	µg/L	350	<5	NS	<5	<5
Acetone	µg/L	6,300	<5	NS	<5	3
Benzene	µg/L	5	<0.5	NS	<0.5	<0.5
Bromobenzene	µg/L	1,000	<2	NS	<2	<2
Bromochloromethane	µg/L	NA	<2	NS	<2	<2
Bromodichloromethane	µg/L	3	<1	NS	<1	<1
Bromoform	µg/L	4	<2	NS	<2	<2
Bromomethane	µg/L	7	<2	NS	<2	<2
Carbon Disulfide	µg/L	1,000	<2	NS	<2	<2
Carbon Tetrachloride	µg/L	2	<1	NS	<1	<1
Chlorobenzene	µg/L	100	<1	NS	<1	<1
Chlorodibromomethane	µg/L	2	<1	NS	<1	<1
Chloroethane	µg/L	1,000	<2	NS	<2	<2
Chloroform	µg/L	50	<1	NS	0	<1
Chloromethane	µg/L	1,000	<2	NS	<2	<2
cis-1,2-Dichloroethylene	µg/L	20	<1	NS	<1	<1
cis-1,3-Dichloropropene	µg/L	0.4	<0.4	NS	<0.4	<0.4
Dibromomethane	µg/L	5,000	<2	NS	<2	<2
Dichlorodifluoromethane	µg/L	10,000	<2	NS	<2	<2
Diethyl Ether	µg/L	1,000	<2	NS	<2	<2
Diisopropyl Ether	µg/L	1,000	<2	NS	<2	<2
Ethylbenzene	µg/L	700	<1	NS	<1	<1
Hexachlorobutadiene	µg/L	0.6	<0.6	NS	<0.6	<0.6
Isopropylbenzene	µg/L	10,000	<2	NS	<2	<2
m+p Xylene	µg/L	NA	<2	NS	<2	<2
Methyl tert Butyl Ether	µg/L	70	<2	NS	<2	<2
Methylene Chloride	µg/L	5	<2	NS	<2	<2
Naphthalene	µg/L	140	<2	NS	<2	<2
n-Butylbenzene	µg/L	NA	<2	NS	<2	<2
n-Propylbenzene	µg/L	1,000	<2	NS	<2	<2
o-Chlorotoluene	µg/L	1,000	<2	NS	<2	<2
o-Xylene	µg/L	NA	<1	NS	<1	<1
p-Chlorotoluene	µg/L	NA	<2	NS	<2	<2
p-Isopropyltoluene	µg/L	1,000	<2	NS	<2	<2
sec-Butylbenzene	µg/L	NA	<2	NS	<2	<2
Styrene	µg/L	100	<1	NS	<1	<1
tert-Butylbenzene	µg/L	1,000	<2	NS	<2	<2
tert-Amyl Methyl Ether (TAME)	µg/L	NA	<2	NS	<2	<2
tert-Butyl Ethyl Ether (TBEE)	µg/L	NA	<2	NS	<2	<2
Tetrachloroethylene	µg/L	5	<1	NS	<1	<1
Tetrahydrofuran	µg/L	5,000	<2	NS	8.6	2.5
Toluene	µg/L	1,000	<1	NS	<1	<1
trans-1,2-Dichloroethylene	µg/L	80	<1	NS	<1	<1
trans-1,3-Dichloropropene	µg/L	0.5	<0.4	NS	<0.4	<0.4
Trichloroethylene	µg/L	5	<1	NS	<1	<1
Trichlorofluoromethane	µg/L	10,000	<2	NS	<2	<2
Vinyl Chloride	µg/L	2	<1	NS	<1	<1
Xylenes, Total	µg/L	3,000	<1	NS	<1	<1
<b>Dissolved Metals</b>						
Antimony	µg/L	6	<4	NS	<4	<4
Arsenic	µg/L	10	<5	NS	<5	<5
Barium	µg/L	2,000	45	NS	13	<10
Beryllium	µg/L	4	<0.5	NS	<0.5	<0.5
Cadmium	µg/L	4	<4	NS	<4	<4
Chromium	µg/L	100	<10	NS	<10	<10
Lead	µg/L	10	<10	NS	<10	<10
Mercury	µg/L	2	<0.2	NS	<0.2	<0.2
Nickel	µg/L	100	<25	NS	<25	<25
Selenium	µg/L	50	<10	NS	<10	<10
Silver	µg/L	7	<7	NS	<7	<7
Thallium	µg/L	2	<1	NS	<1	<1
Vanadium	µg/L	30	<10	NS	<10	<10
Zinc	µg/L	900	<50	NS	<50	<50

Table 2 - Groundwater Analytical Results  
Sand Pit Road, Truro MA

Sample Designation		MW-1		MW-2	MW-3
Sample Date		2/15/2023	3/15/2023	2/15/2023	2/15/2023
Depth to Water (ft)		73.34	73.13	52.35	28
Total Well Depth (ft)		82.0	82.0	60.64	36.35
Groundwater Standards	MCP RCGW-1	Sample Results			
<b>Extractable Petroleum Hydrocarbons</b>					
C9-C18 Aliphatics	µg/L	700	<100	NS	<100
C19-C36 Aliphatics	µg/L	14,000	<100	NS	<100
C11-C22 Aromatics	µg/L	200	<100	NS	<100
<b>Polycyclic Aromatic Hydrocarbons</b>					
2-Methylnaphthalene	µg/L	10	<0.4	NS	<0.4
Acenaphthene	µg/L	20	<0.4	NS	<0.4
Naphthalene	µg/L	140	<0.4	NS	<0.4
Phenanthrene	µg/L	40	<0.4	NS	<0.4
Acenaphthylene	µg/L	30	<0.4	NS	<0.4
Anthracene	µg/L	30	<0.4	NS	<0.4
Benzo(a)anthracene	µg/L	1	<0.4	NS	<0.4
Benzo(a)pyrene	µg/L	0.2	<0.2	NS	<0.2
Benzo(b)fluoranthene	µg/L	1	<0.4	NS	<0.4
Benzo(g,h,i)perylene	µg/L	20	<0.4	NS	<0.4
Benzo(k)fluoranthene	µg/L	1	<0.4	NS	<0.4
Chrysene	µg/L	2	<0.4	NS	<0.4
Dibenzo(a,h)Anthracene	µg/L	0.5	<0.4	NS	<0.4
Fluoranthene	µg/L	90	<0.4	NS	<0.4
Fluorene	µg/L	30	<0.4	NS	<0.4
Indeno(1,2,3-cd)Pyrene	µg/L	0.5	<0.4	NS	<0.4
Pyrene	µg/L	20	<0.4	NS	<0.4

Notes:

1. µg/L = micrograms per liter.
2. **Bold** indicates concentration exceeds applicable Method 1 Standard.
3. **Bold and underlined** concentrations were Not Detected but reporting limits exceed Method 1 standard
4. MCP = Massachusetts Contingency Plan
5. RCGW-1 = The Reportable Concentration for category GW-1 groundwater as documented in the 2019 MCP
6. < = Not detected by the laboratory above the reporting limit. Laboratory reporting limit shown.
7. U = Not detected by the laboratory above the method detection limit. Laboratory method detection limit shown.
8. J = Concentration is an estimated value between the laboratory method detection limit and reporting limit.
9. ND = Not Detected
10. NA = Not Applicable.
11. NS = Not Sampled.
12. Sum of six includes estimated values and does not include non-detects (U or <). SUM of Six PFAS includes *PFUnA*, PFHpA, PFHxS, PFNA, PFOA, PFOS AND PFDA.
13. Total PFAS is the sum of all laboratory detected PFAS analytes including estimated values and does not include non-detects (U or <).

# APPENDIX A

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## SUBJECT PROPERTY PHOTOGRAPHS

Photo Log – 2 Sandpit Road and 9 Noons Drive



Photo 1: Vehicle storage area.



Photo 2: Utility pole area.

Photo Log – 2 Sandpit Road and 9 Noons Drive



Photo 3: Mulch/yard waste processing area.



Photo 4: Mulch pile.

Photo Log – 2 Sandpit Road and 9 Noons Drive



Photo 5: General sandpit area.



Photo 6: General wooded area.

Photo Log – 2 Sandpit Road and 9 Noons Drive



Photo 7: Barrels used as obstacles for horses.



Photo 8: General sandpit area.

Photo Log – 2 Sandpit Road and 9 Noons Drive



Photo 9: General sandpit area.



Photo 10: Typical fisherman equipment storage area.

Photo Log – 2 Sandpit Road and 9 Noons Drive



Photo 11: Typical fisherman equipment storage area.



Photo 12: Pump house for former dust control/equipment rinsing well.

Photo Log – Sand Pit Test Pits, Truro Test Pit

#1: Located near asphalt piles.



Test Pit #2: Located near asphalt piles and lobster traps.



Test Pit #3: Located near trailers.



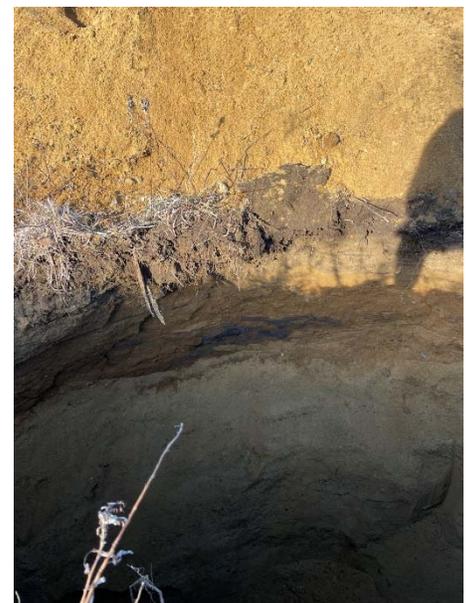
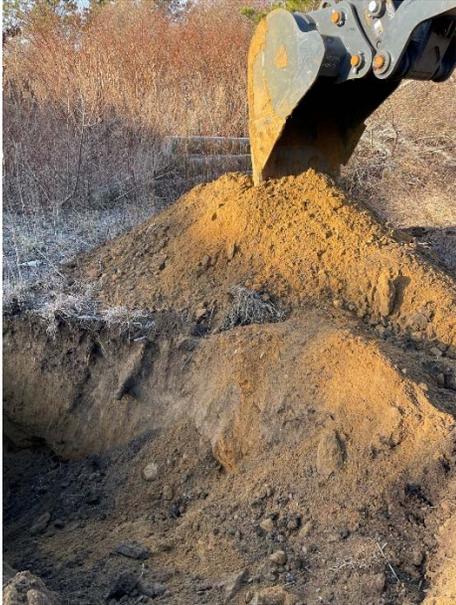
Test Pit #4: Located near trailers.



Test Pit #5: Located on western edge of property along treeline.



Test Pit #6: Located on northern portion of property, near wooden poles.



Test Pit #7: Located on northeastern portion of property, near shell pile.



Test Pit #8: Located on western portion of property, near Noons Drive.



Test Pit Grave



Test Pit #9: Located on southern portion of property, near sand piles.



Test Pit #10: Located in the eastern portion of the property, adjacent to access road.



Test Pit #11: Located on southeastern portion of property, on plateau near Noons Drive.



## APPENDIX B

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### SUPPORTING DOCUMENTS

- Town of Truro Assessor's Records
- Deed Information
- Settlement and Land Use Agreement
- User Questionnaire
- Resume of Environmental Professional

Key: 1234

Town of TRURO - Fiscal Year 2023

9/1/2022 6:23 pm SEQ #: 1.222

LEGALS

CURRENT OWNER				PARCEL ID				LOCATION			
NOONS DONALD W ESTATE OF PO BOX 23 NO TRURO, MA 02652-0023				39-107-0				2 SAND PIT RD			
TRANSFER HISTORY				DOS	T	SALE PRICE	BK-PG (Cert)				
NOONS DONALD W ESTATE OF				02/08/2007	99	279-034+					
NOONS DONALD W				06/13/1979	99	279-034+					
NOONS JOHN F (HEIR OF JOA				04/20/1905	99	279-034+					

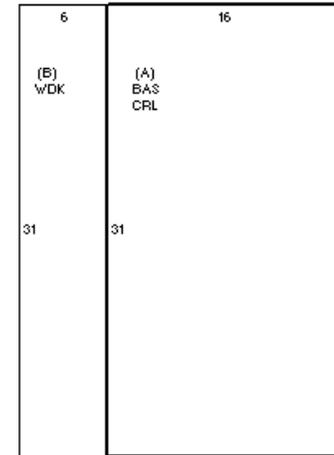
CLASS	CLASS%	DESCRIPTION			BN ID	BN	CARD	
4100	100	SAND/GRAVEL				1	1 of 2	
PMT NO	PMT DT	TY	DESC	AMOUNT	INSP	BY	1st	%
06-SS16	01/01/2007	50	SPLIT SUB				100	100
05-SS21	12/31/2005	50	SPLIT SUB				100	100
87-178	10/21/1987	3	REPAIR/REMOD	5,000	12/31/1987		100	100

LAND

CD	T	AC/SF/UN	Nbhd	Infl1	Infl2	ADJ BASE	SAF	Infl3	Lpi	VC	CREDIT AMT	ADJ VALUE			
103	S	33,750	RT6	1.00	1	1.00	1	1.00	270,000	1.00	80	0.80	C01	0.90	209,240
303	A	37,955	RT6	1.00	1	1.00	1	1.00	11,475	1.00	50	0.50	C01	0.90	435,530

DETACHED

TOTAL	38.730 Acres	ZONING	GR6	FRNT	0	ASSESSED	CURRENT	PREVIOUS
Nbhd	ROUTE 6	NOTE	LAND	644,800	586,000			
Infl1	NO ADJ		BUILDING	74,400	67,100			
Infl2	NO ADJ		DETACHED	2,100	2,100			
			OTHER	171,000	154,500			
			TOTAL	892,300	809,700			



BUILDING

TY	QUAL	COND	DIM/NOTE	YB	UNITS	ADJ PRICE	RCNLD
SHM	G	1.18 A-	0.70 8X12		96	18.10	1,200
SHM	A	1.00 A	0.75 8X10		80	15.34	900



BUILDING	CD	ADJ	DESC	MEASURE	11/3/2011	DF
MODEL	5		CIM	LIST	11/3/2011	DF
STYLE	20	1.95	OFFICE BUILDING [100%]	REVIEW	11/10/2010	DF
QUALITY	L	0.83	LOW COST [100%]			
FRAME	1	1.00	WOOD FRAME [100%]			

ELEMENT	CD	DESCRIPTION	ADJ	S	BAT	T	DESCRIPTION	UNITS	YB	ADJ PRICE	RCN
FOUNDATION	3	CONTIN WALL	1.00	A	CRL	N	CRAWL SPACE	496		15.50	7,688
EXTERIOR WALL	1	WOOD SHINGLES	1.00	A	BAS	L	BASE AREA	496	1980	264.67	131,277
ROOF STRUCTURE	1	GABLE	1.00	B	WDK	N	WOOD DECK	186		69.67	12,958
ROOF COVER	1	ASPH/COMP SHIN	1.00								
FLOORING	3	WW/ CARPET	1.00								
INT FINISH	2	DRYWALL	1.02								
H.V.A.C.	5	ELECTRIC	0.98								
FUEL SOURCE	3	ELECTRIC	1.00								
COMPLEX	0		1.00								

YEAR BLT	1980	SIZE ADJ	1.750
NET AREA	496	DETAIL ADJ	1.852
\$NLA(RCN)	\$306	OVERALL	1.000

CAPACITY	UNITS	ADJ
STORIES	1	1.00
% HEATED	100	1.00
% A/C	100	1.00
% SPRINKLERS	0	1.00

TOTAL RCN	151,923
CONDITION ELEM	CD
EFF.YR/AGE	1990 / 31
COND	51 51 %
FUNC	0
ECON	0
DEPR	51 % GD 49
RCNLD	\$74,400



Key: 1235

Town of TRURO - Fiscal Year 2023

9/1/2022 6:23 pm SEQ #: 1.224

LEGAL

CURRENT OWNER				PARCEL ID				LOCATION			
NOONS DONALD W ESTATE OF PO BOX 23 NO TRURO, MA 02652-0023				39-108-0				9 NOONS DR			
TRANSFER HISTORY				DOS	T	SALE PRICE		BK-PG (Cert)			
NOONS DONALD W ESTATE OF NOONS DONALD W				02/08/2007 07/02/1997	99 H			10833-307+ 10833-307			

CLASS	CLASS%	DESCRIPTION			BN ID	BN	CARD	
1300	100	DEV LAND					1 of 1	
PMT NO	PMT DT	TY	DESC	AMOUNT	INSP	BY	1st	%

LAND

CD	T	AC/SF/UN	Nbhd		Infl1	Infl2	ADJ BASE	SAF	Infl3	Lpi	VC	CREDIT AMT	ADJ VALUE	
100	A	0.775	11	1.00	1	1.00	L2 0.75	410,944	1.00	1	1.00	V6	1.75	318,480
300	A	16.425	11	1.00	1	1.00	1.00	41,825	0.55	1	1.00	V6	1.75	379,070
400	F	300	11	1.00	1	1.00	1.00	403	1.00	1	1.00	V6	1.75	120,750

TOTAL	17.200 Acres	ZONING	RES	FRNT	313	ASSESSED	CURRENT	PREVIOUS	
Nbhd	NORTH TRURO	N	FY05=DECR ACRG AGAIN PER 2003 PLAN. FY10				LAND	818,300	706,300
Infl1	NO ADJ	O	ADDED LOC ADJ (ABUTS SAND/GRVL PIT)+VW				BUILDING	0	0
Infl2	LOC ADJ	T	+CHGD REMAINING FRNTG+ MOVED LT3 ADJ TO				DETACHED	0	0
		E	CODE 300. FY11=VW INCR (DISTANT PANORAMIC)				OTHER	0	0
			+DELETED LG TRACT ADJ PER FIELD REV.				TOTAL	818,300	706,300

DETACHED

TY	QUAL	COND	DIM/NOTE	YB	UNITS	ADJ PRICE	RCNLD	PHOTO

BUILDING

BUILDING	CD	ADJ	DESC	MEASURE
MODEL				
STYLE				
QUALITY				
FRAME				

YEAR BLT	NET AREA	\$NLA(RCN)	SIZE ADJ	DETAIL ADJ	OVERALL	ELEMENT	CD	DESCRIPTION	ADJ	S	BAT	T	DESCRIPTION	UNITS	YB	ADJ PRICE	RCN

TOTAL RCN		CONDITION ELEM	CD
EFF.YR/AGE			
COND	FUNC	ECON	DEPR
			% GD
RCNLD			

N O T FIDUCIARY DEED N O T

A N A N

FLEET NATIONAL BANK, a banking corporation established under the laws of the United States of America and having an address of 75 State Street, Boston, Massachusetts 02109, as it is Executor of the Will of John F. Noons, Barnstable Probate and Family Court Docket Number 58216, pursuant to the power of sale contained in said will and as it is Trustee under a certain trust agreement dated November 21, 1978, recorded in Barnstable Deeds, Book 9722, Page 320 establishing The John F. Noons Trust Agreement, pursuant to the powers set forth or contained therein, and every other power hereto enabling,

C O P Y

in consideration of ONE (\$1.00) DOLLAR paid,

grants to

DONALD W. NOONS of Post Office Box 23, North Truro, Massachusetts 02652

The following parcels of land, together with improvements thereon, if any, in Truro, Barnstable County, Massachusetts:

I. Land containing 19.591 acres, more or less, as shown on a plan entitled in part: "Consolidation of Plan of Land in Truro made for the Estate of John F. Noons" dated Aug., 1981 prepared by Slade Associates, Inc. and recorded in Barnstable County Registry of Deeds Plan Book 360, Page 15.

Excluded from the foregoing premises is a parcel consisting of .806 acres, more or less, and being shown as LOT 1 on a plan entitled in part: "Division Plan of Land in Truro made for Donald W. Noons" dated May, 1993 prepared by Slade Associates, Inc. and recorded in Barnstable County Registry of Deeds Plan Book 499, Page 51, said excluded portion having been previously conveyed by deed recorded in Book 8941, Page 236.

For Grantor's title to Parcel I see deed recorded in Barnstable County Registry of Deeds Book 1051, Page 488 of which the above described premises are a portion. See also decree of the Barnstable Probate and Family Court in case number 96E 0031 CG-1.

II. LOT 6 containing 26,042 square feet, more or less, being shown on a plan entitled in part: "Subdivision Plan of Land in North Truro made for John F. Noons" dated September, 1970 prepared by W.G. Slade, Surveyor and filed in the Barnstable Registry of Deeds in Plan Tube 169.

For Grantor's title to Parcel II see deed recorded with Barnstable County Registry of Deeds Book 1263, Page 205 of which the above described premises are a portion.

III. LOT 7 containing 27,229 square feet, more or less, being shown on a plan entitled in part:

2

"Subdivision Plan of Land in North Truro made for John F. Noons" dated September, 1970 prepared by W.G. Slade, Surveyor and filed in the Barnstable Registry of Deeds in Plan Tube 169.

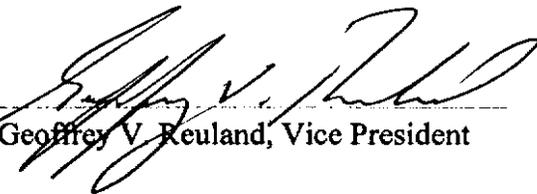
O F F I C I A L O F F I C I A L  
C O P Y C O P Y

For Grantor's title to Parcel III see deed recorded with Barnstable County Registry of Deeds Book 1263, Page 205 of which the above described premises are a portion.

With respect to all parcels see also the above referenced probate docket number 58216. See also Barnstable Registry District document number 454,307, Shawmut Bank of Cape Cod, N. A. becomes Shawmut Bank of Southeastern Massachusetts, N. A.; document number 485,068, Shawmut Bank of Southeastern Massachusetts, N. A. becomes Shawmut Bank, N. A.; document number 658,460, Shawmut Bank, N. A. becomes Fleet National Bank of Massachusetts; and document number 663,200, Fleet National Bank of Massachusetts becomes Fleet National Bank.

IN WITNESS WHEREOF, the said Fleet National Bank, Trustee and Executor as aforesaid, has caused its corporate seal to be hereto affixed and these presents to be signed, acknowledged and delivered in its name and behalf by GEOFFREY V. REULAND, its Vice President, hereunto duly authorized this 19<sup>th</sup> day of June, 1997.

FLEET NATIONAL BANK,  
Trustee and Executor as aforesaid

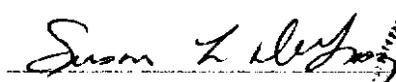
By:   
Geoffrey V. Reuland, Vice President

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss.

June 19, 1997

Then personally appeared the above named Geoffrey V. Reuland, Vice President, and acknowledged the foregoing instrument to be the free act and deed of Fleet National Bank, as trustee and executor as aforesaid, before me,

  
Notary Public  
My Commission Expires: Nov. 30, 2001  




SETTLEMENT AND LAND USE AGREEMENT

A N A N  
O F F I C I A L O F F I C I A L

This Settlement and Land Use Agreement is made between, on the one hand, Paula Noons, as Executrix of the Estate of Donald Noons, and John F. Noons, Inc. (together, "Noons"), and, on the other hand, John A. Shope, Frank Korahais, Gwendolyn Korahais, Beth Dietz, Christine Markowski, Leslie Gerber, Frederick M. Misilio, JA (as trustee of the Noons Drive Realty Trust), Veronika Bernstein, David Bernstein, Nicholas Paradiso and Banafsheh Moradi (together, "the Abutters").

C O P Y

C O P Y

WHEREAS, the Estate of Donald Noons is the owner of record of property known as 9 Noons Drive and listed as Parcel 39-108 on the tax rolls of the Truro assessor, as well as adjoining property known as 2 Sandpit Road listed as Parcel 39-107 on the same tax rolls (Parcels 39-107 and 39-108 shall be referred to herein as the "Noons Parcels");

WHEREAS, John F. Noons, Inc., contends that it has operated a sand and gravel operation dating back to the 1950s on Parcels 39-107 and 39-108;

WHEREAS, the Abutters are the owners and/or the occupants of properties that immediately abut Parcel 39-108 (and are not far from Parcel 39-107) and that have addresses of 32 Noons Drive, 30 Noons Drive, 29 Noons Drive, 28 Noons Drive, 25 Noons Drive, 23 Noons Drive, and 21 Noons Drive (all of said properties shall be referred to herein as the "Abutters Parcels");

WHEREAS, the Noons Parcels and the Abutters Parcels affected by this agreement are listed more particularly by reference to deeds on Exhibit A hereto.

WHEREAS, most of the Abutters have complained to the Building Inspector of the Town of Truro about the excavation of sand by John F. Noons, Inc. on Parcel 39-108, and have complained to Noons about the use of Parcels 39-107 and 39-108 for target shooting;

WHEREAS, Noons reports that it has taken preventative action regarding the target shooting, including following through with notice to the Truro Police Department;

WHEREAS, by letter dated August 16, 2012, the Building Inspector issued an order to Noons to cease and desist from the excavation of sand/soil on Parcel 39-108, and to restore the property to its pre-excavation condition;

WHEREAS, Noons has appealed the order of the Building Inspector, and the Abutters have opposed the appeal; and

WHEREAS, Noons and the Abutters seek amicably to resolve the issues concerning the use of Parcels 39-107 and 39-108 for target shooting and the excavation of Parcel 39-108, reserving their rights as to all other land use or other issues that may arise or have arisen between them.

NOW, THEREFORE, the parties agree as follows: N O T  
A N A N

1. The Abutters shall withdraw their complaint to the Building Inspector with respect to the excavation of Parcel 39-108, except that the Abutters shall not be deemed to have waived any legal rights in the event that the obligations of Noons do not become effective under paragraph 3 below. N O T N O T  
A N A N

2. So long as Noons shall remain in compliance with this Agreement, the Abutters shall not object to the issuance of a permit to excavate sand, during work days (other than Massachusetts or federal holidays) only, in the portion of Parcel 39-108 designated for new excavation on the map attached hereto as Exhibit B, so long as said permit shall require as a condition compliance with the obligations in paragraph 5 below.

3. Provided the Building Commissioner withdraws his Cease and Desist Order, dated August 16, 2012, and further issues a permit for sand and gravel excavation consistent with the proposed continued new excavation, as shown on Exhibit B attached hereto, excavation (other than as may be permitted for building, road construction, leveling and filling pursuant to a validly issued permit(s) and / or approval(s)) shall be prohibited on all land in between Noons Drive and Somerset Heights Road, the location of which roads is denoted on deeds recorded at the Barnstable Registry of Deeds at, respectively, Plan Book 241, Page 41, and Plan Book 299, Page 54. For certainty, other than as set forth above, the parties reserve their rights as to any excavation on Parcel 39-108, except that Noons agrees that it shall not undertake or permit any excavation except pursuant to a permit issued by the Town of Truro.

4. Noons and their successors, heirs, and assigns shall not use or permit the use of Parcels 39-107 or 39-108 for target shooting or other discharge of firearms. Upon the execution of this agreement by all parties, Noons shall confirm to the Truro Town Police by letter in the form attached hereto as Exhibit C that shooting on Parcels 39-107 and 39-108 is prohibited and that any persons who may hereafter discharge firearms on the property will be trespassing.

5. The Estate of Donald Noons and John F. Noons, Inc. shall be jointly and severally responsible to complete the measures set forth on Exhibits D and E, attached hereto, in order to screen Parcel 39-108 from view from 32 Noons Drive, to permit access to 32 Noons Drive and to partially mitigate the disruption of the natural landscape resulting from the excavation that has already taken place, as more specifically provided for in Exhibit D, the Work Narrative.

6. Noons' obligations under paragraphs 3 and 5 shall be in full force and effect only as long as Noons uses any portion of Parcel 39-108 for a sand and gravel operation. In the event that the owner of record of Parcel 39-108 forever abandons, both for itself and its successors, heirs, and assigns, the sand and gravel operation on parcel 39-108 and records a notice to that effect, then the obligations of Noons under this agreement, as set forth in paragraphs 3 and 5, shall cease to exist and be of no further force and effect. The parties agree that the recorded notice shall have the effect of permanently discontinuing and abandoning the sand and gravel operation on Parcel 39-108, irrespective of how many years have passed, notwithstanding any language in the Truro Zoning or General By-Law to the contrary. Further, the parties agree that irrespective of whether any such notice is filed, Noons shall be obligated to complete all of the work listed on Exhibit D,

the Work Narrative, and that the term to be constructed thereunder, in order to screen Parcel 39-108 from the view of 32 Noons Drive, shall remain in place and its plantings may be maintained by John A. Shope or his successors (and trimmed by the Abutters per the terms of Exhibit D) until such time as a redevelopment plan for Parcel 39-108 has been filed and received all requisite approvals from the Town of Truro and the Cape Cod Commission, to the extent applicable.

N O T N O T  
A N A N

7. The rights, restrictions and responsibilities pursuant to this agreement are intended to run with the land in perpetuity or as long as may be permitted under Massachusetts law. Without limiting the foregoing, (a) the rights, benefits, liabilities, agreements and obligations set forth in Paragraphs 1 and 2 shall bind the Abutters and all parties claiming by, through or under the Abutters, and are for the benefit of the Noons Parcels and may be enforced by the Noons and all parties claiming by, through or under the Noons, and (b) the rights, benefits, restrictions, liabilities, agreements and obligations set forth in Paragraphs 3, 4 and 5 shall burden the Noons Parcels and shall bind Noons and all parties claiming by, through or under Noons, and are for the benefit of the Abutters Parcels and may be enforced by the Abutters and all parties claiming by, through or under the Abutters. This Agreement and extensions pursuant to M.G.L. c. 184, § 27 may be recorded by any party at the Barnstable Registry of Deeds.

8. This agreement shall take effect upon the execution by the last of the Estate of Donald Noons, John F. Noons, Inc., and John A. Shope, irrespective of execution by any other party, but no other party may claim any rights hereunder unless it shall have executed the agreement by May 6, 2013.

9. This agreement may be executed in counterparts that, taken together, shall constitute a single agreement.

WHEREUNTO the parties have subscribed their signatures below.

ESTATE OF DONALD NOONS

Paula Noons, Executrix  
By: Paula Noons, Executrix

JOHN F. NOONS, INC. N O T

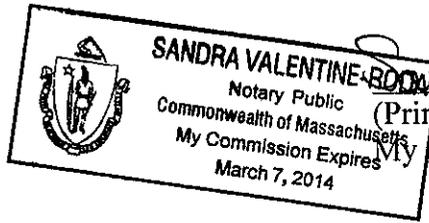
N O T

By: Linda Noons Rose, President OFFICIAL COPY

The Commonwealth of Massachusetts

Barnstable, ss. OFFICIAL COPY Paula Noons and Linda Noons Rose OFFICIAL May 6, 2013

On this day, personally appeared the above-named Linda Noons Rose, proved to me by satisfactory evidence of identification, being (check whichever applies):  driver's license or other state or federal governmental document bearing a photographic image,  oath or affirmation of a credible witness known to me who knows the above signatory, or  my own personal knowledge of the identity of the signatory, to be the person whose name is signed above, and acknowledged the foregoing instrument to be his/her free act and deed for the purposes stated therein.



Sandra Valentine-Roda  
(Print Name of Notary Public):  
My commission expires: March 7, 2014

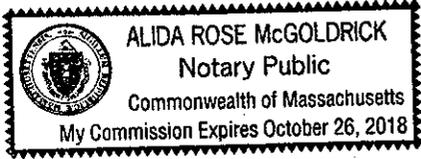
John A. Shope  
John A. Shope

The Commonwealth of Massachusetts

Suffolk, ss. April 22, 2013

On this day, personally appeared the above-named John A. Shope, proved to me by satisfactory evidence of identification, being (check whichever applies):  driver's license or other state or federal governmental document bearing a photographic image,  oath or affirmation of a credible witness known to me who knows the above signatory, or  my own personal knowledge of the identity of the signatory, to be the person whose name is signed above, and acknowledged the foregoing instrument to be his/her free act and deed for the purposes stated therein.

Alida Rose McGoldrick  
(Print Name of Notary Public):  
My commission expires: 10/26/18



Frank Korahais  
Frank Korahais

NOT  
AN

OFFICIAL COPY OFFICIAL COPY

Gwendolyn H. Korahais  
Gwendolyn H. Korahais

NOT  
AN

Beth Dietz  
Beth Dietz

OFFICIAL COPY OFFICIAL COPY

Christine Markowski  
Christine Markowski

\_\_\_\_\_  
Leslie Gerber

\_\_\_\_\_  
Frederick M. Misilio, Jr., as trustee of the  
Noons Drive Realty Trust

\_\_\_\_\_  
Veronika Bernstein

\_\_\_\_\_  
David Bernstein

\_\_\_\_\_  
Nicholas Paradis

\_\_\_\_\_  
Banafsheh Moradi

N O T A N	N O T A N
O F F I C I A L	O F F I C I A L
C O P Y	C O P Y

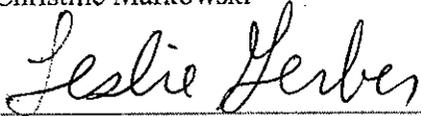
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N O T A N	N O T A N
O F F I C I A L	O F F I C I A L
C O P Y	C O P Y

---

Beth Dietz

Christine Markowski



Leslie Gerber

Frederick M. Misilio, Jr., as trustee of the  
Noons Drive Realty Trust

Veronika Bernstein

David Bernstein

Nicholas Paradis

Banafsheh Moradi

Frank Korahais  
N O T  
A N  
O F F I C I A L  
C O P Y

N O T  
A N  
O F F I C I A L  
C O P Y

Gwyndolyn H. Korahais  
N O T  
A N  
O F F I C I A L  
C O P Y

N O T  
A N  
O F F I C I A L  
C O P Y

Beth Dietz

Christine Markowski

Leslie Gerber

*Frederick M. Misilo, Jr. Trustee*  
Frederick M. Misilo, Jr., as trustee of the  
Noons Drive Realty Trust

Veronika Bernstein

David Bernstein

Nicholas Paradis

Banafsheh Moradi

	N O T A N		N O T A N
Frank Korahais	O F F I C I A L		O F F I C I A L
	C O P Y		C O P Y

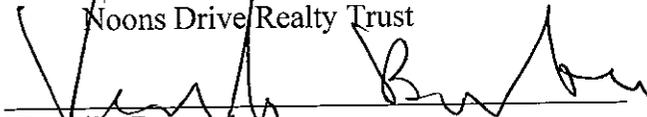
	N O T A N		N O T A N
Gwyndolyn H. Korahais	O F F I C I A L		O F F I C I A L
	C O P Y		C O P Y

Beth Dietz

Christine Markowski

Leslie Gerber

Frederick M. Misilo, Jr., as trustee of the  
Noons Drive Realty Trust



Veronika Bernstein



David Bernstein

Nicholas Paradis

Banafsheh Moradi

Frank Korahais  
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Gwyndolyn H. Korahais  
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Beth Dietz

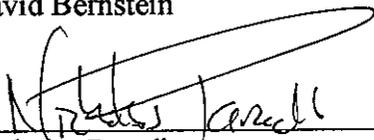
Christine Markowski

Leslie Gerber

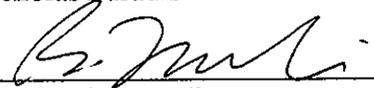
Frederick M. Misilo, Jr., as trustee of the  
Noons Drive Realty Trust

Veronika Bernstein

David Bernstein



Nicholas Paradis



Banafsheh Moradi

	N O T	<b>Exhibit A</b>	N O T
	A N		A N
<u>Noons Parcels</u>	O F F I C I A L		O F F I C I A L
	C O P Y		C O P Y

Parcel 39-107, 2 Sandpit Road, see Barnstable Book 279, Page 34.

	A N		A N
Parcel 39-108, 9 Noons Drive, see Barnstable Book 1033, Page 307.	O F F I C I A L		O F F I C I A L
	C O P Y		C O P Y

Abutters Parcels

32 Noons Drive, see Barnstable Book 24303, Page 202.

30 Noons Drive, see Barnstable Book 1941, Page 157.

29 Noons Drive, see Barnstable Book 25491, Page 30.

28 Noons Drive, see Barnstable Book 1461, Page 736.

25 Noons Drive, see Barnstable Book 12656, Page 191.

23 Noons Drive, see Barnstable Book 24234, Page 24.

21 Noons Drive, see Barnstable Book 23657, Page 292.



NOT AN OFFICIAL COPY  
**Exhibit C**  
NOT AN OFFICIAL COPY  
[Letterhead of John F. Noons, Inc.]

NOT AN OFFICIAL COPY  
Chief Kyle Takakjian  
Truro Police Department  
344 Route 6  
Truro, MA 02666

NOT AN OFFICIAL COPY

Re: Shooting in Sand Pit

Dear Chief Takakjian:

This will confirm that John F. Noons, Inc. and the Estate of Donald Noons do not permit target shooting or other discharge of firearms in the premises and property at 2 Sandpit Road and 9 Noons Drive, which are popularly known as "the sand pit." Please have your force treat any persons who may be discharging firearms in the sand pit as trespassing.

Thank you for your attention to this matter.

Sincerely,

Linda Noons Rose  
President

cc: John A. Shope



All material used for any of the work pursuant to this agreement shall be clean fill, which the parties agree shall be free of debris or contaminants.

O F F I C I A L O F F I C I A L

Appropriate fill will be used working from both the top over the edge and from the bottom.

In order to provide access for larger vehicles as well as a buffer, appropriate fill shall be used to create a passage/base on Noons Drive of thirty feet (30') parallel to the pole line for a distance of approximately 80' from pole #1. From that point to pole #2, the width of the passage may, at the election of Noons, neck down to the existing width due to the lack of need of access to the corner of the 32 Noons Drive lot.

A standard finished banking grade of 1.5 to 2 to 1 shall be established along this area. That is, the bank shall run horizontally from 1.5' to 2' for each 1' that it rises. However, at the election of Noons, the banking grade may be made softer.

As a protected means, a low berm or small boulders shall be added to the edge as well (or poles) to create a berm of a few feet. The banking shall descend gradually after pole #2.

The banking area running 80' from the work to pole # 2 in a north, northwesterly direction will be leveled but otherwise left in its present condition because Noons is unable to fill from the top without crossing property lines and avoiding wires. (There is previously processed material presently stockpiled at the edge of the bank.)

Noons will fill some from the bottom and/or pull down and re-grade or terrace this section as it becomes accessible.

### The Berm

Noons shall create a berm of material for the purpose of a visual buffer and to provide a planting medium.

The area of the berm will be twenty feet (20') in on the northeast side of the road, beginning at a point as shown on the attached sketch plan. The berm will peak at about eight feet (8') and gradually slope to cover an area of approximately fifteen feet (15') running north, northwesterly by Noons Drive and running approximately fifty feet (50') easterly by Somerset Heights Road.

Noons shall cover the side of the berm facing Somerset Heights Road with a mulching material. Noons shall plant on the berm two (2) rows of Leyland Cypress trees on the in a staggered fashion. One row shall be at the base of berm next to the existing pine trees and the other row shall be on the south side of the term. The berm may be terraced if necessary to accommodate the planting of the trees.

The remaining banking behind the berm will be filled to make a 1.5 to 2 to 1 slope, except that a softer grade is permissible at the election of Noons.

The berm shall have soil suitable to sustain Leyland Cypress trees, and in particular, shall have a base layer of loam of at least one foot (1') and a surface layer of loam of at least one foot (1').

O F F I C I A L O F F I C I A L

No fewer than twenty-four (24) Leyland Cypress trees having an initial height of approximately three feet (3') (but no less than 2'8") shall be planted on the berm.

N O T N O T

Noons shall also plant no fewer than seven (7) Leyland Cypress trees having an initial height of approximately three feet (3') (but no less than 2'8") at the intersection of Somerset Heights Road and Noons Drive. The area shall be filled in a couple of feet and graded down not too close to the road to provide an appropriate planting medium for the trees to root well. Linda Noons Rose and John Shope have staked the locations of these seven (7) trees. In this area the planting could get an earlier start with the trees planted before the berm is built.

Noons estimates that the filling and berm creation will require approximately 1600 cubic yards of material, but Noons' obligations hereunder shall not be affected if that estimate is incorrect.

Noons shall not be responsible for watering or tending the trees, but, for itself and its successors, the Estate of Donald Noons hereby grants to John A. Shope and his successors in title at 32 Noons Drive an easement of access for the limited purpose of watering and tending the trees to be planted pursuant to this agreement. In addition, for itself and its successors, the Estate of Donald Noons hereby grants to the Abutters and their successors in title the right to trim the Leyland Cypress trees to be planted pursuant to this agreement but only to the extent necessary to preserve unobstructed views of Cape Cod Bay from their currently existing residences. Shope and the Abutters hereby agree to indemnify and hold harmless Noons against any personal injury, damage or claim arising out of the limited rights granted hereunder. Further, the easement of access and trimming rights granted hereunder, shall be in full force and effect only until the owner of record of Parcel 39-108 shall file a notice, pursuant to paragraph 6 of the Settlement and Land Use Agreement, that said owner has permanently abandoned, for itself and its successors and assigns, any sand and gravel operation on Parcel 39-108 and a redevelopment plan for Parcel 39-108 has been filed and received all requisite approvals from the Town of Truro and the Cape Cod Commission. Noons agrees to take care not to damage hoses or any other property used to water or tend the trees and shall indemnify John A. Shope in the event that it does so.

Irrespective of the date on which the building inspector may withdraw his complaint or issue a new permit to excavate, the planting of the seven (7) Leyland Cypress trees at the intersection of Somerset Heights Road and Noons Drive shall be completed by June 15, 2013. The creation of the berm shall be completed by May 31, 2013, except for ten feet or less on the eastern edge. The planting of the trees on the berm shall be completed by June 30, 2013, except for trees on the eastern edge noted above. The remainder of the berm and planting of remaining trees thereon shall be completed by October 1, 2013. The remaining grading and filling shall be completed no later than December 31, 2013.

All work to be performed pursuant to this agreement shall be performed on weekdays only (state and federal holidays excepted), without prior approval of Shope, which shall not be unreasonably withheld.

AREA TO BE EXCAVATED UNDER PERMIT . N O T  
A N A N

Stakes have been placed 20' apart for a distance of approximately 300' running 15" or less from the tree line along the road known as Somerset Heights Road in a north, northeasterly direction. This line is located from Somerset Heights Road in distances varying from 40' to 120' as approximately shown on the attached sketch plan. At the end the line turns (in a curve) north, northeasterly for approximately 120' and then northwesterly to the edge of the already excavated area all as approximately shown on the attached sketch plan. I C I A L

C O P Y C O P Y

Upon the completion of excavation, the banking along this line shall be graded to a 1.5 to 2 to 1 grade and some areas such as the circular area (shown on the plan) shall be filled in completely and graded the same ratio, except that at the election of Noons the grade may be softer.

The adjacent areas that have previously been worked in years past will also be regraded so as to create a groomed landscape. The tree line along Somerset Heights Road will not be affected.

For certainty, this agreement does not address any rights of excavation as to Parcel 39-107, as to which the parties reserve their rights.

N O T  
A N

**Exhibit E**

N O T  
A N

[Copies of Exhibit E are on file with the parties and the Building Inspector for the Town of Truro]

C O P Y

N O T  
A N

N O T  
A N

O F F I C I A L  
C O P Y

O F F I C I A L  
C O P Y

ASTM E1527-21 USER QUESTIONNAIRE

Name: Jarrold J. Cabral Title: Director of Public works

Company: Town of Truro Date: MAy 8th, 2023

Relationship to Site: The Town of Truro is considering purchasing 2 Sand Pit Road and 9 Noons Way.

**Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry?**

- Yes
- No

If yes describe:

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**Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?**

- Yes
- No

If yes describe:

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**Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?**

- Yes
- No

If yes describe:

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ASTM E1527-21 USER QUESTIONNAIRE

As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties?

- Yes
- No

If yes describe:

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Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If not, have you considered whether the price difference is due to contamination?

- Yes
- No

Additional Information

Appraisal is under contract, we expect deliverables in four weeks

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Do you know the past uses of the property?

- Yes
- No

If yes describe:

The property has historically been used for landscape supply, lobster trap winter storage, brush dump for landscapers, and storage for Noons construction company.

Do you know of specific chemicals that are present or once were present at the property?

- Yes
- No

If yes describe:

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ASTM E1527-21 USER QUESTIONNAIRE

Do you know of spills or other chemical releases that have taken place at the property?

- Yes
- No

If yes describe:

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Do you know of any environmental cleanups that have taken place at the property?

- Yes
- No

If yes describe:

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As the user of the ESA, based on your knowledge and experience related to the property are there any indicators that point to the presence or likely presence of contamination at the property?

- Yes
- No

If yes describe:

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Monitoring well number one shows PFAS above acceptable limits, and it has been determined  
that the source is upgradient.

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## **Bryan Massa, LSP**

Senior Scientist

bmassa@horsleywitten.com

### **Areas of Expertise**

Environmental Due Diligence  
Environmental Site Assessment and  
Remediation Design and Oversight

### **Professional Registrations**

Massachusetts Licensed Site Professional  
40-Hour OSHA

### **Academic Background**

Bachelors of Science, Environmental  
Engineering, Wentworth Institute of  
Technology

### **Professional Experience**

Horsley Witten Group, Inc., Senior  
Scientist and LSP, August 2018 to Present

Lightship Engineering, Senior Project  
Manager, July 2013 to August 2018

META Environmental, Project Manager  
January 2009 to June 2013

Vertex Engineering, Project Manager,  
June 2005 to December 2008

Battelle, Environmental Laboratory  
Technician and Hazardous Waste  
Coordinator, June 2000 to June 2005

Bryan Massa is a Senior Environmental Professional and LSP with over 23 years of experience in the environmental field. Bryan has worked on a variety of environmental projects throughout the United States and Mexico. His experience has included remediation design and oversight, risk assessments, landfill construction oversight and monitoring, emergency response to releases, soil gas and indoor air assessment, LSP services, Phase I and Phase II Environmental Site Assessments for due diligence purposes, forensic evaluation of analytical data and environmental chemistry. His portfolio includes a number of interdisciplinary projects that combine remediation efforts with civil site design, stream restoration, and adaptive reuse.

### **KEY PROJECTS**

#### ***Assessment and Remediation of PFAS in Soil and Groundwater, Cape Cod Gateway Airport, Hyannis, MA***

Bryan is the LSP of record for a release of PFAS to soil and groundwater relating to the historic usage of aqueous fire-fighting foams (AFFF) at the Airport. Tasks have included the delineation of soil and groundwater impacts, surface water testing, forensic evaluation of groundwater data to identify comingled PFAS plumes and the design and installation of a non-permeable cap on approximately 2-acres of PFAS impacted soils. Mr. Massa is currently developing a comprehensive remedial strategy for the site.

#### ***Assessment and Remediation of PFAS and Aviation Gas in Soil and Groundwater, Provincetown, MA***

Bryan is the LSP of record for a release of aviation gas and PFAS to soil and groundwater relating to an aircraft accident and subsequent usage of AFFF for firefighting purposes. Tasks have included the delineation of soil and groundwater impacts, groundwater extraction and disposal, soil excavation and disposal, and hydraulic conductivity testing. Investigation of the extent of the release is ongoing.

#### ***Former Manufactured Gas Plant, Greenfield, MA***

Bryan conducted a comprehensive subsurface investigation to determine the nature and extent of coal tar related impacts in soil, groundwater and river sediment at a former Manufactured Gas Plant. The data collected was used to design a barrier wall to prevent the migration of coal tar into the river and to develop a sediment remedial action and river restoration plan. Bryan subsequently observed the installation of an approximate 620-foot barrier wall with a passive groundwater management system, the excavation of thousands of tons of sediment, community air monitoring and the re-stabilization of the adjacent riverbanks. Bryan oversaw the remediation on a daily basis over a period of approximately nine months and completed numerous field studies including indoor air/sub-slab vapor assessments, groundwater sampling and NAPL recovery.

#### ***South Main Street Former Manufactured Gas Plant, Canandaigua, NY***

Bryan conducted a comprehensive subsurface investigation of river sediment and soil within and adjacent to Sucker Brook as part of response actions at an adjacent former Manufactured Gas Plant. Investigation activities included the collection of soil, groundwater, and sediment. Mr. Massa subsequently observed the remediation which included the diversion of a stream, excavation of thousands of tons of sediment and land side soil, injection of remedial additives, sheet-pile installation and vibration/crack monitoring, community air monitoring and the re-stabilization of the adjacent riverbanks. Mr. Massa oversaw the remediation on a daily basis over a period of approximately ten months.

***Clark Street Former Manufactured Gas Plant, Canandaigua, NY***

Bryan conducted a comprehensive subsurface investigation of soil and groundwater within the parking lot of a strip plaza that was formerly a manufactured gas plant. The investigation also included a comprehensive screening of sub-slab vapors and indoor air within the strip plaza building to determine if vapor intrusion existed. Mr. Massa subsequently observed the remedial action that included the installation of sheet pile, excavation of thousands of tons of soil under a movable sprung structure, and the re-stabilization of the parking lot. Mr. Massa also conducted vibration/crack monitoring and community air monitoring. Mr. Massa oversaw the remediation on a daily basis over a period of approximately six months.

***Former Mill Building, Gardner, MA***

Bryan conducted an ASTM Phase I Environmental Site Assessment on a former mill building that had been used for the manufacturing of furniture. The former mill building had been abandoned since the mid 1980's and a private developer was interested in converting the former mill building into residential apartments. Bryan identified several recognized environmental conditions ("RECs") at the site. A subsequent Phase II Subsurface Investigation identified a release of petroleum related compounds ("PRCs") from an upgradient source had impacted the site as well as chlorinated solvents relating to the historic use as a furniture manufacturer. Soil, groundwater and soil gas was impacted by the release. A sub-slab depressurization system was subsequently designed and installed at the Site during construction. A Method 3 Risk Assessment determined that a level of No Significant Risk exists at the site.

***Former Mill Building, Haverhill, MA***

Bryan conducted an ASTM Phase I Environmental Site Assessment of a former mill building that had been used for the manufacturing of circuit boards. The former mill building had been abandoned since the mid 1990's and a private developer was interested in converting the former mill building into residential apartments. Bryan identified several RECs at the site. A subsequent Phase II Subsurface Investigation identified a release of petroleum related compounds, an abandoned in place petroleum underground storage tank, and soil gas impacted with chlorinated solvents.

***Former Commercial Vehicle Painter, Braintree, MA***

Bryan conducted an ASTM Phase I Environmental Site Assessment on a commercial vehicle painter that had been in operation since the 1970's and identified several RECs at the Site. A subsequent Phase II Subsurface Investigation identified a release of select metals and PAHs in soil relating to the historic use of the site. A Method 3 Risk Assessment determined that a level of No Significant Risk exists at the site.

***Emergency Responses to Aircraft Accidents, Commercial Vehicles, and Recreational Boats, MA.***

Bryan has provided LSP services for release of oil and/or hazardous materials in excess of the Massachusetts Department of Environmental Protection (MassDEP) Reportable Quantity. These services included MassDEP regulatory reporting, release assessment and remediation oversight.

## APPENDIX C

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### ENVIRONMENTAL DATA RESOURCES, INC REPORT

- The EDR Radius Map™ Report with GeoCheck®
- Certified Sanborn® Map Report
- The EDR Aerial Photo Decade Package
- EDR Historical Topographical Map Report with QuadMatch™
- The EDR-City Directory Image Report

**Sand Pit Road**

2 Sand Pit Rd  
North Truro, MA 02652

Inquiry Number: 7228749.1s  
January 19, 2023

**The EDR Radius Map™ Report with GeoCheck®**



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

2 SAND PIT RD  
NORTH TRURO, MA 02652

#### COORDINATES

Latitude (North): 42.0234930 - 42° 1' 24.57"  
Longitude (West): 70.0797270 - 70° 4' 47.01"  
Universal Transverse Mercator: Zone 19  
UTM X (Meters): 410609.4  
UTM Y (Meters): 4652735.0  
Elevation: 46 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 11721272 NORTH TRURO, MA  
Version Date: 2018

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140718  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
 2 SAND PIT RD  
 NORTH TRURO, MA 02652

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	TOW BOAT US	352 RTE 6	HW GEN	Higher	596, 0.113, East
<a href="#">A2</a>	TOW BOAT US PROVINCE	352 RTE 6	RCRA-VSQQ	Higher	596, 0.113, East
<a href="#">A3</a>	ROADWAY - VEHICLE AC	IN FRONT 350 RT 6	SHWS, RELEASE	Higher	628, 0.119, East
<a href="#">4</a>	PROVINCETOWN WATER	JCT RTES 6 AND 6A	RCRA NonGen / NLR	Higher	1043, 0.198, ENE
<a href="#">5</a>	WATTS SERVICE CTR/S	372 ROUTE 6	SEMS-ARCHIVE, LUST, RELEASE	Higher	1424, 0.270, NNE
<a href="#">6</a>	NORTH TRURO POST OFF	34 SHORE RD	LAST, RELEASE	Lower	2363, 0.448, North
<a href="#">7</a>	S HIGHLAND RD LANDFI	HIGHLAND RD	SHWS, INST CONTROL, RELEASE	Higher	2548, 0.483, ENE
<a href="#">8</a>	WTP SO. HOLLOW WELLF	11 SOUTH HOLLOW RD	SHWS, RELEASE	Lower	2852, 0.540, NE
<a href="#">9</a>	NO LOCATION AID	LONG NOOK RD	SHWS, RELEASE	Lower	3197, 0.605, North
<a href="#">10</a>	FORMER AIR BASE	32 OLD DEWLINE RD	SHWS, LUST, RELEASE	Higher	4528, 0.858, NE
<a href="#">11</a>	NO LOCATION AID	1 PERRY RD	SHWS, LAST, RELEASE	Higher	4684, 0.887, SSE
<a href="#">12</a>	CITGO GAS STATION	435 ROUTE 6	SHWS, RELEASE	Higher	5261, 0.996, NNW

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Lists of Federal NPL (Superfund) sites***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Lists of Federal Delisted NPL sites***

Delisted NPL..... National Priority List Deletions

### ***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS..... Corrective Action Report

### ***Lists of Federal RCRA TSD facilities***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Lists of Federal RCRA generators***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROLS..... Institutional Controls Sites List

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

# EXECUTIVE SUMMARY

## ***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF..... Solid Waste Facility Database/Transfer Stations

## ***Lists of state and tribal leaking storage tanks***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

## ***Lists of state and tribal registered storage tanks***

FEMA UST..... Underground Storage Tank Listing

UST..... Summary Listing of all the Tanks Registered in the State of Massachusetts

AST..... Aboveground Storage Tank Database

INDIAN UST..... Underground Storage Tanks on Indian Land

## ***Lists of state and tribal voluntary cleanup sites***

INDIAN VCP..... Voluntary Cleanup Priority Listing

## ***Lists of state and tribal brownfield sites***

BROWNFIELDS..... Completed Brownfields Covenants Listing

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

ODI..... Open Dump Inventory

IHS OPEN DUMPS..... Open Dumps on Indian Land

### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register

US CDL..... National Clandestine Laboratory Register

### ***Local Land Records***

LIENS..... Liens Information Listing

LIENS 2..... CERCLA Lien Information

### ***Records of Emergency Release Reports***

HMIRS..... Hazardous Materials Information Reporting System

RELEASE..... Reportable Releases Database

SPILLS..... Historical Spill List

SPILLS 90..... SPILLS 90 data from FirstSearch

SPILLS 80..... SPILLS 80 data from FirstSearch

## EXECUTIVE SUMMARY

### **Other Ascertainable Records**

FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
ECHO.....	Enforcement & Compliance History Information
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
PFAS NPL.....	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES.....	Federal Sites PFAS Information
PFAS TSCA.....	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST.....	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR.....	PFAS Contamination Site Location Listing
PFAS WQP.....	Ambient Environmental Sampling for PFAS
PFAS NPDES.....	Clean Water Act Discharge Monitoring Information
PFAS ECHO.....	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAINING.....	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT.....	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC.....	Aqueous Foam Related Incidents Listing
PFAS.....	PFAS Contaminated Sites Listing
AIRS.....	Permitted Facilities Listing
ASBESTOS.....	ASBESTOS
DRYCLEANERS.....	Regulated Drycleaning Facilities

## EXECUTIVE SUMMARY

ENF.....	Enforcement Action Cases
Financial Assurance.....	Financial Assurance Information Listing
GWDP.....	Ground Water Discharge Permits
MERCURY.....	Mercury Product Recycling Drop-Off Locations Listing
NPDES.....	NPDES Permit Listing
TIER 2.....	Tier 2 Information Listing
TSD.....	TSD Facility
UIC.....	Underground Injection Control Listing
MINES MRDS.....	Mineral Resources Data System

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for

## EXECUTIVE SUMMARY

listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 10/27/2022 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>WATTS SERVICE CTR/S</b> Site ID: 0100505 EPA Id: MAD044806594	<b>372 ROUTE 6</b>	<b>NNE 1/4 - 1/2 (0.270 mi.)</b>	<b>5</b>	<b>16</b>

### ***Lists of Federal RCRA generators***

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 11/21/2022 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TOW BOAT US PROVINCE</b> EPA ID:: MAR000552703	<b>352 RTE 6</b>	<b>E 0 - 1/8 (0.113 mi.)</b>	<b>A2</b>	<b>8</b>

### ***Lists of state- and tribal hazardous waste facilities***

SHWS: Contains information on releases of oil and hazardous materials that have been reported to DEP.

A review of the SHWS list, as provided by EDR, and dated 07/22/2022 has revealed that there are 7 SHWS sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>ROADWAY - VEHICLE AC</b> Release Tracking Number: 4-0020912 Current Status: RAO	<b>IN FRONT 350 RT 6</b>	<b>E 0 - 1/8 (0.119 mi.)</b>	<b>A3</b>	<b>11</b>
<b>S HIGHLAND RD LANDFI</b> Release Tracking Number: 4-0000897 Current Status: RAO	<b>HIGHLAND RD</b>	<b>ENE 1/4 - 1/2 (0.483 mi.)</b>	<b>7</b>	<b>23</b>
<b>FORMER AIR BASE</b> Release Tracking Number: 4-0019586 Current Status: RAO	<b>32 OLD DEWLINE RD</b>	<b>NE 1/2 - 1 (0.858 mi.)</b>	<b>10</b>	<b>30</b>
<b>NO LOCATION AID</b> Release Tracking Number: 4-0010336	<b>1 PERRY RD</b>	<b>SSE 1/2 - 1 (0.887 mi.)</b>	<b>11</b>	<b>34</b>

## EXECUTIVE SUMMARY

Current Status: RAO

<b>CITGO GAS STATION</b> Release Tracking Number: 4-0028779 Current Status: PSNC	<b>435 ROUTE 6</b>	<b>NNW 1/2 - 1 (0.996 mi.)</b>	<b>12</b>	<b>39</b>
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<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>WTP SO. HOLLOW WELLF</b> Release Tracking Number: 4-0018962 Current Status: RAO	<b>11 SOUTH HOLLOW RD</b>	<b>NE 1/2 - 1 (0.540 mi.)</b>	<b>8</b>	<b>27</b>
<b>NO LOCATION AID</b> Release Tracking Number: 4-0012923 Current Status: RAO	<b>LONG NOOK RD</b>	<b>N 1/2 - 1 (0.605 mi.)</b>	<b>9</b>	<b>29</b>

### ***Lists of state and tribal leaking storage tanks***

LUST: Sites within the Releases Database that have a UST listed as its source.

A review of the LUST list, as provided by EDR, and dated 07/22/2022 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>WATTS SERVICE CTR/S</b> Release Tracking Number / Current Status: 4-0000170 / RAO	<b>372 ROUTE 6</b>	<b>NNE 1/4 - 1/2 (0.270 mi.)</b>	<b>5</b>	<b>16</b>

LAST: The Leaking Aboveground Storage Tanks database

A review of the LAST list, as provided by EDR, and dated 07/22/2022 has revealed that there is 1 LAST site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>NORTH TRURO POST OFF</b> Release Tracking Number / Current Status: 4-0011029 / RAO	<b>34 SHORE RD</b>	<b>N 1/4 - 1/2 (0.448 mi.)</b>	<b>6</b>	<b>18</b>

### ***State and tribal institutional control / engineering control registries***

INST CONTROL: Activity and Use Limitations establish limits and conditions on the future use of contaminated property, and therefore allow cleanups to be tailored to these uses.

A review of the INST CONTROL list, as provided by EDR, and dated 07/22/2022 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>S HIGHLAND RD LANDFI</b> Release Tracking Number: 4-0000897	<b>HIGHLAND RD</b>	<b>ENE 1/4 - 1/2 (0.483 mi.)</b>	<b>7</b>	<b>23</b>

## EXECUTIVE SUMMARY

### ADDITIONAL ENVIRONMENTAL RECORDS

#### ***Other Ascertainable Records***

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 11/21/2022 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PROVINCETOWN WATER EPA ID:: MAD981061682	JCT RTES 6 AND 6A	ENE 1/8 - 1/4 (0.198 mi.)	4	13

HW GEN: Permanent generator identification numbers for all Massachusetts generators of hazardous waste and waste oil that have registered with or notified MassDEP of their hazardous waste activities.

A review of the HW GEN list, as provided by EDR, and dated 09/15/2022 has revealed that there is 1 HW GEN site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOW BOAT US State Generator Status: VQG-MA EPA Id: MAR000552703	352 RTE 6	E 0 - 1/8 (0.113 mi.)	A1	8

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

<u>Site Name</u>	<u>Database(s)</u>
AIR ROUTE SURVEILLANCE RADAR SITE	SHWS, RELEASE
NO LOCATION AID	SHWS, RELEASE

# OVERVIEW MAP - 7228749.1S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

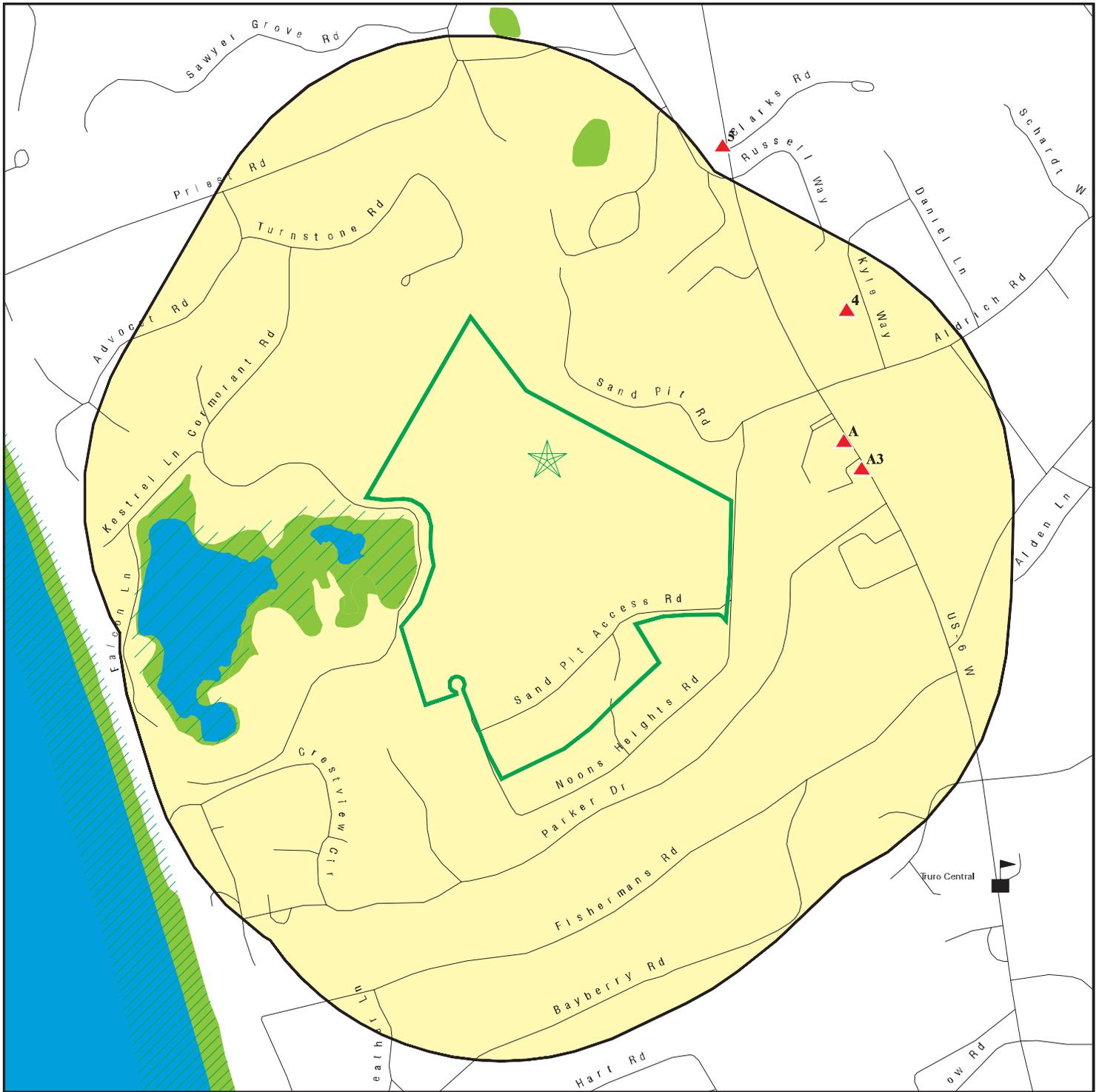
Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Sand Pit Road  
 ADDRESS: 2 Sand Pit Rd  
 North Truro MA 02652  
 LAT/LONG: 42.023493 / 70.079727

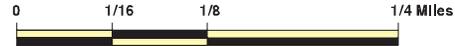
CLIENT: Horsley Witten Group, Inc.  
 CONTACT: Caroline Armstrong  
 INQUIRY #: 7228749.1s  
 DATE: January 19, 2023 10:31 am

# DETAIL MAP - 7228749.1S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Areas of Critical Environmental Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p><b>SITE NAME:</b> Sand Pit Road  <b>ADDRESS:</b> 2 Sand Pit Rd                  North Truro MA 02652  <b>LAT/LONG:</b> 42.023493 / 70.079727</p>	<p><b>CLIENT:</b> Horsley Witten Group, Inc.  <b>CONTACT:</b> Caroline Armstrong  <b>INQUIRY #:</b> 7228749.1s  <b>DATE:</b> January 19, 2023 10:32 am</p>
---	--

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Lists of Federal NPL (Superfund) sites</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<b><i>Lists of Federal Delisted NPL sites</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Lists of Federal sites subject to CERCLA removals and CERCLA orders</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Lists of Federal CERCLA sites with NFRAP</i></b>								
SEMS-ARCHIVE	0.500		0	0	1	NR	NR	1
<b><i>Lists of Federal RCRA facilities undergoing Corrective Action</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Lists of Federal RCRA TSD facilities</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Lists of Federal RCRA generators</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		1	0	NR	NR	NR	1
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>Lists of state- and tribal hazardous waste facilities</i></b>								
SHWS	1.000		1	0	1	5	NR	7
<b><i>Lists of state and tribal landfills and solid waste disposal facilities</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>Lists of state and tribal leaking storage tanks</i></b>								
LUST	0.500		0	0	1	NR	NR	1

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LAST	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b><i>Lists of state and tribal registered storage tanks</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b><i>State and tribal institutional control / engineering control registries</i></b>								
INST CONTROL	0.500		0	0	1	NR	NR	1
<b><i>Lists of state and tribal voluntary cleanup sites</i></b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b><i>Lists of state and tribal brownfield sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b><i>Local Land Records</i></b>								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b><i>Records of Emergency Release Reports</i></b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
RELEASE	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
SPILLS 80	TP		NR	NR	NR	NR	NR	0
<b><i>Other Ascertainable Records</i></b>								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A1**  
**East**  
**< 1/8**  
**0.113 mi.**  
**596 ft.**

**TOW BOAT US**  
**352 RTE 6**  
**TRURO, MA 02666**  
**Site 1 of 3 in cluster A**

**HW GEN** **S123811229**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**113 ft.**

HW GEN:  
 Name: TOW BOAT US  
 Address: 352 RTE 6  
 City,State,Zip: TRURO, MA 02666  
 EPA Id: MAR000552703  
 RCRA Generator Status: VSQG  
 State Generator Status: VQG-MA

**A2**  
**East**  
**< 1/8**  
**0.113 mi.**  
**596 ft.**

**TOW BOAT US PROVINCETOWN/CHATHAM/BASS RIVER**  
**352 RTE 6**  
**TRURO, MA 02666**  
**Site 2 of 3 in cluster A**

**RCRA-VSQG** **1025502795**  
**MAR000552703**

**Relative:**  
**Higher**  
**Actual:**  
**113 ft.**

RCRA Listings:  
 Date Form Received by Agency: 20190326  
 Handler Name: TOW BOAT US PROVINCETOWN/CHATHAM/BASS RIVER  
 Handler Address: 352 RTE 6  
 Handler City,State,Zip: TRURO, MA 02666  
 EPA ID: MAR000552703  
 Contact Name: NOAH SANTOS  
 Contact Address: COMMERCIAL STREET  
 Contact City,State,Zip: PROVINCETOWN, MA 02657  
 Contact Telephone: 508-742-7166  
 Contact Fax: Not reported  
 Contact Email: TOWBOATSUSPROVINCETOWN@GMAIL.COM  
 Contact Title: PRESIDENT  
 EPA Region: 01  
 Land Type: Private  
 Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator  
 Non-Notifier: Not reported  
 Biennial Report Cycle: Not reported  
 Accessibility: Not reported  
 Active Site Indicator: Handler Activities, State-specific Activities  
 State District Owner: MA  
 State District: SE  
 Mailing Address: COMMERCIAL STREET  
 Mailing City,State,Zip: PROVINCETOWN, MA 02657  
 Owner Name: NOAH SANTOS  
 Owner Type: Private  
 Operator Name: NOAH SANTOS  
 Operator Type: Private  
 Short-Term Generator Activity: No  
 Importer Activity: No  
 Mixed Waste Generator: No  
 Transporter Activity: No  
 Transfer Facility Activity: No  
 Recycler Activity with Storage: No  
 Small Quantity On-Site Burner Exemption: No  
 Smelting Melting and Refining Furnace Exemption: No  
 Underground Injection Control: No  
 Off-Site Waste Receipt: No  
 Universal Waste Indicator: No  
 Universal Waste Destination Facility: No

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**TOW BOAT US PROVINCETOWN/CHATHAM/BASS RIVER (Continued)**

**1025502795**

Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	--Y
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190402
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

**Hazardous Waste Summary:**

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D018
Waste Description:	BENZENE

**Handler - Owner Operator:**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	NOAH SANTOS
Legal Status:	Private

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOW BOAT US PROVINCETOWN/CHATHAM/BASS RIVER (Continued)**

**1025502795**

Date Became Current: 20190326  
Date Ended Current: Not reported  
Owner/Operator Address: 131A COMMERCIAL STREET  
Owner/Operator City,State,Zip: PROVINCETOWN, MA 02657  
Owner/Operator Telephone: 508-742-7166  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: TOWBOATSUSPROVINCETOWN@GMAIL.COM

Owner/Operator Indicator: Operator  
Owner/Operator Name: NOAH SANTOS  
Legal Status: Private  
Date Became Current: 20190326  
Date Ended Current: Not reported  
Owner/Operator Address: 131A COMMERCIAL STREET  
Owner/Operator City,State,Zip: PROVINCETOWN, MA 02657  
Owner/Operator Telephone: 508-742-7166  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: TOWBOATSUSPROVINCETOWN@GMAIL.COM

Historic Generators:

Receive Date: 20190326  
Handler Name: TOW BOAT US PROVINCETOWN/CHATHAM/BASS RIVER  
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator  
State District Owner: MA  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: No  
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:

NAICS Code: 336612  
NAICS Description: BOAT BUILDING

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**A3**            **ROADWAY - VEHICLE ACCIDENT**  
**East**        **IN FRONT 350 RT 6**  
**< 1/8**        **TRURO, MA 02666**  
**0.119 mi.**  
**628 ft.**      **Site 3 of 3 in cluster A**

**SHWS**    **S108962912**  
**RELEASE**    **N/A**

**Relative:**  
**Higher**  
**Actual:**  
**117 ft.**

**SHWS:**  
Name: ROADWAY - VEHICLE ACCIDENT  
Address: IN FRONT 350 RT 6  
City,State,Zip: TRURO, MA 026660000  
Facility ID: 4-0020912  
Source Type: VEHICLE  
Release Town: TRURO  
Notification Date: 11/20/2007  
Category: TWO HR  
Associated ID: Not reported  
Current Status: RAO  
Status Date: 01/31/2008  
Phase: Not reported  
Response Action Outcome: A2  
Oil Or Haz Material: Oil

**Release:**  
Name: ROADWAY - VEHICLE ACCIDENT  
Address: IN FRONT 350 RT 6  
City,State,Zip: TRURO, MA 026660000  
Release Tracking Number/Current Status: 4-0020912 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 11/20/2007  
Category: TWO HR  
Status Date: 01/31/2008  
Phase: Not reported  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

**Actions:**  
Action Type: Immediate Response Action  
Action Status: Imminent Hazard Evaluation Received  
Action Date: 1/31/2008  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.  
  
Action Type: RNFE  
Action Status: Transmittal, Notice, or Notification Received  
Action Date: 1/31/2008  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.  
  
Action Type: Immediate Response Action  
Action Status: Completion Statement Received  
Action Date: 1/31/2008  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ROADWAY - VEHICLE ACCIDENT (Continued)**

**S108962912**

Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	1/31/2008
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FLDDO
Action Date:	11/20/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	FLDISS
Action Date:	11/20/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	11/20/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	11/21/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.)
Action Date:	12/10/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	12/4/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	12/5/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FLDD1U
Action Date:	12/5/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Response Action Outcome - RAO
Action Status:	Level I - Technical Screen Audit
Action Date:	5/14/2008

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**ROADWAY - VEHICLE ACCIDENT (Continued)**

**S108962912**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:  
 Chemical: DIESEL FUEL  
 Quantity: 35 gallons  
 Location Type: ROADWAY  
 Source: VEHICLE

**4**  
**ENE**  
**1/8-1/4**  
**0.198 mi.**  
**1043 ft.**

**PROVINCETOWN WATER**  
**JCT RTES 6 AND 6A**  
**TRURO, MA 02652**

**RCRA NonGen / NLR 1000433238**  
**MAD981061682**

**Relative:**  
**Higher**  
**Actual:**  
**114 ft.**

RCRA Listings:  
 Date Form Received by Agency: 19860331  
 Handler Name: PROVINCETOWN WATER  
 Handler Address: JCT RTES 6 AND 6A  
 Handler City,State,Zip: TRURO, MA 02652  
 EPA ID: MAD981061682  
 Contact Name: PAUL DALEY  
 Contact Address: TOWN HALL 260 COMMERCIAL ST  
 Contact City,State,Zip: PROVINCETOWN, MA 02657  
 Contact Telephone: 508-487-1810  
 Contact Fax: Not reported  
 Contact Email: Not reported  
 Contact Title: Not reported  
 EPA Region: 01  
 Land Type: Private  
 Federal Waste Generator Description: Not a generator, verified  
 Non-Notifier: Not reported  
 Biennial Report Cycle: Not reported  
 Accessibility: Not reported  
 Active Site Indicator: Not reported  
 State District Owner: MA  
 State District: S  
 Mailing Address: TOWN HALL 260 COMMERCIAL ST  
 Mailing City,State,Zip: PROVINCETOWN, MA 02657  
 Owner Name: TOWN OF PROVINCETOWN  
 Owner Type: Private  
 Operator Name: PROVINCETOWN CITY OF SHWF SITE  
 Operator Type: Private  
 Short-Term Generator Activity: No  
 Importer Activity: No  
 Mixed Waste Generator: No  
 Transporter Activity: No  
 Transfer Facility Activity: No  
 Recycler Activity with Storage: No  
 Small Quantity On-Site Burner Exemption: No  
 Smelting Melting and Refining Furnace Exemption: No  
 Underground Injection Control: No  
 Off-Site Waste Receipt: No  
 Universal Waste Indicator: No  
 Universal Waste Destination Facility: No  
 Federal Universal Waste: No  
 Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**PROVINCETOWN WATER (Continued)**

**1000433238**

Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20171020
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

**Hazardous Waste Summary:**

Waste Code:	U019
Waste Description:	BENZENE (I,T)
Waste Code:	U220
Waste Description:	BENZENE, METHYL- (OR) TOLUENE
Waste Code:	U239
Waste Description:	BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

**Handler - Owner Operator:**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TOWN OF PROVINCETOWN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PROVINCETOWN WATER (Continued)**

**1000433238**

Legal Status:	Private
Date Became Current:	20041016
Date Ended Current:	Not reported
Owner/Operator Address:	TOWN HALL 260 COMMERCIAL ST
Owner/Operator City,State,Zip:	PROVINCETOWN, MA 02657
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	PROVINCETOWN CITY OF SHWF SITE
Legal Status:	Private
Date Became Current:	19911208
Date Ended Current:	19990416
Owner/Operator Address:	TOWN HALL 260 COMMERCIAL ST
Owner/Operator City,State,Zip:	PROVINCETOWN, MA 02657
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Historic Generators:	
Receive Date:	19860331
Handler Name:	PROVINCETOWN WATER
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	MA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
List of NAICS Codes and Descriptions:	
NAICS Codes:	No NAICS Codes Found
Facility Has Received Notices of Violations:	
Violations:	No Violations Found
Evaluation Action Summary:	
Evaluations:	No Evaluations Found

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

5  
NNE  
1/4-1/2  
0.270 mi.  
1424 ft.

WATTS SERVICE CTR/S HOLLOW WELLFIELD  
372 ROUTE 6  
TRURO, MA 02666

SEMS-ARCHIVE 1003862278  
LUST MAD044806594  
RELEASE

Relative:  
Higher  
Actual:  
56 ft.

SEMS Archive:  
Site ID: 0100505  
EPA ID: MAD044806594  
Name: WATTS SERVICE CTR/S HOLLOW WELLFIELD  
Address: 372 ROUTE 6  
Address 2: Not reported  
City,State,Zip: TRURO, MA 02666  
Cong District: 12  
FIPS Code: 25001  
FF: N  
NPL: Not on the NPL  
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region: 01  
Site ID: 0100505  
EPA ID: MAD044806594  
Site Name: WATTS SERVICE CTR/S HOLLOW WELLFIELD  
NPL: N  
FF: N  
OU: 00  
Action Code: VS  
Action Name: ARCH SITE  
SEQ: 1  
Start Date: Not reported  
Finish Date: 1982-04-01 05:00:00  
Qual: Not reported  
Current Action Lead: EPA Perf In-Hse

Region: 01  
Site ID: 0100505  
EPA ID: MAD044806594  
Site Name: WATTS SERVICE CTR/S HOLLOW WELLFIELD  
NPL: N  
FF: N  
OU: 00  
Action Code: DS  
Action Name: DISCVRY  
SEQ: 1  
Start Date: 1977-12-01 05:00:00  
Finish Date: 1977-12-01 05:00:00  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 01  
Site ID: 0100505  
EPA ID: MAD044806594  
Site Name: WATTS SERVICE CTR/S HOLLOW WELLFIELD  
NPL: N  
FF: N  
OU: 00  
Action Code: PA  
Action Name: PA  
SEQ: 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WATTS SERVICE CTR/S HOLLOW WELLFIELD (Continued)**

**1003862278**

Start Date: Not reported  
Finish Date: 1982-04-01 05:00:00  
Qual: N  
Current Action Lead: EPA Perf

LUST:

Facility:

Name: WATTS SERV WELLFIELD  
Address: OFF RTE 6A  
City,State,Zip: TRURO, MA 02666  
**Current Status: Response Action Outcome**  
Release Tracking Number/Current Status: 4-0000170 / RAO  
Status Date: 12/31/1996  
Source Type: UST  
Release Town: TRURO  
Notification Date: 10/15/1987  
Category: NONE  
Associated ID: Not reported  
Phase: Not reported  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil Or Haz Material: Not reported  
Location Type: GASSTATION  
Source: UST

[Click here to access the MA DEP site for this facility:](#)

Chemicals:

Chemical: UNKNOWN  
Quantity: Not reported

Actions:

Action Type: Release Disposition  
Action Status: Valid Transition Site  
Action Date: 10/15/1987  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RAO - DEP Lead  
Action Status: RAO Statement Received  
Action Date: 12/31/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FLDRUN  
Action Date: 9/23/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WATTS SERVICE CTR/S HOLLOW WELLFIELD (Continued)**

**1003862278**

Release:

Name: WATTS SERV WELLFIELD  
Address: OFF RTE 6A  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number/Current Status: 4-0000170 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 10/15/1987  
Category: NONE  
Status Date: 12/31/1996  
Phase: Not reported  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition  
Action Status: Valid Transition Site  
Action Date: 10/15/1987  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RAO - DEP Lead  
Action Status: RAO Statement Received  
Action Date: 12/31/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FLDRUN  
Action Date: 9/23/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:

Chemical: UNKNOWN  
Quantity: Not reported  
Location Type: GASSTATION  
Source: UST

**6**  
**North**  
**1/4-1/2**  
**0.448 mi.**  
**2363 ft.**

**NORTH TRURO POST OFFICE**  
**34 SHORE RD**  
**TRURO, MA 02666**

**LAST** **S102088269**  
**RELEASE** **N/A**

**Relative:**  
**Lower**  
**Actual:**  
**13 ft.**

LAST:

Name: NORTH TRURO POST OFFICE  
Address: 34 SHORE RD  
City,State,Zip: TRURO, MA 026660000  
Release Tracking Number/Current Status: 4-0011029 / RAO  
Source Type: AST  
Release Town: TRURO  
Notification Date: 01/03/1995

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NORTH TRURO POST OFFICE (Continued)**

**S102088269**

Category: TWO HR  
Associated ID: Not reported  
Status Date: 08/08/1995  
Phase: Not reported  
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Oil Or Haz Material: Oil

Chemicals:

Chemical: FUEL OIL  
Quantity: 150 gallons  
Chemical: #2 FUEL OIL  
Quantity: 190 gallons  
Location Type: MUNICIPAL  
Source: AST

Actions:

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 1/4/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Written Approval of Plan  
Action Date: 1/9/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.  
Action Date: 1/9/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NORTH TRURO POST OFFICE (Continued)**

**S102088269**

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 2/9/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Written Plan Received  
Action Date: 3/2/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Imminent Hazard Evaluation Received  
Action Date: 3/2/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 3/21/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Written Approval of Plan  
Action Date: 3/22/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 5/23/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Status or Interim Report Received  
Action Date: 6/23/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: Fee Received - FMCRA Use Only  
Action Date: 8/15/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Completion Statement Received  
Action Date: 8/8/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 8/8/1995

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NORTH TRURO POST OFFICE (Continued)**

**S102088269**

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Release:

Name: NORTH TRURO POST OFFICE  
Address: 34 SHORE RD  
City, State, Zip: TRURO, MA 026660000  
Release Tracking Number/Current Status: 4-0011029 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 01/03/1995  
Category: TWO HR  
Status Date: 08/08/1995  
Phase: Not reported  
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.  
Oil / Haz Material Type: Oil

[Click here to access the MA DEP site for this facility:](#)

Actions:

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 1/3/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 1/4/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Written Approval of Plan  
Action Date: 1/9/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NORTH TRURO POST OFFICE (Continued)**

**S102088269**

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 1/9/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 2/9/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Written Plan Received  
Action Date: 3/2/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Imminent Hazard Evaluation Received  
Action Date: 3/2/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 3/21/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Written Approval of Plan  
Action Date: 3/22/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 5/23/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Status or Interim Report Received  
Action Date: 6/23/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: Fee Received - FMCRA Use Only  
Action Date: 8/15/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NORTH TRURO POST OFFICE (Continued)**

**S102088269**

Action Status: Completion Statement Received  
Action Date: 8/8/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 8/8/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:  
Chemical: FUEL OIL  
Quantity: 150 gallons  
Chemical: #2 FUEL OIL  
Quantity: 190 gallons  
Location Type: MUNICIPAL  
Source: AST

**7**  
**ENE**  
**1/4-1/2**  
**0.483 mi.**  
**2548 ft.**

**S HIGHLAND RD LANDFILL**  
**HIGHLAND RD**  
**TRURO, MA 02666**

**SHWS** **S105200407**  
**INST CONTROL** **N/A**  
**RELEASE**

**Relative:**  
**Higher**  
**Actual:**  
**94 ft.**

SHWS:  
Name: S HIGHLAND RD LANDFILL  
Address: HIGHLAND RD  
City,State,Zip: TRURO, MA 02666  
Facility ID: 4-0000897  
Source Type: UNCONTAIN  
Release Town: TRURO  
Notification Date: 07/15/1990  
Category: NONE  
Associated ID: Not reported  
Current Status: RAO  
Status Date: 04/08/2005  
Phase: Not reported  
Response Action Outcome: A3  
Oil Or Haz Material: Not reported

INST CONTROL:  
Name: S HIGHLAND RD LANDFILL  
Address: HIGHLAND RD  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number: 4-0000897  
Action Type: AUL  
Action Stat: LEGNOT  
Action Date: 05/04/2005  
Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Name: S HIGHLAND RD LANDFILL  
Address: HIGHLAND RD  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number: 4-0000897

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**S HIGHLAND RD LANDFILL (Continued)**

**S105200407**

Action Type: AUL  
Action Stat: RECPT  
Action Date: 04/08/2005  
Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Name: S HIGHLAND RD LANDFILL  
Address: HIGHLAND RD  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number: 4-0000897  
Action Type: AUL  
Action Stat: SNAUDI  
Action Date: 10/17/2008  
Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Name: S HIGHLAND RD LANDFILL  
Address: HIGHLAND RD  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number: 4-0000897  
Action Type: AUL  
Action Stat: TSAUD  
Action Date: 08/04/2005  
Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Release:  
Name: S HIGHLAND RD LANDFILL  
Address: HIGHLAND RD  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number/Current Status: 4-0000897 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 07/15/1990  
Category: NONE  
Status Date: 04/08/2005  
Phase: Not reported  
Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.  
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:  
Action Type: Activity and Use Limitation  
Action Status: Level II - Audit Inspection  
Action Date: 10/17/2008  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.  
Action Type: An activity type that is related to an Audit

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**S HIGHLAND RD LANDFILL (Continued)**

**S105200407**

Action Status:	NAFNVD
Action Date:	10/17/2008
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	RLFA
Action Status:	FLDRUN
Action Date:	2/26/1997
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	Phase 4
Action Status:	Written Plan Received
Action Date:	4/4/2003
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	Phase 1
Action Status:	Completion Statement Received
Action Date:	4/7/2000
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	Tier Classification
Action Status:	Tier 2 Classification
Action Date:	4/7/2000
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Non-Compliance Issued
Action Date:	4/7/2000
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	Tier Classification
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	4/7/2000
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	4/8/1999
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.
Action Type:	Phase 2
Action Status:	Completion Statement Received

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**S HIGHLAND RD LANDFILL (Continued)**

**S105200407**

Action Date: 4/8/2002  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Phase 3  
Action Status: Completion Statement Received  
Action Date: 4/8/2002  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Phase 4  
Action Status: Completion Statement Received  
Action Date: 4/8/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Phase 4  
Action Status: As-Built Construction Report Received  
Action Date: 4/8/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Activity and Use Limitation  
Action Status: Transmittal, Notice, or Notification Received  
Action Date: 4/8/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 4/8/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Activity and Use Limitation  
Action Status: Legal Notice Published  
Action Date: 5/4/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Release Disposition  
Action Status: Valid Transition Site  
Action Date: 7/15/1990  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Phase 2  
Action Status: Scope of Work Received  
Action Date: 7/30/2001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**S HIGHLAND RD LANDFILL (Continued)**

**S105200407**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Activity and Use Limitation  
Action Status: Level I - Technical Screen Audit  
Action Date: 8/4/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Action Type: Response Action Outcome - RAO  
Action Status: Level I - Technical Screen Audit  
Action Date: 8/8/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented.

Chemicals:  
Chemical: UNKNOWN  
Quantity: Not reported  
Location Type: LANDFILL  
Source: UNCONTAIN

**8**  
**NE**  
**1/2-1**  
**0.540 mi.**  
**2852 ft.**

**WTP SO. HOLLOW WELLFIELD**  
**11 SOUTH HOLLOW RD**  
**TRURO, MA 02666**

**SHWS S106863510**  
**RELEASE N/A**

**Relative:**  
**Lower**  
**Actual:**  
**24 ft.**

SHWS:  
Name: WTP SO. HOLLOW WELLFIELD  
Address: 11 SOUTH HOLLOW RD  
City,State,Zip: TRURO, MA 026660000  
Facility ID: 4-0018962  
Source Type: Not reported  
Release Town: TRURO  
Notification Date: 03/11/2005  
Category: TWO HR  
Associated ID: Not reported  
Current Status: RAO  
Status Date: 05/09/2005  
Phase: Not reported  
Response Action Outcome: A2  
Oil Or Haz Material: Hazardous Material

Release:  
Name: WTP SO. HOLLOW WELLFIELD  
Address: 11 SOUTH HOLLOW RD  
City,State,Zip: TRURO, MA 026660000  
Release Tracking Number/Current Status: 4-0018962 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 03/11/2005  
Category: TWO HR  
Status Date: 05/09/2005  
Phase: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WTP SO. HOLLOW WELLFIELD (Continued)**

**S106863510**

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.

Oil / Haz Material Type: Hazardous Material

[Click here to access the MA DEP site for this facility:](#)

**Actions:**

Action Type: Immediate Response Action

Action Status: Oral Approval of Plan or Action

Action Date: 3/11/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA

Action Status: FOLOFF

Action Date: 3/11/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 3/11/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action

Action Status: REFAG

Action Date: 3/16/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA

Action Status: FLDD1A

Action Date: 3/25/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 4/5/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO

Action Status: Level I - Technical Screen Audit

Action Date: 5/25/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 5/9/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action

Action Status: Completion Statement Received

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WTP SO. HOLLOW WELLFIELD (Continued)**

**S106863510**

Action Date: 5/9/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 5/9/2005  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:  
Chemical: POTASSIUM HYDROXIDE  
Quantity: 8 gallons  
Location Type: MUNICIPAL

**9**  
**North**  
**1/2-1**  
**0.605 mi.**  
**3197 ft.**

**NO LOCATION AID**  
**LONG NOOK RD**  
**TRURO, MA 02666**

**SHWS** **S102618672**  
**RELEASE** **N/A**

**Relative:**  
**Lower**  
**Actual:**  
**45 ft.**

SHWS:  
Name: NO LOCATION AID  
Address: LONG NOOK RD  
City,State,Zip: TRURO, MA 026660000  
Facility ID: 4-0012923  
Source Type: TRANSFORM  
Release Town: TRURO  
Notification Date: 04/01/1997  
Category: TWO HR  
Associated ID: Not reported  
Current Status: RAO  
Status Date: 05/30/1997  
Phase: Not reported  
Response Action Outcome: A1  
Oil Or Haz Material: Hazardous Material

Release:  
Name: NO LOCATION AID  
Address: LONG NOOK RD  
City,State,Zip: TRURO, MA 026660000  
Release Tracking Number/Current Status: 4-0012923 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 04/01/1997  
Category: TWO HR  
Status Date: 05/30/1997  
Phase: Not reported  
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.  
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:  
Action Type: Immediate Response Action

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NO LOCATION AID (Continued)**

**S102618672**

Action Status: Oral Approval of Plan or Action  
Action Date: 4/1/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 4/1/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 4/1/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.  
Action Date: 4/11/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 5/19/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 5/30/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:  
Chemical: PCB OIL  
Quantity: 15 gallons  
Location Type: ROADWAY  
Location Type: STATE  
Source: TRANSFORM

**10  
NE  
1/2-1  
0.858 mi.  
4528 ft.**

**FORMER AIR BASE  
32 OLD DEWLINE RD  
NORTH TRURO, MA 02652**

**SHWS S107678074  
LUST N/A  
RELEASE**

**Relative:  
Higher  
Actual:  
129 ft.**

SHWS:  
Name: FORMER AIR BASE  
Address: 32 OLD DEWLINE RD  
City,State,Zip: NORTH TRURO, MA 026520000  
Facility ID: 4-0019586  
Source Type: PIPE  
Release Town: TRURO  
Notification Date: 01/26/2006  
Category: 72 HR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER AIR BASE (Continued)**

**S107678074**

Associated ID: Not reported  
Current Status: RAO  
Status Date: 03/28/2006  
Phase: Not reported  
Response Action Outcome: A2  
Oil Or Haz Material: Oil

LUST:

Facility:

Name: FORMER AIR BASE  
Address: 32 OLD DEWLINE RD  
City,State,Zip: NORTH TRURO, MA 026520000  
**Current Status: Response Action Outcome**  
Release Tracking Number/Current Status: 4-0019586 / RAO  
Status Date: 03/28/2006  
Source Type: UST  
Release Town: TRURO  
Notification Date: 01/26/2006  
Category: 72 HR  
Associated ID: Not reported  
Phase: Not reported  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil Or Haz Material: Oil  
  
Location Type: FEDERAL  
Source: PIPE  
Source: UST

[Click here to access the MA DEP site for this facility:](#)

Chemicals:

Chemical: GASOLINE  
Quantity: Not reported

Actions:

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 1/26/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FLDD1A  
Action Date: 1/26/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FLDRAN  
Action Date: 1/27/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER AIR BASE (Continued)**

**S107678074**

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 2/27/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 2/8/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 3/28/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 3/28/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: Level I - Technical Screen Audit  
Action Date: 8/11/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Release:  
Name: FORMER AIR BASE  
Address: 32 OLD DEWLINE RD  
City,State,Zip: NORTH TRURO, MA 026520000  
Release Tracking Number/Current Status: 4-0019586 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 01/26/2006  
Category: 72 HR  
Status Date: 03/28/2006  
Phase: Not reported  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil / Haz Material Type: Oil

[Click here to access the MA DEP site for this facility:](#)

Actions:  
Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 1/26/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FORMER AIR BASE (Continued)**

**S107678074**

Action Status: FLDD1A  
Action Date: 1/26/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FLDRAN  
Action Date: 1/27/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 2/27/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 2/8/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 3/28/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 3/28/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: Level I - Technical Screen Audit  
Action Date: 8/11/2006  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:  
Chemical: GASOLINE  
Quantity: Not reported  
Location Type: FEDERAL  
Source: PIPE  
Source: UST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

11  
SSE  
1/2-1  
0.887 mi.  
4684 ft.

NO LOCATION AID  
1 PERRY RD  
TRURO, MA 02666

SHWS S102087911  
LAST N/A  
RELEASE

Relative:  
Higher  
Actual:  
72 ft.

SHWS:  
Name: NO LOCATION AID  
Address: 1 PERRY RD  
City,State,Zip: TRURO, MA 02666  
Facility ID: 4-0010336  
Source Type: BASEMENT  
Release Town: TRURO  
Notification Date: 03/15/1994  
Category: TWO HR  
Associated ID: Not reported  
Current Status: RAO  
Status Date: 03/10/1995  
Phase: Not reported  
Response Action Outcome: A2  
Oil Or Haz Material: Oil

LAST:  
Name: NO LOCATION AID  
Address: 1 PERRY RD  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number/Current Status: 4-0010336 / RAO  
Source Type: AST  
Release Town: TRURO  
Notification Date: 03/15/1994  
Category: TWO HR  
Associated ID: Not reported  
Status Date: 03/10/1995  
Phase: Not reported  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil Or Haz Material: Oil

Chemicals:  
Chemical: #2 FUEL OIL  
Quantity: 200 gallons  
Location Type: RESIDENTIAL  
Source: BASEMENT  
Source: AST

Actions:  
Action Type: An activity type that is related to an Audit  
Action Status: NOA  
Action Date: 11/17/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: An activity type that is related to an Audit  
Action Status: NAFNVD  
Action Date: 2/20/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Completion Statement Received

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NO LOCATION AID (Continued)**

**S102087911**

Action Date: 3/10/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 3/10/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: Fee Received - FMCRA Use Only  
Action Date: 3/13/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 3/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 3/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 3/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 3/16/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 3/18/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 3/22/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 4/12/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NO LOCATION AID (Continued)**

**S102087911**

Action Type: Immediate Response Action  
Action Status: Written Plan Received  
Action Date: 4/12/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Written Approval of Plan  
Action Date: 4/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 4/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 5/25/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 5/25/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 5/9/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 5/9/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Written Plan Received  
Action Date: 6/14/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Release:  
Name: NO LOCATION AID  
Address: 1 PERRY RD  
City,State,Zip: TRURO, MA 02666  
Release Tracking Number/Current Status: 4-0010336 / RAO  
Primary ID: Not reported  
Official City: TRURO  
Notification: 03/15/1994

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NO LOCATION AID (Continued)**

**S102087911**

Category: TWO HR  
Status Date: 03/10/1995  
Phase: Not reported  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil / Haz Material Type: Oil

[Click here to access the MA DEP site for this facility:](#)

**Actions:**

Action Type: An activity type that is related to an Audit  
Action Status: NOA  
Action Date: 11/17/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: An activity type that is related to an Audit  
Action Status: NAFNVD  
Action Date: 2/20/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Completion Statement Received  
Action Date: 3/10/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 3/10/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: Fee Received - FMCRA Use Only  
Action Date: 3/13/1995  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 3/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 3/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 3/15/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NO LOCATION AID (Continued)**

**S102087911**

Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	3/16/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	3/18/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	3/22/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	4/12/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	4/12/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Immediate Response Action
Action Status:	Written Approval of Plan
Action Date:	4/15/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	4/15/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FOLFLD
Action Date:	5/25/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	5/25/1994
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	5/9/1994

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NO LOCATION AID (Continued)**

**S102087911**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 5/9/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Written Plan Received  
Action Date: 6/14/1994  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:  
Chemical: #2 FUEL OIL  
Quantity: 200 gallons  
Location Type: RESIDENTIAL  
Source: BASEMENT  
Source: AST

12  
NNW  
1/2-1  
0.996 mi.  
5261 ft.

**CITGO GAS STATION**  
**435 ROUTE 6**  
**TRURO, MA 02652**

**SHWS S127590317**  
**RELEASE N/A**

**Relative:**  
**Higher**  
**Actual:**  
**50 ft.**

SHWS:  
Name: CITGO GAS STATION  
Address: 435 ROUTE 6  
City,State,Zip: TRURO, MA 026520000  
Facility ID: 4-0028779  
Source Type: HOSE  
Release Town: TRURO  
Notification Date: 05/02/2021  
Category: TWO HR  
Associated ID: Not reported  
Current Status: PSNC  
Status Date: 04/26/2022  
Phase: Not reported  
Response Action Outcome: PN  
Oil Or Haz Material: Not reported

Name: CITGO GAS STATION  
Address: 435 ROUTE 6  
City,State,Zip: TRURO, MA 026520000  
Facility ID: 4-0028779  
Source Type: GAS STATIO  
Release Town: TRURO  
Notification Date: 05/02/2021  
Category: TWO HR  
Associated ID: Not reported  
Current Status: PSNC  
Status Date: 04/26/2022  
Phase: Not reported  
Response Action Outcome: PN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CITGO GAS STATION (Continued)**

**S127590317**

Oil Or Haz Material: Not reported

Release:

Name: CITGO GAS STATION  
Address: 435 ROUTE 6  
City,State,Zip: TRURO, MA 026520000  
Release Tracking Number/Current Status: 4-0028779 / PSNC  
Primary ID: Not reported  
Official City: TRURO  
Notification: 05/02/2021  
Category: TWO HR  
Status Date: 04/26/2022  
Phase: Not reported  
Response Action Outcome: PN - PN  
Oil / Haz Material Type: Not reported

[Click here to access the MA DEP site for this facility:](#)

Actions:

Action Type: Response Action Outcome - RAO  
Action Status: PSNRCD  
Action Date: 4/26/2022  
Response Action Outcome: PN

Action Type: BOL  
Action Status: Transmittal, Notice, or Notification Received  
Action Date: 5/14/2021  
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 5/17/2021  
Response Action Outcome: PN

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 5/2/2021  
Response Action Outcome: PN

Action Type: Immediate Response Action  
Action Status: Oral Approval of a Modified Plan  
Action Date: 5/7/2021  
Response Action Outcome: PN

Action Type: Immediate Response Action  
Action Status: Written Plan Received  
Action Date: 7/1/2021  
Response Action Outcome: PN

Action Type: RNFE  
Action Status: Transmittal, Notice, or Notification Received  
Action Date: 7/1/2021  
Response Action Outcome: PN

Action Type: Immediate Response Action  
Action Status: Level I - Technical Screen Audit

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CITGO GAS STATION (Continued)**

**S127590317**

Action Date: 7/21/2021  
Response Action Outcome: PN

Action Type: BOL  
Action Status: SHPFAC  
Action Date: 9/7/2021  
Response Action Outcome: PN

Chemicals:  
Chemical: Not reported  
Quantity: Not reported  
Location Type: COMMERCIAL  
Source: HOSE  
Source: GAS STATIO

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NORTH TRURO	S108962702	AIR ROUTE SURVEILLANCE RADAR SITE	OLD DEWLINE RD	02652	SHWS, RELEASE
TRURO	S103812491	NO LOCATION AID	HIGGIN HOLLOW RD	02666	SHWS, RELEASE

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### *Lists of Federal NPL (Superfund) sites*

#### NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/27/2022	Source: EPA
Date Data Arrived at EDR: 11/01/2022	Telephone: N/A
Date Made Active in Reports: 11/15/2022	Last EDR Contact: 01/03/2023
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/10/2023
	Data Release Frequency: Quarterly

#### NPL Site Boundaries

##### Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/27/2022	Source: EPA
Date Data Arrived at EDR: 11/01/2022	Telephone: N/A
Date Made Active in Reports: 11/15/2022	Last EDR Contact: 01/03/2023
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/10/2023
	Data Release Frequency: Quarterly

#### NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***Lists of Federal Delisted NPL sites***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/27/2022  
Date Data Arrived at EDR: 11/01/2022  
Date Made Active in Reports: 11/15/2022  
Number of Days to Update: 14

Source: EPA  
Telephone: N/A  
Last EDR Contact: 01/03/2023  
Next Scheduled EDR Contact: 04/10/2023  
Data Release Frequency: Quarterly

## ***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 08/25/2022  
Date Data Arrived at EDR: 09/06/2022  
Date Made Active in Reports: 12/05/2022  
Number of Days to Update: 90

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 12/21/2022  
Next Scheduled EDR Contact: 04/10/2023  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMs by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/27/2022  
Date Data Arrived at EDR: 11/01/2022  
Date Made Active in Reports: 11/15/2022  
Number of Days to Update: 14

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 01/03/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Quarterly

## ***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/27/2022	Source: EPA
Date Data Arrived at EDR: 11/01/2022	Telephone: 800-424-9346
Date Made Active in Reports: 11/15/2022	Last EDR Contact: 01/03/2023
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: Quarterly

## ***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 11/21/2022	Source: EPA
Date Data Arrived at EDR: 11/21/2022	Telephone: 800-424-9346
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 12/21/2022
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Quarterly

## ***Lists of Federal RCRA TSD facilities***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/21/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/21/2022	Telephone: (888) 372-7341
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 12/21/2022
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Quarterly

## ***Lists of Federal RCRA generators***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/21/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/21/2022	Telephone: (888) 372-7341
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 12/21/2022
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/21/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/21/2022	Telephone: (888) 372-7341
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 12/21/2022
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Quarterly

## RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/21/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/21/2022	Telephone: (888) 372-7341
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 12/21/2022
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/02/2022	Source: Department of the Navy
Date Data Arrived at EDR: 11/08/2022	Telephone: 843-820-7326
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 11/01/2022
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/20/2023
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/15/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/17/2022	Telephone: 703-603-0695
Date Made Active in Reports: 10/24/2022	Last EDR Contact: 11/16/2022
Number of Days to Update: 68	Next Scheduled EDR Contact: 03/06/2023
	Data Release Frequency: Varies

### US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/15/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/17/2022	Telephone: 703-603-0695
Date Made Active in Reports: 10/24/2022	Last EDR Contact: 11/16/2022
Number of Days to Update: 68	Next Scheduled EDR Contact: 03/06/2023
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Federal ERNS list**

### ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/12/2022	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 12/14/2022	Telephone: 202-267-2180
Date Made Active in Reports: 12/19/2022	Last EDR Contact: 12/14/2022
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Quarterly

## **Lists of state- and tribal hazardous waste facilities**

### SHWS: Site Transition List

Contains information on releases of oil and hazardous materials that have been reported to DEP.

Date of Government Version: 07/22/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/03/2022	Telephone: 617-292-5990
Date Made Active in Reports: 12/15/2022	Last EDR Contact: 01/06/2023
Number of Days to Update: 73	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Quarterly

## **Lists of state and tribal landfills and solid waste disposal facilities**

### SWF/LF: Solid Waste Facility Database/Transfer Stations

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/02/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/03/2022	Telephone: 617-292-5989
Date Made Active in Reports: 07/22/2022	Last EDR Contact: 12/29/2022
Number of Days to Update: 80	Next Scheduled EDR Contact: 04/10/2023
	Data Release Frequency: Annually

### LF PROFILES: Landfill Profiles Listing

This spreadsheet describes landfills that have actively accepted waste or have closed under MassDEP Solid Waste Regulations first adopted in 1971 (310 CMR 16.00 and 310 CMR 19.00). The list does not include landfills that closed before 1971 (and which never had a MassDEP permit or approval), or for which agency data is incomplete.

Date of Government Version: 07/01/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/27/2015	Telephone: 617-292-5868
Date Made Active in Reports: 12/14/2015	Last EDR Contact: 12/29/2022
Number of Days to Update: 48	Next Scheduled EDR Contact: 04/10/2023
	Data Release Frequency: Varies

## **Lists of state and tribal leaking storage tanks**

### LUST: Leaking Underground Storage Tank Listing

Sites within the Leaking Underground Storage Tank Listing that have a UST listed as its source.

Date of Government Version: 07/22/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/03/2022	Telephone: 617-292-5990
Date Made Active in Reports: 12/15/2022	Last EDR Contact: 01/06/2023
Number of Days to Update: 73	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LAST: Leaking Aboveground Storage Tank Sites

Sites within the Releases Database that have a AST listed as its source.

Date of Government Version: 07/22/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/03/2022	Telephone: 617-292-5500
Date Made Active in Reports: 12/15/2022	Last EDR Contact: 01/06/2023
Number of Days to Update: 73	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Quarterly

## INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/28/2022	Source: EPA Region 6
Date Data Arrived at EDR: 06/13/2022	Telephone: 214-665-6597
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2022	Source: EPA, Region 5
Date Data Arrived at EDR: 06/13/2022	Telephone: 312-886-7439
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

## INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2022	Source: EPA Region 10
Date Data Arrived at EDR: 06/13/2022	Telephone: 206-553-2857
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

## INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/13/2022	Telephone: 415-972-3372
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

## INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/20/2022	Source: EPA Region 8
Date Data Arrived at EDR: 06/13/2022	Telephone: 303-312-6271
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 06/02/2022	Source: EPA Region 4
Date Data Arrived at EDR: 06/13/2022	Telephone: 404-562-8677
Date Made Active in Reports: 08/31/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021	Source: EPA Region 1
Date Data Arrived at EDR: 06/11/2021	Telephone: 617-918-1313
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 01/17/2023
Number of Days to Update: 88	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

## INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2022	Source: EPA Region 7
Date Data Arrived at EDR: 06/13/2022	Telephone: 913-551-7003
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

### ***Lists of state and tribal registered storage tanks***

#### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021	Source: FEMA
Date Data Arrived at EDR: 11/05/2021	Telephone: 202-646-5797
Date Made Active in Reports: 02/01/2022	Last EDR Contact: 12/28/2022
Number of Days to Update: 88	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Varies

#### UST: Summary Listing of all the Tanks Registered in the State of Massachusetts

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 07/12/2022	Source: Department of Fire Services, Office of the Public Safety
Date Data Arrived at EDR: 07/14/2022	Telephone: 617-556-1035
Date Made Active in Reports: 09/27/2022	Last EDR Contact: 01/06/2023
Number of Days to Update: 75	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: Quarterly

#### AST 2: Aboveground Storage Tanks

Aboveground storage tanks

Date of Government Version: 10/06/2022	Source: Department of Fire Services
Date Data Arrived at EDR: 10/06/2022	Telephone: 978-567-3181
Date Made Active in Reports: 12/22/2022	Last EDR Contact: 01/06/2023
Number of Days to Update: 77	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: Varies

#### AST: Aboveground Storage Tank Database

Registered Aboveground Storage Tanks.

Date of Government Version: 09/21/2022	Source: Department of Public Safety
Date Data Arrived at EDR: 10/07/2022	Telephone: 617-556-1035
Date Made Active in Reports: 12/27/2022	Last EDR Contact: 01/10/2023
Number of Days to Update: 81	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: No Update Planned

#### INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/08/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/16/2022  
Number of Days to Update: 64

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/16/2022  
Number of Days to Update: 64

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/14/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/16/2022  
Number of Days to Update: 64

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/16/2022  
Number of Days to Update: 64

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/07/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/16/2022  
Number of Days to Update: 64

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/16/2022  
Number of Days to Update: 64

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/28/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/16/2022  
Number of Days to Update: 64

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 06/02/2022  
Date Data Arrived at EDR: 06/13/2022  
Date Made Active in Reports: 08/31/2022  
Number of Days to Update: 79

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 01/17/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: Varies

## ***State and tribal institutional control / engineering control registries***

### INST CONTROL: Sites With Activity and Use Limitation

Activity and Use Limitations establish limits and conditions on the future use of contaminated property, and therefore allow cleanups to be tailored to these uses.

Date of Government Version: 07/22/2022  
Date Data Arrived at EDR: 10/03/2022  
Date Made Active in Reports: 12/15/2022  
Number of Days to Update: 73

Source: Department of Environmental Protection  
Telephone: 617-292-5990  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Quarterly

## ***Lists of state and tribal voluntary cleanup sites***

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008  
Date Data Arrived at EDR: 04/22/2008  
Date Made Active in Reports: 05/19/2008  
Number of Days to Update: 27

Source: EPA, Region 7  
Telephone: 913-551-7365  
Last EDR Contact: 07/08/2021  
Next Scheduled EDR Contact: 07/20/2009  
Data Release Frequency: Varies

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015  
Date Data Arrived at EDR: 09/29/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 142

Source: EPA, Region 1  
Telephone: 617-918-1102  
Last EDR Contact: 12/13/2022  
Next Scheduled EDR Contact: 04/03/2023  
Data Release Frequency: Varies

## ***Lists of state and tribal brownfield sites***

### BROWNFIELDS: Completed Brownfields Covenants Listing

Under Massachusetts law, M.G.L. c. 21E is the statute that governs the cleanup of releases of oil and/or hazardous material to the environment. The Brownfields Act of 1998 amended M.G.L. c. 21E by establishing significant liability relief and financial incentives to spur the redevelopment of brownfields, while ensuring that the Commonwealth's environmental standards are met. Most brownfields are redeveloped with the benefit of liability protections that operate automatically under M.G.L. c. 21E.

Date of Government Version: 04/05/2017  
Date Data Arrived at EDR: 08/03/2017  
Date Made Active in Reports: 10/10/2017  
Number of Days to Update: 68

Source: Office of the Attorney General  
Telephone: 617-963-2423  
Last EDR Contact: 10/28/2022  
Next Scheduled EDR Contact: 02/06/2023  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## BROWNFIELDS 2: Potential Brownfields Listing

A listing of potential brownfields site locations in the state.

Date of Government Version: 12/03/2019  
Date Data Arrived at EDR: 01/29/2021  
Date Made Active in Reports: 04/21/2021  
Number of Days to Update: 82

Source: Department of Environmental Protection  
Telephone: 617-556-1007  
Last EDR Contact: 10/28/2022  
Next Scheduled EDR Contact: 02/06/2023  
Data Release Frequency: Varies

## ADDITIONAL ENVIRONMENTAL RECORDS

### ***Local Brownfield lists***

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022  
Date Data Arrived at EDR: 03/10/2022  
Date Made Active in Reports: 03/10/2022  
Number of Days to Update: 0

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 12/07/2022  
Next Scheduled EDR Contact: 03/27/2023  
Data Release Frequency: Semi-Annually

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

#### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 10/20/2022  
Next Scheduled EDR Contact: 02/06/2023  
Data Release Frequency: Varies

#### ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 01/13/2023  
Next Scheduled EDR Contact: 05/01/2023  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 10/28/2022
Number of Days to Update: 176	Next Scheduled EDR Contact: 02/06/2023
	Data Release Frequency: Varies

## Local Lists of Hazardous waste / Contaminated Sites

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/29/2022	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 08/18/2022	Telephone: 202-307-1000
Date Made Active in Reports: 10/24/2022	Last EDR Contact: 11/16/2022
Number of Days to Update: 67	Next Scheduled EDR Contact: 03/06/2023
	Data Release Frequency: No Update Planned

### US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/29/2022	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 08/18/2022	Telephone: 202-307-1000
Date Made Active in Reports: 10/24/2022	Last EDR Contact: 11/16/2022
Number of Days to Update: 67	Next Scheduled EDR Contact: 03/06/2023
	Data Release Frequency: Quarterly

## Local Land Records

### LIENS: Liens Information Listing

A listing of environmental liens.

Date of Government Version: 03/07/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/09/2018	Telephone: 617-292-5628
Date Made Active in Reports: 06/21/2018	Last EDR Contact: 11/08/2022
Number of Days to Update: 104	Next Scheduled EDR Contact: 02/27/2023
	Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/27/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/01/2022	Telephone: 202-564-6023
Date Made Active in Reports: 11/15/2022	Last EDR Contact: 01/03/2023
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/10/2023
	Data Release Frequency: Semi-Annually

## Records of Emergency Release Reports

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/19/2022	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/19/2022	Telephone: 202-366-4555
Date Made Active in Reports: 09/30/2022	Last EDR Contact: 12/14/2022
Number of Days to Update: 11	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Quarterly

## MA SPILLS: Historical Spill List

The Spills Database was the release notification tracking system for spills that occurred prior to October 1, 1993. This information should be considered to be primarily of historical interest since all of the listed spills have either been cleaned up or assigned new tracking numbers and moved to the Reportable Releases or Sites Transition List databases.

Date of Government Version: 09/30/1993	Source: Department of Environmental Protection
Date Data Arrived at EDR: 12/03/2003	Telephone: 617-292-5720
Date Made Active in Reports: 12/31/2003	Last EDR Contact: 12/03/2003
Number of Days to Update: 28	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## RELEASE: Reportable Releases

Contains information on all releases of oil and hazardous materials that have been reported to DEP

Date of Government Version: 07/22/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/03/2022	Telephone: 617-292-5990
Date Made Active in Reports: 12/15/2022	Last EDR Contact: 01/06/2023
Number of Days to Update: 73	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Quarterly

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/11/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/08/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 03/10/1998	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/05/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 61	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **Other Ascertainable Records**

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/21/2022  
Date Data Arrived at EDR: 11/21/2022  
Date Made Active in Reports: 12/05/2022  
Number of Days to Update: 14

Source: Environmental Protection Agency  
Telephone: (888) 372-7341  
Last EDR Contact: 12/21/2022  
Next Scheduled EDR Contact: 04/03/2023  
Data Release Frequency: Quarterly

## FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/11/2022  
Date Data Arrived at EDR: 08/11/2022  
Date Made Active in Reports: 09/30/2022  
Number of Days to Update: 50

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 11/10/2022  
Next Scheduled EDR Contact: 02/27/2023  
Data Release Frequency: Varies

## DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021  
Date Data Arrived at EDR: 07/13/2021  
Date Made Active in Reports: 03/09/2022  
Number of Days to Update: 239

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 01/13/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Varies

## FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/11/2018  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 574

Source: U.S. Geological Survey  
Telephone: 888-275-8747  
Last EDR Contact: 01/03/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: N/A

## SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017  
Date Data Arrived at EDR: 02/03/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 63

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 11/03/2022  
Next Scheduled EDR Contact: 02/20/2023  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/19/2022  
Date Data Arrived at EDR: 09/20/2022  
Date Made Active in Reports: 12/22/2022  
Number of Days to Update: 93

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 12/14/2022  
Next Scheduled EDR Contact: 04/03/2023  
Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 10/28/2022
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/16/2023
	Data Release Frequency: Quarterly

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/28/2022
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/16/2023
	Data Release Frequency: Varies

### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/17/2020	Telephone: 202-260-5521
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 12/12/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 03/27/2023
	Data Release Frequency: Every 4 Years

### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 08/14/2020	Telephone: 202-566-0250
Date Made Active in Reports: 11/04/2020	Last EDR Contact: 11/01/2022
Number of Days to Update: 82	Next Scheduled EDR Contact: 02/27/2023
	Data Release Frequency: Annually

### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/17/2022	Source: EPA
Date Data Arrived at EDR: 10/18/2022	Telephone: 202-564-4203
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 01/18/2023
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/27/2022	Source: EPA
Date Data Arrived at EDR: 11/01/2022	Telephone: 703-416-0223
Date Made Active in Reports: 11/15/2022	Last EDR Contact: 01/03/2023
Number of Days to Update: 14	Next Scheduled EDR Contact: 03/13/2023
	Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/04/2022	Telephone: 202-564-8600
Date Made Active in Reports: 05/10/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 6	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/27/2022	Source: EPA
Date Data Arrived at EDR: 11/01/2022	Telephone: 202-564-6023
Date Made Active in Reports: 11/15/2022	Last EDR Contact: 01/03/2023
Number of Days to Update: 14	Next Scheduled EDR Contact: 02/16/2023
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022	Source: EPA
Date Data Arrived at EDR: 01/20/2022	Telephone: 202-566-0500
Date Made Active in Reports: 03/25/2022	Last EDR Contact: 01/04/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 12/28/2022
Number of Days to Update: 79	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Quarterly

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

### MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/26/2022	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 11/22/2022	Telephone: 301-415-7169
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 13	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Quarterly

### COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020	Source: Department of Energy
Date Data Arrived at EDR: 11/30/2021	Telephone: 202-586-8719
Date Made Active in Reports: 02/22/2022	Last EDR Contact: 11/29/2022
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/13/2023
	Data Release Frequency: Varies

### COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 11/23/2022
Number of Days to Update: 251	Next Scheduled EDR Contact: 03/13/2023
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 11/03/2022
Number of Days to Update: 96	Next Scheduled EDR Contact: 02/13/2023
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 12/20/2022
Number of Days to Update: 84	Next Scheduled EDR Contact: 04/10/2023
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 01/28/2020	Telephone: 202-366-4595
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 10/24/2022
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/06/2023
	Data Release Frequency: Quarterly

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2022  
Date Data Arrived at EDR: 10/21/2022  
Date Made Active in Reports: 01/10/2023  
Number of Days to Update: 81

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 01/03/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019  
Date Data Arrived at EDR: 03/02/2022  
Date Made Active in Reports: 03/25/2022  
Number of Days to Update: 23

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 12/21/2022  
Next Scheduled EDR Contact: 04/03/2023  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021  
Date Data Arrived at EDR: 07/27/2021  
Date Made Active in Reports: 10/22/2021  
Number of Days to Update: 87

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 10/27/2022  
Next Scheduled EDR Contact: 02/16/2023  
Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019  
Date Data Arrived at EDR: 11/15/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 74

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 11/09/2022  
Next Scheduled EDR Contact: 02/27/2023  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/27/2022  
Date Data Arrived at EDR: 11/01/2022  
Date Made Active in Reports: 11/15/2022  
Number of Days to Update: 14

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 01/03/2023  
Next Scheduled EDR Contact: 04/10/2023  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 11/29/2022  
Date Data Arrived at EDR: 11/30/2022  
Date Made Active in Reports: 12/22/2022  
Number of Days to Update: 22

Source: DOL, Mine Safety & Health Admi  
Telephone: 202-693-9424  
Last EDR Contact: 01/03/2023  
Next Scheduled EDR Contact: 03/13/2023  
Data Release Frequency: Quarterly

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/03/2022  
Date Data Arrived at EDR: 08/17/2022  
Date Made Active in Reports: 08/31/2022  
Number of Days to Update: 14

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/17/2022  
Next Scheduled EDR Contact: 03/06/2023  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020  
Date Data Arrived at EDR: 05/27/2020  
Date Made Active in Reports: 08/13/2020  
Number of Days to Update: 78

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/21/2022  
Next Scheduled EDR Contact: 03/06/2023  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 11/21/2022
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/06/2023
	Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/13/2022	Source: Department of Interior
Date Data Arrived at EDR: 09/14/2022	Telephone: 202-208-2609
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 12/13/2022
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/20/2023
	Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/03/2022	Source: EPA
Date Data Arrived at EDR: 08/25/2022	Telephone: (617) 918-1111
Date Made Active in Reports: 10/24/2022	Last EDR Contact: 11/29/2022
Number of Days to Update: 60	Next Scheduled EDR Contact: 03/13/2023
	Data Release Frequency: Quarterly

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/25/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/30/2022	Telephone: 202-564-2280
Date Made Active in Reports: 12/22/2022	Last EDR Contact: 01/04/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 202-564-0527
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 11/15/2022
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/06/2023
	Data Release Frequency: Varies

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/09/2021  
Date Data Arrived at EDR: 10/20/2022  
Date Made Active in Reports: 01/10/2023  
Number of Days to Update: 82

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 01/09/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Varies

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/11/2022  
Date Data Arrived at EDR: 08/11/2022  
Date Made Active in Reports: 09/30/2022  
Number of Days to Update: 50

Source: EPA  
Telephone: 800-385-6164  
Last EDR Contact: 11/10/2022  
Next Scheduled EDR Contact: 02/27/2023  
Data Release Frequency: Quarterly

## PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 02/23/2022  
Date Data Arrived at EDR: 07/08/2022  
Date Made Active in Reports: 11/08/2022  
Number of Days to Update: 123

Source: Environmental Protection Agency  
Telephone: 703-603-8895  
Last EDR Contact: 01/10/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Varies

## PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 02/23/2022  
Date Data Arrived at EDR: 03/31/2022  
Date Made Active in Reports: 11/08/2022  
Number of Days to Update: 222

Source: Environmental Protection Agency  
Telephone: 202-272-0167  
Last EDR Contact: 01/05/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Varies

## PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 01/03/2022  
Date Data Arrived at EDR: 03/31/2022  
Date Made Active in Reports: 11/08/2022  
Number of Days to Update: 222

Source: Environmental Protection Agency  
Telephone: 202-272-0167  
Last EDR Contact: 01/05/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Varies

## PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST\_HANDLING\_INSTR), Non-hazardous waste description (NON\_HAZ\_WASTE\_DESCRIPTION), DOT printed information (DOT\_PRINTED\_INFORMATION), Waste line handling instructions (WASTE\_LINE\_HANDLING\_INSTR), Waste residue comments (WASTE\_RESIDUE\_COMMENTS).

Date of Government Version: 01/03/2022  
Date Data Arrived at EDR: 03/31/2022  
Date Made Active in Reports: 11/08/2022  
Number of Days to Update: 222

Source: Environmental Protection Agency  
Telephone: 202-272-0167  
Last EDR Contact: 01/05/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020	Source: Department of Health & Human Services
Date Data Arrived at EDR: 03/17/2021	Telephone: 202-741-5770
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 10/28/2022
Number of Days to Update: 601	Next Scheduled EDR Contact: 02/06/2023
	Data Release Frequency: Varies

## PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 01/03/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 01/05/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Varies

## PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 01/03/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 01/05/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Varies

## PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 01/03/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 01/05/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Varies

## PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facility's name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 08/22/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 01/05/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration's document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 08/22/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/26/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 01/05/2023
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Varies

## AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 02/23/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 01/05/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 04/17/2023
	Data Release Frequency: Varies

## PFAS: PFAS Contaminated Sites Listing

Detection of Per- and Polyfluoroalkyl Substances (PFAS) in drinking water.

Date of Government Version: 06/24/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 06/28/2022	Telephone: 617-292-6770
Date Made Active in Reports: 09/12/2022	Last EDR Contact: 12/12/2022
Number of Days to Update: 76	Next Scheduled EDR Contact: 04/10/2023
	Data Release Frequency: Varies

## AIRS: Permitted Facilities Listing

A listing of Air Quality permit applications.

Date of Government Version: 10/06/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/06/2022	Telephone: 617-292-5789
Date Made Active in Reports: 12/22/2022	Last EDR Contact: 01/06/2023
Number of Days to Update: 77	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: Varies

## ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 08/23/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 08/24/2022	Telephone: 617-292-5982
Date Made Active in Reports: 09/06/2022	Last EDR Contact: 11/08/2022
Number of Days to Update: 13	Next Scheduled EDR Contact: 02/27/2023
	Data Release Frequency: Varies

## DRYCLEANERS: Regulated Drycleaning Facilities

A listing of Department of Environmental Protection regulated drycleaning facilities that use perchloroethylene under the Environmental Results Program.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/07/2022  
Date Data Arrived at EDR: 12/13/2022  
Date Made Active in Reports: 01/12/2023  
Number of Days to Update: 30

Source: Department of Environmental Protection  
Telephone: 617-292-5633  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Varies

## ENFORCEMENT: Enforcement Action Cases

A listing of enforcement action cases tracked by Department of Environmental Protection programs, including Solid Waste and Hazardous Waste.

Date of Government Version: 01/09/2023  
Date Data Arrived at EDR: 01/10/2023  
Date Made Active in Reports: 01/12/2023  
Number of Days to Update: 2

Source: Department of Environmental Quality  
Telephone: 617-292-5979  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/01/2010  
Date Data Arrived at EDR: 12/23/2010  
Date Made Active in Reports: 02/03/2011  
Number of Days to Update: 42

Source: Department of Environmental Protection  
Telephone: 617-292-5970  
Last EDR Contact: 11/30/2022  
Next Scheduled EDR Contact: 03/20/2023  
Data Release Frequency: Varies

## Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tanks. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 07/12/2022  
Date Data Arrived at EDR: 07/14/2022  
Date Made Active in Reports: 09/27/2022  
Number of Days to Update: 75

Source: Office of State Fire Marshal  
Telephone: 978-567-3100  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Varies

## Financial Assurance 3: Financial Assurance Information listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 01/16/2018  
Date Data Arrived at EDR: 04/17/2018  
Date Made Active in Reports: 06/15/2018  
Number of Days to Update: 59

Source: Department of Environmental Protection  
Telephone: 617-292-5970  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Varies

## GWDP: Ground Water Discharge Permits

The Ground Water Discharge Permits datalayer (formerly known as Groundwater Discharge Points) is a statewide point dataset containing approximate locations of permitted discharges to groundwater.

Date of Government Version: 12/29/2021  
Date Data Arrived at EDR: 01/25/2022  
Date Made Active in Reports: 04/18/2022  
Number of Days to Update: 83

Source: MassGIS  
Telephone: 617-556-1150  
Last EDR Contact: 10/28/2022  
Next Scheduled EDR Contact: 02/06/2023  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HW GEN: List of Massachusetts Hazardous Waste Generators

Permanent generator identification numbers for all Massachusetts generators of hazardous waste and waste oil that have registered with or notified MassDEP of their hazardous waste activities.

Date of Government Version: 09/15/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/20/2022	Telephone: 617-292-5500
Date Made Active in Reports: 12/07/2022	Last EDR Contact: 12/14/2022
Number of Days to Update: 78	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Semi-Annually

## MERCURY: Mercury Product Recycling Drop-Off Locations Listing

A listing of locations, collecting and recycling for mercury-added products. Mercury is toxic to the human nervous system, as well as fish and animals. Mercury can enter the body either through skin absorption or through inhalation of mercury vapors. At room temperature, small beads of mercury will vaporize.

Date of Government Version: 09/26/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/26/2022	Telephone: 617-292-5632
Date Made Active in Reports: 12/09/2022	Last EDR Contact: 11/23/2022
Number of Days to Update: 74	Next Scheduled EDR Contact: 02/27/2023
	Data Release Frequency: Varies

## NPDES: NPDES Permit Listing

Listing of treatment plants in Massachusetts that hold permits to discharge to groundwater.

Date of Government Version: 01/07/2020	Source: Department of Environmental Protection
Date Data Arrived at EDR: 02/11/2020	Telephone: 508-767-2781
Date Made Active in Reports: 04/21/2020	Last EDR Contact: 11/10/2022
Number of Days to Update: 70	Next Scheduled EDR Contact: 02/20/2023
	Data Release Frequency: Varies

## TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report

Date of Government Version: 12/31/2019	Source: Massachusetts Emergency Management Agency
Date Data Arrived at EDR: 07/19/2021	Telephone: 508-820-2019
Date Made Active in Reports: 08/17/2021	Last EDR Contact: 01/06/2023
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: Annually

## TSD: TSD Facility

List of Licensed Hazardous Waste Treatment, Storage Disposal Facilities (TSDFs) in Massachusetts.

Date of Government Version: 09/15/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/20/2022	Telephone: 617-292-5580
Date Made Active in Reports: 12/07/2022	Last EDR Contact: 12/14/2022
Number of Days to Update: 78	Next Scheduled EDR Contact: 04/03/2023
	Data Release Frequency: Varies

## UIC: Underground Injection Control Listing

A list of UIC registration data and their locations

Date of Government Version: 03/10/2022	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/15/2022	Telephone: 617-566-1172
Date Made Active in Reports: 06/10/2022	Last EDR Contact: 11/01/2022
Number of Days to Update: 87	Next Scheduled EDR Contact: 02/20/2023
	Data Release Frequency: Varies

## PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/14/2011  
Date Data Arrived at EDR: 08/05/2011  
Date Made Active in Reports: 09/29/2011  
Number of Days to Update: 55

Source: EPA, Office of Water  
Telephone: 202-564-2496  
Last EDR Contact: 12/28/2022  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Semi-Annually

## PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014  
Date Data Arrived at EDR: 01/06/2015  
Date Made Active in Reports: 05/06/2015  
Number of Days to Update: 120

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 12/28/2022  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Semi-Annually

## MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 04/06/2018  
Date Data Arrived at EDR: 10/21/2019  
Date Made Active in Reports: 10/24/2019  
Number of Days to Update: 3

Source: USGS  
Telephone: 703-648-6533  
Last EDR Contact: 11/22/2022  
Next Scheduled EDR Contact: 03/06/2023  
Data Release Frequency: Varies

## PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 02/05/2015  
Date Made Active in Reports: 03/06/2015  
Number of Days to Update: 29

Source: EPA  
Telephone: 202-564-2497  
Last EDR Contact: 12/28/2022  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Varies

## **EDR HIGH RISK HISTORICAL RECORDS**

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

#### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/08/2022  
Date Data Arrived at EDR: 08/08/2022  
Date Made Active in Reports: 10/21/2022  
Number of Days to Update: 74

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 11/16/2022  
Next Scheduled EDR Contact: 02/20/2023  
Data Release Frequency: No Update Planned

## NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 04/10/2019  
Date Made Active in Reports: 05/16/2019  
Number of Days to Update: 36

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 12/28/2022  
Next Scheduled EDR Contact: 04/17/2023  
Data Release Frequency: Annually

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019  
Date Data Arrived at EDR: 10/29/2021  
Date Made Active in Reports: 01/19/2022  
Number of Days to Update: 82

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 10/28/2022  
Next Scheduled EDR Contact: 02/06/2023  
Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018  
Date Data Arrived at EDR: 07/19/2019  
Date Made Active in Reports: 09/10/2019  
Number of Days to Update: 53

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020  
Date Data Arrived at EDR: 11/30/2021  
Date Made Active in Reports: 02/18/2022  
Number of Days to Update: 80

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 12/20/2022  
Next Scheduled EDR Contact: 02/27/2023  
Data Release Frequency: Annually

## VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 10/28/2019  
Date Data Arrived at EDR: 10/29/2019  
Date Made Active in Reports: 01/09/2020  
Number of Days to Update: 72

Source: Department of Environmental Conservation  
Telephone: 802-241-3443  
Last EDR Contact: 01/06/2023  
Next Scheduled EDR Contact: 04/24/2023  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018  
Date Data Arrived at EDR: 06/19/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 76

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 12/01/2022  
Next Scheduled EDR Contact: 03/20/2023  
Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

### Electric Power Transmission Line Data

Source: Endeavor Business Media

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: MassDEP

Telephone: 617-292-5907

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

## STREET AND ADDRESS INFORMATION

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

SAND PIT ROAD  
2 SAND PIT RD  
NORTH TRURO, MA 02652

### **TARGET PROPERTY COORDINATES**

Latitude (North):	42.023493 - 42° 1' 24.57"
Longitude (West):	70.079727 - 70° 4' 47.02"
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	410609.4
UTM Y (Meters):	4652735.0
Elevation:	46 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	11721272 NORTH TRURO, MA
Version Date:	2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

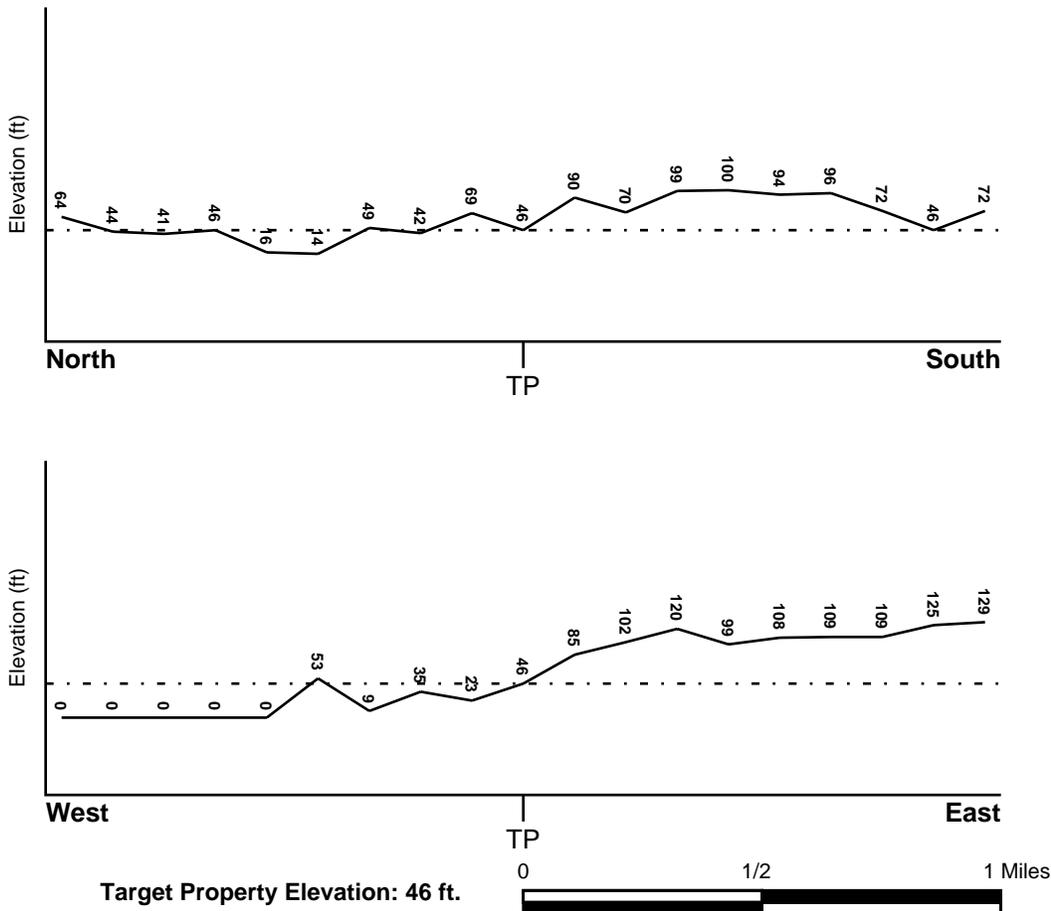
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
25001C0139J	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
25001C0136J	FEMA FIRM Flood data
25001C0137J	FEMA FIRM Flood data
25001C0138J	FEMA FIRM Flood data
25001C0143J	FEMA FIRM Flood data

**NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u> NORTH TRURO	<u>NWI Electronic Data Coverage</u> YES - refer to the Overview Map and Detail Map
---	---

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

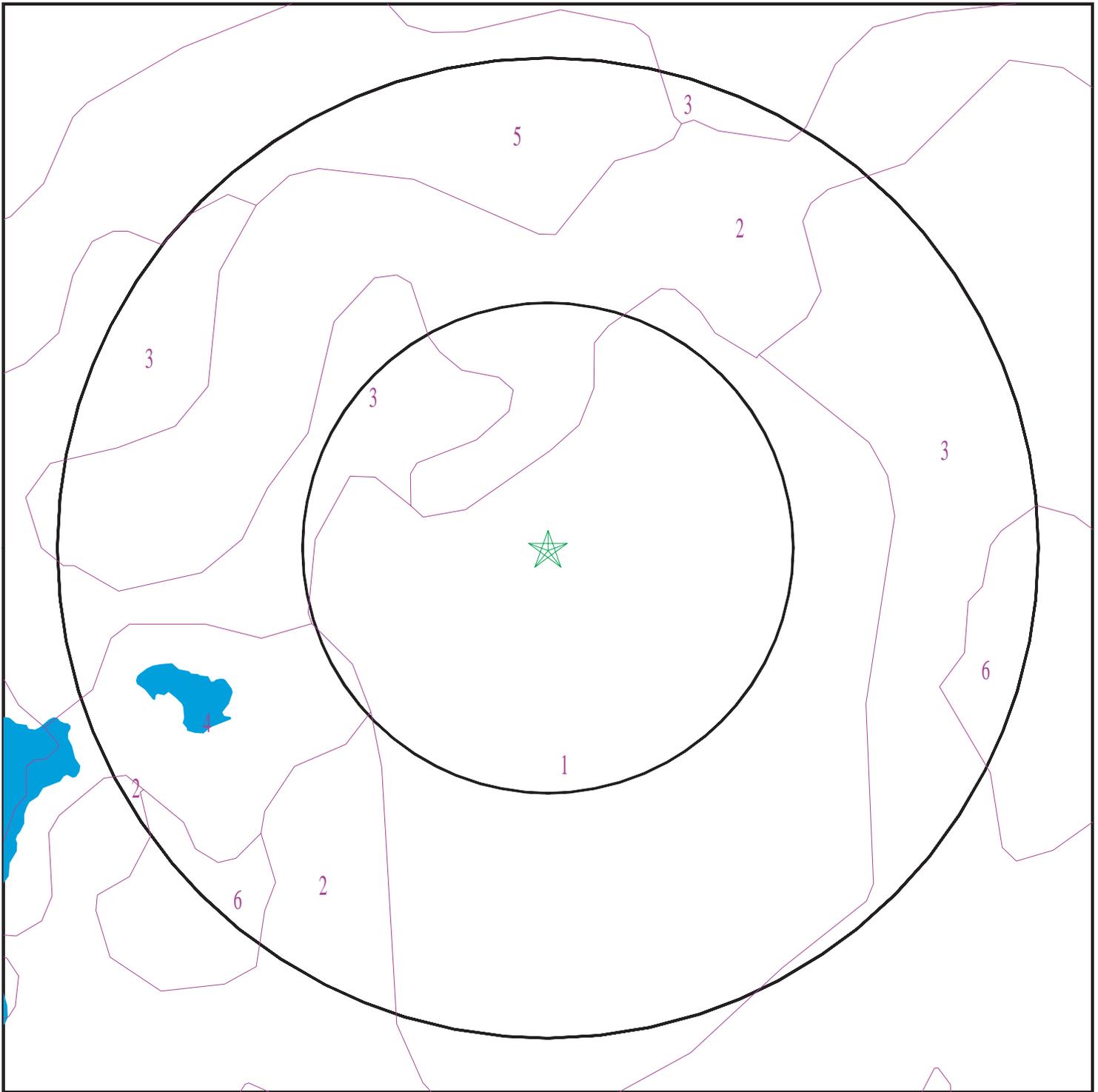
Era: Cenozoic  
System: Quaternary  
Series: Pleistocene  
Code: Qp (*decoded above as Era, System & Series*)

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 7228749.1s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Sand Pit Road  
ADDRESS: 2 Sand Pit Rd  
North Truro MA 02652  
LAT/LONG: 42.023493 / 70.079727

CLIENT: Horsley Witten Group, Inc.  
CONTACT: Caroline Armstrong  
INQUIRY #: 7228749.1s  
DATE: January 19, 2023 10:32 am

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

---

#### Soil Map ID: 1

Soil Component Name: Pits

Soil Surface Texture:  
Hydrologic Group: Not reported

Soil Drainage Class:  
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

---

#### Soil Map ID: 2

Soil Component Name: Carver

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
2	7 inches	16 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
3	16 inches	64 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6

### Soil Map ID: 3

Soil Component Name: Carver

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
2	7 inches	16 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
3	16 inches	64 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 4

Soil Component Name: Freetown

Soil Surface Texture: muck

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	muck	Not reported	Not reported	Max: 42.34 Min: 4.23	Max: Min:
2	5 inches	64 inches	muck	Not reported	Not reported	Max: 42.34 Min: 4.23	Max: Min:

### Soil Map ID: 5

Soil Component Name: Carver

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
2	7 inches	16 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
3	16 inches	64 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6

### Soil Map ID: 6

Soil Component Name: Carver

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
2	7 inches	16 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6
3	16 inches	64 inches	coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 5.5 Min: 3.6

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS40000464026	0 - 1/8 Mile WNW
A2	USGS40000464014	0 - 1/8 Mile WSW
A3	USGS40000464032	0 - 1/8 Mile WNW
9	USGS40000464083	1/4 - 1/2 Mile North
10	USGS40000464082	1/4 - 1/2 Mile NNE
11	USGS40000464005	1/4 - 1/2 Mile ESE
12	USGS40000464122	1/4 - 1/2 Mile NNE
13	USGS40000464123	1/4 - 1/2 Mile NNW
14	USGS40000463934	1/4 - 1/2 Mile South
C15	USGS40000464124	1/4 - 1/2 Mile NNE
16	USGS40000463942	1/4 - 1/2 Mile SSW
C17	USGS40000464130	1/4 - 1/2 Mile NNE
C18	USGS40000464129	1/4 - 1/2 Mile NNE
19	USGS40000464162	1/4 - 1/2 Mile North
D21	USGS40000464128	1/2 - 1 Mile NE
D22	USGS40000464138	1/2 - 1 Mile NNE
23	USGS40000464114	1/2 - 1 Mile NW
D24	USGS40000464139	1/2 - 1 Mile NE
D25	USGS40000464140	1/2 - 1 Mile NE
E26	USGS40000463918	1/2 - 1 Mile SSE
27	USGS40000464151	1/2 - 1 Mile NE
28	USGS40000463975	1/2 - 1 Mile ESE
30	USGS40000464208	1/2 - 1 Mile NNW
31	USGS40000464202	1/2 - 1 Mile NNW
32	USGS40000463863	1/2 - 1 Mile South
33	USGS40000464163	1/2 - 1 Mile NW
34	USGS40000464235	1/2 - 1 Mile NNW
36	USGS40000464216	1/2 - 1 Mile NNW
37	USGS40000463981	1/2 - 1 Mile ESE
F38	USGS40000464022	1/2 - 1 Mile East
G39	USGS40000464269	1/2 - 1 Mile North
G40	USGS40000464270	1/2 - 1 Mile North
42	USGS40000464170	1/2 - 1 Mile NW
44	USGS40000463837	1/2 - 1 Mile South
45	USGS40000464215	1/2 - 1 Mile NE
48	USGS40000463868	1/2 - 1 Mile SE

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
49	USGS40000464319	1/2 - 1 Mile North
51	USGS40000463806	1/2 - 1 Mile South

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

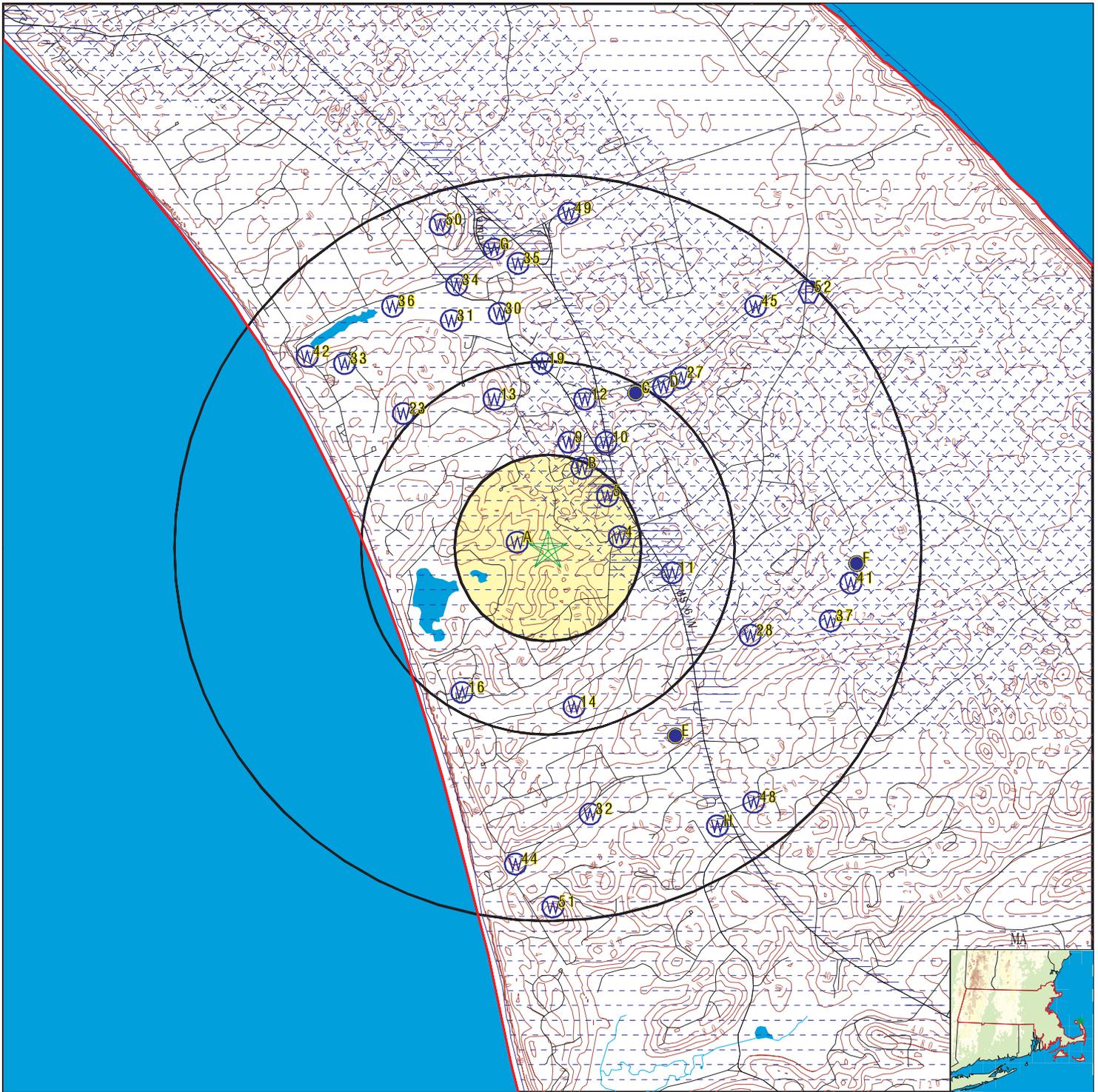
MAP ID	WELL ID	LOCATION FROM TP
52	MA4300001	1/2 - 1 Mile NE

Note: PWS System location is not always the same as well location.

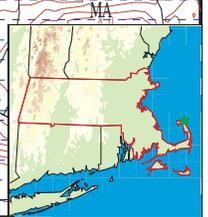
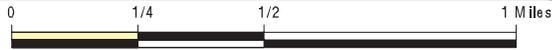
## STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
4	MA9000000001704	1/8 - 1/4 Mile East
5	MA9000000000202	1/8 - 1/4 Mile NE
B6	MA9000000002077	1/8 - 1/4 Mile NNE
B7	MA9000000000884	1/8 - 1/4 Mile NNE
B8	MA9000000001085	1/8 - 1/4 Mile NNE
C20	MA9000000001814	1/4 - 1/2 Mile NNE
E29	MA9000000003145	1/2 - 1 Mile SE
35	MA9000000002839	1/2 - 1 Mile North
41	MA9000000002567	1/2 - 1 Mile East
F43	MA9000000002566	1/2 - 1 Mile East
H46	MA9000000001955	1/2 - 1 Mile SSE
H47	MA9000000003627	1/2 - 1 Mile SSE
50	MA9000000001405	1/2 - 1 Mile NNW

# PHYSICAL SETTING SOURCE MAP - 7228749.1s



- |  |  |                                     |
|--|--|-------------------------------------|
| County Boundary                            | Groundwater Flow Direction                 | Potentially Productive Aquifers     |
| Major Roads                                | Indeterminate Groundwater Flow at Location | Not Potentially Productive Aquifers |
| Contour Lines                              | Groundwater Flow Varies at Location        | DEP Approved Zone IIs               |
| Earthquake epicenter, Richter 5 or greater |  | EPA Designated Sole Src. Aq.        |
| Water Wells                                |  |                                     |
| Public Water Supply Wells                  |  |                                     |
| Cluster of Multiple Icons                  |  |                                     |



SITE NAME: Sand Pit Road  
 ADDRESS: 2 Sand Pit Rd  
 North Truro MA 02652  
 LAT/LONG: 42.023493 / 70.079727

CLIENT: Horsley Witten Group, Inc.  
 CONTACT: Caroline Armstrong  
 INQUIRY #: 7228749.1s  
 DATE: January 19, 2023 10:32 am

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A1**  
**WNW**  
**0 - 1/8 Mile**  
**Lower**

**FED USGS      USGS40000464026**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 189	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19661024	Well Depth:	55
Well Depth Units:	ft	Well Hole Depth:	60
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1966-10-24
Feet below surface:	18.50	Feet to sea level:	Not Reported
Note:	Not Reported		

**A2**  
**WSW**  
**0 - 1/8 Mile**  
**Lower**

**FED USGS      USGS40000464014**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 188	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19661020	Well Depth:	44
Well Depth Units:	ft	Well Hole Depth:	59
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1966-10-20
Feet below surface:	9.80	Feet to sea level:	Not Reported
Note:	Not Reported		

**A3**  
**WNW**  
**0 - 1/8 Mile**  
**Lower**

**FED USGS      USGS40000464032**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 157	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19661026	Well Depth:	50

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well Depth Units:	ft	Well Hole Depth:	60
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:	48	Level reading date:	1977-04-11
Feet below surface:	0.63	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1976-12-06	Feet below surface:	1.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-29	Feet below surface:	1.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-04	Feet below surface:	1.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-31	Feet below surface:	1.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-03	Feet below surface:	1.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-02	Feet below surface:	1.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-24	Feet below surface:	0.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-28	Feet below surface:	0.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-05	Feet below surface:	0.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-01	Feet below surface:	0.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-29	Feet below surface:	0.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-12-29	Feet below surface:	0.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-26	Feet below surface:	0.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	1.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-19	Feet below surface:	1.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-22	Feet below surface:	1.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-06-25	Feet below surface:	0.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-19	Feet below surface:	0.65
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-04-24	Feet below surface:	0.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-03-24	Feet below surface:	0.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-19	Feet below surface:	0.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-17	Feet below surface:	0.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-12-17	Feet below surface:	0.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-23	Feet below surface:	1.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-22	Feet below surface:	1.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-09-16	Feet below surface:	1.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-14	Feet below surface:	1.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-10	Feet below surface:	0.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	0.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	0.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-18	Feet below surface:	0.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-19	Feet below surface:	0.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-28	Feet below surface:	0.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	0.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	0.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	0.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	0.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	0.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	0.53
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-06-13	Feet below surface:	0.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	0.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	0.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	0.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	0.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	0.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	0.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-31	Feet below surface:	0.33
Feet to sea level:	Not Reported	Note:	Not Reported

**4  
East  
1/8 - 1/4 Mile  
Higher**

**MA WELLS    MA9000000001704**

PWS ID:	4300020	Site Name:	PILGRIM SPRING MOTEL
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	CAPE COD		
Basemap:	NA	Accuracy Estimate (ft):	100
Feature Type:	GW	Location Method:	GP_6
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		
Source ID:	4300020-01G	PWS Name:	PILGRIM SPRING MOTEL
Source Name:	WELL # 1	PWS Status:	I
Source Status:	I	PWS Class:	NC
Source Availability:	INACT		

**5  
NE  
1/8 - 1/4 Mile  
Higher**

**MA WELLS    MA9000000000202**

PWS ID:	4300004	Site Name:	CAPE VIEW MOTEL
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	CAPE COD		
Basemap:	NA	Accuracy Estimate (ft):	100
Feature Type:	GW	Location Method:	GP_6
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Source ID:	4300004-01G	PWS Name:	CAPE VIEW MOTEL
Source Name:	WELL 1	PWS Status:	A
Source Status:	A	PWS Class:	NC
Source Availability:	ACTIVE		

**B6  
NNE  
1/8 - 1/4 Mile  
Lower**

**MA WELLS    MA9000000002077**

PWS ID:	4300040	Site Name:	STONES THROW CONDOS
Type:	Non-Transient Non-Community	SubBasin:	CAPE COD
Facility Name:	Not Reported		

Basemap:	DOQ	Accuracy Estimate (ft):	16
Feature Type:	GW	Location Method:	GP_2
Primary Location Source:	SV	Secondary Location Source:	AP_DOQ
Tertiary Location Source:	Not Reported		

Source ID:	4300040-03G	PWS Name:	STONES THROW CONDOS
Source Name:	REPLACEMENT WELL #2	PWS Status:	A
Source Status:	A	PWS Class:	NTNC
Source Availability:	ACTIVE		

**B7  
NNE  
1/8 - 1/4 Mile  
Higher**

**MA WELLS    MA9000000000884**

PWS ID:	4300040	Site Name:	STONES THROW CONDOS
Type:	Non-Transient Non-Community	SubBasin:	CAPE COD
Facility Name:	Not Reported		

Basemap:	DVB	Accuracy Estimate (ft):	500
Feature Type:	GW	Location Method:	OTH
Primary Location Source:	KNOW	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		

Source ID:	4300040-02G	PWS Name:	STONES THROW CONDOS
Source Name:	WELL #2	PWS Status:	A
Source Status:	A	PWS Class:	NTNC
Source Availability:	ACTIVE		

**B8  
NNE  
1/8 - 1/4 Mile  
Higher**

**MA WELLS    MA9000000001085**

PWS ID:	4300040	Site Name:	STONES THROW CONDOS
Type:	Non-Transient Non-Community	SubBasin:	CAPE COD
Facility Name:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Basemap:	NA	Accuracy Estimate (ft):	16
Feature Type:	GW	Location Method:	GP_2
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		

Source ID:	4300040-01G	PWS Name:	STONES THROW CONDOS
Source Name:	WELL #1	PWS Status:	A
Source Status:	I	PWS Class:	NTNC
Source Availability:	INACT		

**9**  
**North**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS      USGS40000464083**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 156	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720519	Well Depth:	9.2
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	5	Level reading date:	1973-10-18
Feet below surface:	2.47	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1973-05-14	Feet below surface:	1.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	2.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	1.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-19	Feet below surface:	1.81
Feet to sea level:	Not Reported	Note:	Not Reported

**10**  
**NNE**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000464082**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 239	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19790330	Well Depth:	130

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well Depth Units:	ft	Well Hole Depth:	150
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:		1	Level reading date:
Feet below surface:	45.50		1979-03-30
Note:	Not Reported	Feet to sea level:	Not Reported

**11**  
**ESE**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000464005**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 288	Type:	Well
Description:	CCC OBS WELL P2	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	20011212
Well Depth:	129.5	Well Depth Units:	ft
Well Hole Depth:	129.5	Well Hole Depth Units:	ft

**12**  
**NNE**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS      USGS40000464122**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 155	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720526	Well Depth:	14.1
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	7	Level reading date:	1975-05-21
Feet below surface:	10.50	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1974-09-04	Feet below surface:	11.21
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-10-18	Feet below surface:	10.63
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-05-14	Feet below surface:	9.60
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-11-11	Feet below surface:	10.24
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1972-06-05	Feet below surface:	10.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-26	Feet below surface:	10.03
Feet to sea level:	Not Reported	Note:	Not Reported

**13  
NNW  
1/4 - 1/2 Mile  
Lower**

**FED USGS      USGS40000464123**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 145	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720531	Well Depth:	12.2
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	26	Level reading date:	2000-12-19
Feet below surface:	1.70	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2000-11-29	Feet below surface:	1.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-09-25	Feet below surface:	1.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-08-30	Feet below surface:	1.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-31	Feet below surface:	1.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-28	Feet below surface:	1.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-26	Feet below surface:	1.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-26	Feet below surface:	0.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-29	Feet below surface:	1.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-09	Feet below surface:	1.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-01-24	Feet below surface:	2.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-22	Feet below surface:	2.07
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1999-11-23	Feet below surface:	2.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-21	Feet below surface:	2.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-09-23	Feet below surface:	2.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-08-24	Feet below surface:	2.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-07-21	Feet below surface:	2.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-06-21	Feet below surface:	1.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-05-21	Feet below surface:	1.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-04-13	Feet below surface:	1.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-03-25	Feet below surface:	1.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-18	Feet below surface:	1.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-14	Feet below surface:	0.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-11	Feet below surface:	1.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	1.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-31	Feet below surface:	1.21
Feet to sea level:	Not Reported	Note:	Not Reported

**14  
South  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS40000463934**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 160	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	197205	Well Depth:	104
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:                      1                      Level reading date:                      1972-05-15



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well Hole Depth Units:	Not Reported		
Ground water levels,Number of Measurements:	45	Level reading date:	1977-04-11
Feet below surface:	11.05	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1977-03-01	Feet below surface:	11.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-06	Feet below surface:	9.93
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer had been pumped recently.
Level reading date:	1976-10-29	Feet below surface:	16.30
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.
Level reading date:	1976-10-04	Feet below surface:	12.28
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.
Level reading date:	1976-08-31	Feet below surface:	12.75
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.
Level reading date:	1976-08-03	Feet below surface:	12.83
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.
Level reading date:	1976-07-02	Feet below surface:	10.65
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer had been pumped recently.
Level reading date:	1976-05-24	Feet below surface:	10.70
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.
Level reading date:	1976-04-28	Feet below surface:	10.69
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.
Level reading date:	1976-04-05	Feet below surface:	8.86
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer had been pumped recently.
Level reading date:	1976-03-01	Feet below surface:	8.93
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer had been pumped recently.
Level reading date:	1976-01-29	Feet below surface:	8.96
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer had been pumped recently.
Level reading date:	1975-12-29	Feet below surface:	11.00
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.
Level reading date:	1975-11-26	Feet below surface:	11.38
Feet to sea level:	Not Reported	Note:	A nearby site that taps the same aquifer was being pumped.

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-10-22	Feet below surface:	11.59
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-09-29	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-08-19	Feet below surface:	11.82
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-07-22	Feet below surface:	11.94
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-06-25	Feet below surface:	12.47
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-05-19	Feet below surface:	10.78
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-04-24	Feet below surface:	9.65
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-03-24	Feet below surface:	9.37
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1975-02-19	Feet below surface:	10.96
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-01-17	Feet below surface:	11.09
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-12-17	Feet below surface:	10.82
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-11-23	Feet below surface:	11.32
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-10-22	Feet below surface:	9.75
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-09-16	Feet below surface:	11.78
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-08-14	Feet below surface:	12.28
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-07-10	Feet below surface:	11.59
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-05-15	Feet below surface:	10.39
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-04-08	Feet below surface:	10.44
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-03-13	Feet below surface:	8.76
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-02-19	Feet below surface:	8.68
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-01-28	Feet below surface:	10.34
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-01-02	Feet below surface:	10.49
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-11-20	Feet below surface:	10.95
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-10-18	Feet below surface:	12.22
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-05-14	Feet below surface:	9.75
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1972-11-11	Feet below surface:	9.48
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1972-06-07	Feet below surface:	10.45
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1972-06-06	Feet below surface:	8.98
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1972-06-05	Feet below surface:	9.12
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1972-05-31	Feet below surface:	8.91
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**C18**  
**NNE**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS      USGS40000464129**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 78	Type:	Well: Multiple wells
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	195310
Well Depth:	60.6	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1953-10-01
Feet below surface:	21.70	Feet to sea level:	Not Reported
Note:	Not Reported		

**19**  
**North**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS      USGS40000464162**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 146	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720518	Well Depth:	8.9
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	23	Level reading date:	1975-05-21
Feet below surface:	5.02	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1974-08-13	Feet below surface:	5.90
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-07-10	Feet below surface:	5.23
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-05-15	Feet below surface:	4.74
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-04-07	Feet below surface:	4.73
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-03-13	Feet below surface:	4.56
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-02-21	Feet below surface:	4.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-30	Feet below surface:	4.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	4.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	5.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	5.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	5.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	5.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	4.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	4.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	4.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-14	Feet below surface:	4.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	3.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	4.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	4.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-11	Feet below surface:	4.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	4.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-18	Feet below surface:	4.54
Feet to sea level:	Not Reported	Note:	Not Reported

**C20**  
**NNE**  
**1/4 - 1/2 Mile**  
**Lower**

**MA WELLS MA9000000001814**

PWS ID:	4242000	Site Name:	PAUL D. DALEY WELLFIELD
Type:	Community Groundwater Well	SubBasin:	CAPE COD
Facility Name:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Basemap:	DOQ	Accuracy Estimate (ft):	100
Feature Type:	PH	Location Method:	PHO
Primary Location Source:	AP_DOQ	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		

Source ID:	4242000-03G	PWS Name:	PROVINCETOWN WATER DEPARTMENT
Source Name:	PAUL D. DALEY WELLFIELD	PWS Status:	A
Source Status:	A	PWS Class:	COM
Source Availability:	ACTIVE		

Well Name:	PAUL D. DALEY WELLFIELD	Purveyor:	PROVINCETOWN WATER DEPARTMENT
Basin:	CAPE COD	Region:	4

**D21**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS USGS40000464128**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 271	Type:	Well
Description:	SO HOLLOW ZOT MONITOR WELL NEAR PSW SH-5		
HUC:	01090002	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Units:	Not Reported		
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	19990101
Well Depth:	153	Well Depth Units:	ft
Well Hole Depth:	153	Well Hole Depth Units:	ft

**D22**  
**NNE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS USGS40000464138**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 87	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19521218	Well Depth:	50.6
Well Depth Units:	ft	Well Hole Depth:	65.6
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	402	Level reading date:	1978-03-02
Feet below surface:	12.93	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1977-04-01	Feet below surface:	13.66
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1977-02-23	Feet below surface:	13.39
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1977-01-26	Feet below surface:	12.98
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1976-12-27	Feet below surface:	12.98
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1976-11-29	Feet below surface:	12.94
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1976-10-28	Feet below surface:	12.98
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1976-09-28	Feet below surface:	14.37
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1976-09-15	Feet below surface:	14.51
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1976-08-26	Feet below surface:	15.11
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1976-07-27	Feet below surface:	14.84
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1976-06-28	Feet below surface:	14.20
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1976-05-25	Feet below surface:	13.42
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1976-04-26	Feet below surface:	12.21
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1976-03-24	Feet below surface:	12.73
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1976-02-25	Feet below surface:	12.62
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1976-02-04	Feet below surface:	12.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1976-01-29	Feet below surface:	12.02
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1975-12-30	Feet below surface:	13.16
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-12-15	Feet below surface:	13.33
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1975-11-24	Feet below surface:	13.59
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-10-28	Feet below surface:	13.41
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-09-25	Feet below surface:	14.77
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1975-08-26	Feet below surface:	15.02
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1975-07-23	Feet below surface:	14.37
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1975-06-25	Feet below surface:	14.06
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1975-05-28	Feet below surface:	13.46
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-04-29	Feet below surface:	12.67
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1975-03-26	Feet below surface:	12.37
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1975-02-25	Feet below surface:	12.81
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1975-01-29	Feet below surface:	13.36
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-12-27	Feet below surface:	13.90
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-11-26	Feet below surface:	13.45
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-10-29	Feet below surface:	12.83
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1974-09-26	Feet below surface:	13.73
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-08-28	Feet below surface:	14.72
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-08-14	Feet below surface:	14.62
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-07-30	Feet below surface:	14.43
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1974-07-10	Feet below surface:	13.10
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-06-26	Feet below surface:	13.25
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-05-29	Feet below surface:	13.17
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-05-15	Feet below surface:	12.77
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-04-24	Feet below surface:	12.04
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-04-08	Feet below surface:	12.87
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-03-28	Feet below surface:	11.83
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-03-13	Feet below surface:	11.82
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-02-26	Feet below surface:	11.74
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1974-02-19	Feet below surface:	11.79
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1974-01-29	Feet below surface:	12.87
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-01-28	Feet below surface:	12.85
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1974-01-02	Feet below surface:	13.03
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-12-20	Feet below surface:	12.54
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-11-28	Feet below surface:	13.33
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-11-20	Feet below surface:	13.46
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-10-29	Feet below surface:	13.48
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-10-17	Feet below surface:	13.25
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-09-27	Feet below surface:	13.45
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-09-12	Feet below surface:	13.71
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-08-28	Feet below surface:	14.22
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-08-14	Feet below surface:	14.24
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-07-27	Feet below surface:	13.95
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-07-17	Feet below surface:	13.78
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1973-06-27	Feet below surface:	13.14
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-06-13	Feet below surface:	13.12
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-05-25	Feet below surface:	12.64
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-05-15	Feet below surface:	12.44
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-04-26	Feet below surface:	12.28
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-04-13	Feet below surface:	12.07
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-03-27	Feet below surface:	12.44
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-03-14	Feet below surface:	12.49
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-02-26	Feet below surface:	12.08
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-02-08	Feet below surface:	12.11
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1973-01-26	Feet below surface:	11.98
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-12-27	Feet below surface:	12.21
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-11-27	Feet below surface:	12.52
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-11-10	Feet below surface:	12.63
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-10-26	Feet below surface:	12.29
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-09-27	Feet below surface:	12.39
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-08-29	Feet below surface:	13.85
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-07-27	Feet below surface:	13.85
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-06-27	Feet below surface:	12.78
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-06-07	Feet below surface:	12.68
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-06-06	Feet below surface:	12.22
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-06-05	Feet below surface:	12.34
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-06-01	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-05-25	Feet below surface:	12.95
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-04-26	Feet below surface:	12.76
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-04-07	Feet below surface:	12.83
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-03-28	Feet below surface:	12.65
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-02-25	Feet below surface:	12.48
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1972-01-27	Feet below surface:	12.51
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-12-27	Feet below surface:	12.47
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-11-26	Feet below surface:	13.53
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-10-27	Feet below surface:	13.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-09-27	Feet below surface:	14.61
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1971-08-26	Feet below surface:	14.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-07-28	Feet below surface:	14.48
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-06-25	Feet below surface:	13.24
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-05-24	Feet below surface:	13.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-04-27	Feet below surface:	12.56
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-03-26	Feet below surface:	12.87
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-02-24	Feet below surface:	12.31
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1971-01-27	Feet below surface:	12.86
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-12-28	Feet below surface:	12.66
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-11-24	Feet below surface:	13.02
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-10-28	Feet below surface:	13.05
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-09-28	Feet below surface:	13.18
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-08-27	Feet below surface:	14.22
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-07-29	Feet below surface:	14.41
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-06-26	Feet below surface:	13.57
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-05-20	Feet below surface:	12.60
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-04-24	Feet below surface:	11.43
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-03-25	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-02-24	Feet below surface:	11.84
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1970-01-26	Feet below surface:	12.28
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-12-30	Feet below surface:	12.35
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-11-25	Feet below surface:	13.02
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-10-29	Feet below surface:	13.56
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-09-26	Feet below surface:	14.18
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-08-27	Feet below surface:	14.74
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-07-29	Feet below surface:	14.28
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-06-27	Feet below surface:	13.76
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-05-26	Feet below surface:	12.79
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-04-28	Feet below surface:	12.34
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-03-27	Feet below surface:	12.14
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1969-02-26	Feet below surface:	12.25
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1969-01-27	Feet below surface:	13.19
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-12-26	Feet below surface:	13.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-11-25	Feet below surface:	13.43
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-10-29	Feet below surface:	13.91
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-09-25	Feet below surface:	14.03
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-08-27	Feet below surface:	14.97
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-07-26	Feet below surface:	14.68
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-06-26	Feet below surface:	13.75
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-05-27	Feet below surface:	13.28
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-04-22	Feet below surface:	12.73
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-03-27	Feet below surface:	12.46
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-02-27	Feet below surface:	12.69
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1968-01-29	Feet below surface:	12.34
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-12-26	Feet below surface:	13.27
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-11-27	Feet below surface:	13.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-10-26	Feet below surface:	13.20
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-09-27	Feet below surface:	13.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-08-23	Feet below surface:	13.64
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-08-22	Feet below surface:	13.55
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-08-08	Feet below surface:	12.55
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-07-26	Feet below surface:	12.61
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-06-27	Feet below surface:	12.03
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-05-24	Feet below surface:	12.58
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-04-25	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-03-29	Feet below surface:	12.43
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-02-28	Feet below surface:	12.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1967-01-27	Feet below surface:	12.38
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-12-21	Feet below surface:	12.88
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-11-28	Feet below surface:	12.43
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-11-26	Feet below surface:	12.53
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-10-25	Feet below surface:	13.74
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1966-09-27	Feet below surface:	13.99
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-08-25	Feet below surface:	14.56
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-07-22	Feet below surface:	14.95
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-06-23	Feet below surface:	14.37
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-05-29	Feet below surface:	14.36
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-04-25	Feet below surface:	13.72
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-03-21	Feet below surface:	13.46
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-02-28	Feet below surface:	12.87
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1966-01-31	Feet below surface:	13.53
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-12-20	Feet below surface:	12.99
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-11-23	Feet below surface:	13.11
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-10-27	Feet below surface:	14.17
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-09-28	Feet below surface:	14.51
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-08-26	Feet below surface:	15.38
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-07-28	Feet below surface:	15.22
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-06-28	Feet below surface:	14.79
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-05-28	Feet below surface:	13.72
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-04-27	Feet below surface:	13.46
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-03-29	Feet below surface:	12.55
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-02-28	Feet below surface:	13.26
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1965-01-29	Feet below surface:	13.32
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-12-29	Feet below surface:	13.34
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-11-24	Feet below surface:	13.63
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-10-27	Feet below surface:	13.77
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-09-28	Feet below surface:	14.29
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-09-01	Feet below surface:	14.46
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-07-29	Feet below surface:	14.32
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-06-30	Feet below surface:	12.88
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-05-27	Feet below surface:	13.51
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-04-28	Feet below surface:	12.64
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-03-30	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1964-02-28	Feet below surface:	12.69
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1964-01-31	Feet below surface:	13.05
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-12-30	Feet below surface:	12.28
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-12-02	Feet below surface:	12.35
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-10-25	Feet below surface:	13.66
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-09-30	Feet below surface:	13.64
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-08-29	Feet below surface:	14.45
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-07-31	Feet below surface:	14.26
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-06-28	Feet below surface:	14.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-05-29	Feet below surface:	13.29
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-04-30	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-04-01	Feet below surface:	12.12
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-02-28	Feet below surface:	12.35
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1963-01-31	Feet below surface:	11.62
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-12-28	Feet below surface:	11.69
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-11-29	Feet below surface:	12.48
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-10-30	Feet below surface:	13.09
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-09-26	Feet below surface:	13.13
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-06-28	Feet below surface:	13.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-05-26	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-04-25	Feet below surface:	11.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-03-30	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-02-26	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-02-02	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1962-01-01	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-12-01	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-11-01	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-10-01	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-09-01	Feet below surface:	13.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-07-31	Feet below surface:	14.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-06-26	Feet below surface:	13.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1961-06-02	Feet below surface:	11.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-04-01	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-03-27	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-02-27	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-01-30	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1961-01-09	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-11-28	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-10-31	Feet below surface:	13.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-09-26	Feet below surface:	14.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-08-29	Feet below surface:	14.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-07-29	Feet below surface:	14.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-06-27	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-05-30	Feet below surface:	11.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-04-30	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-03-26	Feet below surface:	11.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-02-27	Feet below surface:	11.80
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1960-01-30	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-12-31	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-11-28	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-10-31	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-09-26	Feet below surface:	13.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-08-29	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-07-25	Feet below surface:	13.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-06-27	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-05-30	Feet below surface:	13.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-04-25	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-03-28	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-02-28	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1959-01-31	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-12-31	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-11-29	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1958-10-25	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-09-27	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-08-30	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-07-26	Feet below surface:	13.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-06-28	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-05-31	Feet below surface:	11.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-04-26	Feet below surface:	11.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-03-29	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-02-22	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1958-01-25	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-12-28	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-11-09	Feet below surface:	13.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-11-02	Feet below surface:	13.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-10-26	Feet below surface:	13.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-10-19	Feet below surface:	13.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-10-12	Feet below surface:	13.20
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-10-05	Feet below surface:	13.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-09-28	Feet below surface:	13.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-09-21	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-09-14	Feet below surface:	13.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-09-07	Feet below surface:	13.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-08-31	Feet below surface:	14.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-08-24	Feet below surface:	14.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-08-17	Feet below surface:	14.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-08-10	Feet below surface:	14.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-08-03	Feet below surface:	14.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-07-27	Feet below surface:	14.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-07-20	Feet below surface:	15.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-07-13	Feet below surface:	14.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-07-06	Feet below surface:	14.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-06-29	Feet below surface:	14.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1957-06-22	Feet below surface:	13.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-06-15	Feet below surface:	14.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-06-08	Feet below surface:	13.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-06-01	Feet below surface:	12.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-05-25	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-05-18	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-05-11	Feet below surface:	12.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-05-04	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-04-27	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-04-20	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-03-30	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-03-23	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-03-16	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-03-09	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-03-02	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-02-23	Feet below surface:	12.50
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-02-16	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-02-09	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-02-02	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-01-26	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-01-19	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-01-12	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1957-01-05	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-12-29	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-12-22	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-12-15	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-12-07	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-12-01	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-11-10	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-11-03	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-10-27	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-10-20	Feet below surface:	12.20

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-10-13	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-10-06	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-09-29	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-09-22	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-09-15	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-09-08	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-09-01	Feet below surface:	12.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-08-25	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-08-18	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-08-11	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-07-28	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-07-21	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-07-14	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-07-07	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-06-30	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1956-06-23	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-06-16	Feet below surface:	11.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-06-09	Feet below surface:	11.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-06-02	Feet below surface:	11.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-05-26	Feet below surface:	11.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-05-19	Feet below surface:	11.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-05-12	Feet below surface:	11.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-05-05	Feet below surface:	11.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-04-28	Feet below surface:	11.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-04-21	Feet below surface:	11.11
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-04-14	Feet below surface:	11.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-04-07	Feet below surface:	11.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-03-31	Feet below surface:	11.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-03-26	Feet below surface:	11.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-02-18	Feet below surface:	11.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-02-11	Feet below surface:	11.50
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-02-04	Feet below surface:	11.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-01-28	Feet below surface:	11.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1956-01-05	Feet below surface:	12.33
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer had been pumped recently.		
Level reading date:	1955-12-31	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-12-24	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-12-17	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-12-10	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-12-03	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-11-17	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-11-12	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-11-05	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-10-29	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-10-22	Feet below surface:	12.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-10-15	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-10-08	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1955-10-01	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-09-24	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-09-17	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-09-10	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-09-03	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-08-27	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-08-20	Feet below surface:	13.40
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-08-13	Feet below surface:	13.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-08-06	Feet below surface:	13.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-07-30	Feet below surface:	13.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-07-23	Feet below surface:	14.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-07-16	Feet below surface:	13.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-07-09	Feet below surface:	12.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-07-02	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-06-25	Feet below surface:	12.60
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-06-18	Feet below surface:	12.50
Feet to sea level:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-06-11	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-06-04	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-05-28	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-05-21	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-05-14	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-05-07	Feet below surface:	11.80
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-04-30	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-04-23	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-04-16	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-04-09	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-04-02	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-03-26	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-03-19	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-03-12	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-03-05	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1955-02-26	Feet below surface:	12.00
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-02-19	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-02-12	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-02-05	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-01-29	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-01-22	Feet below surface:	11.90
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-01-15	Feet below surface:	12.10
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-01-08	Feet below surface:	12.20
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1955-01-01	Feet below surface:	12.30
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1954-12-25	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1954-12-18	Feet below surface:	12.50
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1954-12-11	Feet below surface:	12.70
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

23  
NW  
1/2 - 1 Mile  
Lower

FED USGS

USGS40000464114

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 143	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Construction Date:	19720517	Well Depth:	14.2
Well Depth Units:	ft	Well Hole Depth:	14.2
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:	23	Level reading date:	1975-05-21
Feet below surface:	5.93	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1974-09-04	Feet below surface:	6.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-13	Feet below surface:	6.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-10	Feet below surface:	6.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	5.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	5.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	5.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-21	Feet below surface:	5.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-30	Feet below surface:	5.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	5.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	6.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	6.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	6.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	6.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	5.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	5.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	5.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	5.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	5.78
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-02-08	Feet below surface:	5.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	5.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	5.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-17	Feet below surface:	5.66
Feet to sea level:	Not Reported	Note:	Not Reported

**D24**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464139**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 192	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19521218	Well Depth:	69.8
Well Depth Units:	ft	Well Hole Depth:	85
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1952-12-18
Feet below surface:	28.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**D25**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464140**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 233	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19521024	Well Depth:	62
Well Depth Units:	ft	Well Hole Depth:	82
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1952-10-24
Feet below surface:	26.10	Feet to sea level:	Not Reported
Note:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**E26**  
**SSE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000463918**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 163	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720519	Well Depth:	19.7
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels, Number of Measurements:	23	Level reading date:	1975-05-21
Feet below surface:	16.29	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1974-09-04	Feet below surface:	16.53
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-08-14	Feet below surface:	16.53
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-07-10	Feet below surface:	16.22
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-05-15	Feet below surface:	15.86
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-04-07	Feet below surface:	15.83
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-03-13	Feet below surface:	15.74
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-02-19	Feet below surface:	15.66
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-01-28	Feet below surface:	15.77
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-01-02	Feet below surface:	15.91
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-11-20	Feet below surface:	16.33
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-10-17	Feet below surface:	16.28
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-09-12	Feet below surface:	16.14
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-08-14	Feet below surface:	16.15
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-07-17	Feet below surface:	15.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	15.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	15.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	15.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	15.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	15.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	16.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	15.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-19	Feet below surface:	15.96
Feet to sea level:	Not Reported	Note:	Not Reported

**27**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464151**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 272	Type:	Well
Description:	SO HOLLOW WELL FIELD ZOT MONITOR WELL SH8-3		
HUC:	01090002	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Units:	Not Reported		
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	19990101
Well Depth:	205	Well Depth Units:	ft
Well Hole Depth:	205	Well Hole Depth Units:	ft

**28**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000463975**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 45	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	195002

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well Depth:	120	Well Depth Units:	ft
Well Hole Depth:	120	Well Hole Depth Units:	ft
Ground water levels,Number of Measurements:		1	Level reading date:
Feet below surface:	65.50		1950-02-01
Note:	Not Reported	Feet to sea level:	Not Reported

**E29  
SE  
1/2 - 1 Mile  
Lower**

**MA WELLS      MA9000000003145**

PWS ID:	4300019	Site Name:	WHITMAN HOUSE RESTAURANT
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	CAPE COD		
Basemap:	NA	Accuracy Estimate (ft):	100
Feature Type:	GW	Location Method:	GP_6
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		
Source ID:	4300019-01G	PWS Name:	WHITMAN HOUSE RESTAURANT
Source Name:	WELL 1	PWS Status:	A
Source Status:	A	PWS Class:	NC
Source Availability:	ACTIVE		

**30  
NNW  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000464208**

Organization ID:	USGS-MA	Type:	Well
Organization Name:	USGS Massachusetts Water Science Center	HUC:	01090002
Monitor Location:	MA-TSW 147	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	Sand and gravel aquifers (glaciated regions)	Aquifer Type:	Not Reported
Formation Type:	Not Reported	Well Depth:	14.4
Construction Date:	19720518	Well Hole Depth:	Not Reported
Well Depth Units:	ft		
Well Hole Depth Units:	Not Reported		
Ground water levels,Number of Measurements:	5	Level reading date:	1973-10-18
Feet below surface:	1.20	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1973-05-14	Feet below surface:	0.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-11	Feet below surface:	0.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	0.50
Feet to sea level:	Not Reported	Note:	Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1972-05-18	Feet below surface:	0.63
Feet to sea level:	Not Reported	Note:	Not Reported

**31**  
**NNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464202**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 158	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720504	Well Depth:	14.3
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	6	Level reading date:	1975-05-21
Feet below surface:	8.83	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1973-10-18	Feet below surface:	8.97
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-05-14	Feet below surface:	8.02
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-11-10	Feet below surface:	8.46
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-06-05	Feet below surface:	8.67
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-05-04	Feet below surface:	8.64
Feet to sea level:	Not Reported	Note:	Not Reported

**32**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000463863**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 162	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720519	Well Depth:	20.1
Well Depth Units:	ft	Well Hole Depth:	20.1
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	48	Level reading date:	1977-04-11
Feet below surface:	12.37	Feet to sea level:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Not Reported		
Level reading date:	1977-03-01	Feet below surface:	12.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-06	Feet below surface:	12.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-29	Feet below surface:	12.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-04	Feet below surface:	12.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-31	Feet below surface:	12.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-03	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-02	Feet below surface:	12.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-24	Feet below surface:	11.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-28	Feet below surface:	11.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-05	Feet below surface:	12.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-01	Feet below surface:	12.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-29	Feet below surface:	12.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-26	Feet below surface:	12.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-10-22	Feet below surface:	12.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-19	Feet below surface:	12.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-22	Feet below surface:	12.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-06-25	Feet below surface:	12.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-19	Feet below surface:	12.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-24	Feet below surface:	12.01
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-03-24	Feet below surface:	12.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-19	Feet below surface:	12.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-17	Feet below surface:	12.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-12-17	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-23	Feet below surface:	12.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-22	Feet below surface:	12.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-09-16	Feet below surface:	12.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-14	Feet below surface:	12.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-10	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	11.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	11.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	11.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-19	Feet below surface:	11.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-28	Feet below surface:	11.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	11.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	12.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	12.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	12.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	11.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-05-15	Feet below surface:	11.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	11.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	11.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	11.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	11.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-31	Feet below surface:	11.92
Feet to sea level:	Not Reported	Note:	Not Reported

**33  
NW  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS40000464163**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 142	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1971	Well Depth:	64.3
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	50	Level reading date:	1977-04-11
Feet below surface:	54.63	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1977-03-01	Feet below surface:	54.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-29	Feet below surface:	55.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-04	Feet below surface:	55.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-31	Feet below surface:	55.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-03	Feet below surface:	55.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-02	Feet below surface:	54.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-24	Feet below surface:	54.59
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1976-04-28	Feet below surface:	54.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-05	Feet below surface:	54.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-01	Feet below surface:	54.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-29	Feet below surface:	54.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-12-29	Feet below surface:	54.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-26	Feet below surface:	54.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-10-22	Feet below surface:	54.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	55.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-19	Feet below surface:	54.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-22	Feet below surface:	54.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-06-25	Feet below surface:	54.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-19	Feet below surface:	54.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-24	Feet below surface:	54.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-03-24	Feet below surface:	54.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-19	Feet below surface:	54.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-17	Feet below surface:	54.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-12-17	Feet below surface:	54.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-23	Feet below surface:	54.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-22	Feet below surface:	55.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-09-16	Feet below surface:	54.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-13	Feet below surface:	55.20
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-07-10	Feet below surface:	54.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	54.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	54.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	54.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-21	Feet below surface:	54.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-30	Feet below surface:	54.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	54.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	54.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	54.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	54.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	54.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	54.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	54.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	54.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-14	Feet below surface:	54.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	54.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	54.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	54.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	54.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	54.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-02	Feet below surface:	54.47
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**34**  
**NNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464235**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 148	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720518	Well Depth:	9
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	6	Level reading date:	1975-05-21
Feet below surface:	3.95	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1973-10-18	Feet below surface:	4.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-14	Feet below surface:	3.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	3.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	3.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-18	Feet below surface:	3.43
Feet to sea level:	Not Reported	Note:	Not Reported

**35**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**MA WELLS      MA9000000002839**

PWS ID:	4300042	Site Name:	MAMARAZZI RESTAURANT
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	CAPE COD		
Basemap:	NA	Accuracy Estimate (ft):	16
Feature Type:	GW	Location Method:	GP_2
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		
Source ID:	4300042-01G	PWS Name:	MAMARAZZI RESTAURANT
Source Name:	WELL #1 MAMARAZZI RESTAURANT		
PWS Status:	I	Source Status:	I
PWS Class:	NC	Source Availability:	ACTIVE

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**36**  
**NNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464216**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 144	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720518	Well Depth:	8.9
Well Depth Units:	ft	Well Hole Depth:	8.9
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	7	Level reading date:	1975-05-21
Feet below surface:	2.03	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1974-09-04	Feet below surface:	2.65
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-10-18	Feet below surface:	1.34
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-05-14	Feet below surface:	1.73
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-11-10	Feet below surface:	1.94
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-06-05	Feet below surface:	1.94
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-05-18	Feet below surface:	1.77
Feet to sea level:	Not Reported	Note:	Not Reported

**37**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000463981**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 74	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	19510316
Well Depth:	158	Well Depth Units:	ft
Well Hole Depth:	160	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1973-05-14
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## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet below surface:	102.43	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1972-11-10	Feet below surface:	101.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	102.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-03-16	Feet below surface:	101.00
Feet to sea level:	Not Reported	Note:	Not Reported

**F38  
East  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS40000464022**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 285	Type:	Well
Description:	CCC OBS WELL P3	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	20020110
Well Depth:	162	Well Depth Units:	ft
Well Hole Depth:	170	Well Hole Depth Units:	ft

**G39  
North  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000464269**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 89 TRURO, MA	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Outwash		
Aquifer Type:		Aquifer Type:	Unconfined single aquifer
Construction Date:	19570924	Well Depth:	21.7
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels, Number of Measurements:	565	Level reading date:	2005-02-24
Feet below surface:	11.62	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2004-12	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-11-23	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-10-21	Feet below surface:	12.41
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	2004-09-30	Feet below surface:	12.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-08-24	Feet below surface:	12.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-07-27	Feet below surface:	12.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-06-21	Feet below surface:	12.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-05-20	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-04-28	Feet below surface:	11.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-03-24	Feet below surface:	12.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-02-25	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-12-23	Feet below surface:	11.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-11-19	Feet below surface:	12.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-10-21	Feet below surface:	12.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-09-30	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-26	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-07-22	Feet below surface:	11.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-24	Feet below surface:	11.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-22	Feet below surface:	10.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-25	Feet below surface:	10.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-03-25	Feet below surface:	11.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-02-27	Feet below surface:	11.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-01-29	Feet below surface:	11.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-12-19	Feet below surface:	11.89
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	2002-11-21	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-10-22	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-09-26	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-08-22	Feet below surface:	12.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-07-25	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-20	Feet below surface:	12.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-05-21	Feet below surface:	12.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-04-23	Feet below surface:	12.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-21	Feet below surface:	12.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-02-19	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-01-24	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-12-20	Feet below surface:	12.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-11-21	Feet below surface:	12.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-22	Feet below surface:	12.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-02	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-08-22	Feet below surface:	12.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-07-23	Feet below surface:	12.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-06-21	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-05-29	Feet below surface:	11.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-23	Feet below surface:	11.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-03-28	Feet below surface:	11.75
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	2001-02-27	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-12-21	Feet below surface:	12.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-11-28	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-24	Feet below surface:	12.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-09-28	Feet below surface:	12.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-08-24	Feet below surface:	12.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-21	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-23	Feet below surface:	11.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-25	Feet below surface:	11.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-25	Feet below surface:	11.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-23	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-02-23	Feet below surface:	12.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-01-24	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-21	Feet below surface:	12.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-11-23	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-21	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-09-24	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-08-24	Feet below surface:	12.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-07-21	Feet below surface:	12.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-06-21	Feet below surface:	12.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-05-20	Feet below surface:	12.01
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1999-04-27	Feet below surface:	11.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-03-25	Feet below surface:	11.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-02-23	Feet below surface:	12.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-01-21	Feet below surface:	12.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-12-21	Feet below surface:	12.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-11-24	Feet below surface:	12.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-10-21	Feet below surface:	12.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-09-25	Feet below surface:	12.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-08-25	Feet below surface:	11.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-07-29	Feet below surface:	11.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-06-25	Feet below surface:	11.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-05-20	Feet below surface:	11.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-04-22	Feet below surface:	10.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-24	Feet below surface:	10.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-02-26	Feet below surface:	11.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-01-21	Feet below surface:	11.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-12-19	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-11-20	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-10-29	Feet below surface:	12.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-09-25	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-26	Feet below surface:	12.18
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1997-07-29	Feet below surface:	11.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-20	Feet below surface:	11.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-23	Feet below surface:	11.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-04-29	Feet below surface:	10.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-03-20	Feet below surface:	11.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-02-26	Feet below surface:	11.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-01-21	Feet below surface:	11.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-12-23	Feet below surface:	10.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-11-21	Feet below surface:	10.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-10-23	Feet below surface:	11.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-09-24	Feet below surface:	11.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-08-22	Feet below surface:	12.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-07-24	Feet below surface:	12.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-06-26	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-05-24	Feet below surface:	11.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-04-25	Feet below surface:	11.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-03-27	Feet below surface:	11.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-02-23	Feet below surface:	11.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-01-23	Feet below surface:	11.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-12-28	Feet below surface:	11.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-11-21	Feet below surface:	12.12
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1995-10-20	Feet below surface:	12.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-09-20	Feet below surface:	12.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-08-25	Feet below surface:	12.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-07-20	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-06-23	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-05-24	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-04-24	Feet below surface:	11.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-03-23	Feet below surface:	12.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-02-23	Feet below surface:	12.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-01-20	Feet below surface:	12.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-12-20	Feet below surface:	12.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-11-23	Feet below surface:	12.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-10-25	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-09-21	Feet below surface:	12.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-08-24	Feet below surface:	12.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-07-20	Feet below surface:	11.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-06-22	Feet below surface:	11.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-05-20	Feet below surface:	11.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-04-20	Feet below surface:	11.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-03-24	Feet below surface:	10.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-02-22	Feet below surface:	11.69
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1994-01-21	Feet below surface:	11.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-12-20	Feet below surface:	11.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-11-29	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-10-24	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-09-23	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-08-26	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-07-21	Feet below surface:	11.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-06-23	Feet below surface:	11.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-05-24	Feet below surface:	11.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-04-21	Feet below surface:	10.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-03-27	Feet below surface:	11.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-02-24	Feet below surface:	11.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-01-21	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-12-28	Feet below surface:	12.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-11-24	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-10-22	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-09-23	Feet below surface:	12.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-08-25	Feet below surface:	12.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-07-22	Feet below surface:	12.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-06-23	Feet below surface:	11.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-05-21	Feet below surface:	12.09
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1992-04-22	Feet below surface:	11.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-03-20	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-20	Feet below surface:	11.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-01-22	Feet below surface:	11.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-12-20	Feet below surface:	12.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-11-20	Feet below surface:	12.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-10-22	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-09-25	Feet below surface:	12.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-08-27	Feet below surface:	12.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-07-25	Feet below surface:	12.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-06-21	Feet below surface:	12.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-05-21	Feet below surface:	11.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-25	Feet below surface:	11.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-03-27	Feet below surface:	11.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-26	Feet below surface:	12.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-01-28	Feet below surface:	12.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-12-26	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-28	Feet below surface:	12.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-25	Feet below surface:	12.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-20	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-08-29	Feet below surface:	12.48
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1990-07-25	Feet below surface:	12.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-06-22	Feet below surface:	12.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-05-24	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-04-24	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-03-26	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-02-21	Feet below surface:	12.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-01-23	Feet below surface:	12.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-12-27	Feet below surface:	12.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-11-27	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-10-26	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-08-22	Feet below surface:	12.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-07-24	Feet below surface:	12.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-06-27	Feet below surface:	12.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-05-24	Feet below surface:	11.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-04-25	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-03-23	Feet below surface:	12.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-02-22	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-01-25	Feet below surface:	12.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-12-21	Feet below surface:	12.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-11-23	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-10-27	Feet below surface:	12.47
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1988-09-22	Feet below surface:	12.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-08-26	Feet below surface:	12.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-07-21	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-06-22	Feet below surface:	12.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-05-26	Feet below surface:	11.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-04-26	Feet below surface:	11.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-03-24	Feet below surface:	11.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-02-22	Feet below surface:	11.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-01-25	Feet below surface:	12.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-12-23	Feet below surface:	11.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-11-24	Feet below surface:	12.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-10-23	Feet below surface:	12.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-09-24	Feet below surface:	11.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-08-25	Feet below surface:	12.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-07-21	Feet below surface:	11.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-06-24	Feet below surface:	11.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-05-20	Feet below surface:	10.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-04-23	Feet below surface:	10.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-03-25	Feet below surface:	11.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-01-28	Feet below surface:	11.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-12-24	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1986-11-25	Feet below surface:	12.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-10-22	Feet below surface:	12.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-09-23	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-08-20	Feet below surface:	12.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-07-28	Feet below surface:	12.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-06-24	Feet below surface:	12.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-05-21	Feet below surface:	11.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-04-25	Feet below surface:	11.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-03-24	Feet below surface:	11.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-02-24	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-01-28	Feet below surface:	12.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-12-20	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-11-22	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-10-23	Feet below surface:	12.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-09-25	Feet below surface:	11.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-08-22	Feet below surface:	12.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-07-23	Feet below surface:	12.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-06-24	Feet below surface:	12.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-05-20	Feet below surface:	12.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-04-23	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-03-21	Feet below surface:	12.32
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1985-02-22	Feet below surface:	12.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-01-24	Feet below surface:	12.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-12-19	Feet below surface:	12.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-11-27	Feet below surface:	12.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-10-26	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-09-25	Feet below surface:	12.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-08-21	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-07-25	Feet below surface:	11.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-07-03	Feet below surface:	11.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-22	Feet below surface:	11.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-04-25	Feet below surface:	10.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-26	Feet below surface:	11.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-27	Feet below surface:	11.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-25	Feet below surface:	12.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-27	Feet below surface:	11.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-22	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-25	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-26	Feet below surface:	12.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-25	Feet below surface:	12.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-25	Feet below surface:	11.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-22	Feet below surface:	11.27
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1983-05-26	Feet below surface:	10.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-25	Feet below surface:	10.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-03-23	Feet below surface:	10.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-23	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-01-26	Feet below surface:	12.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-22	Feet below surface:	12.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-23	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-25	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-09-23	Feet below surface:	12.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-08-27	Feet below surface:	12.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-07-26	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-06-25	Feet below surface:	11.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-26	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-26	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-03-23	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-02-23	Feet below surface:	11.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-25	Feet below surface:	12.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-12-29	Feet below surface:	11.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-11-21	Feet below surface:	12.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-27	Feet below surface:	12.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-09-25	Feet below surface:	12.59
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1981-08-26	Feet below surface:	12.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-07-28	Feet below surface:	12.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-06-25	Feet below surface:	12.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-26	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-04-22	Feet below surface:	11.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-03-24	Feet below surface:	11.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-03-18	Feet below surface:	11.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-02-24	Feet below surface:	12.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-02-04	Feet below surface:	12.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-01-26	Feet below surface:	12.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-12-21	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-12-17	Feet below surface:	12.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-23	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-13	Feet below surface:	12.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-27	Feet below surface:	12.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-08	Feet below surface:	12.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-24	Feet below surface:	12.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-10	Feet below surface:	12.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-24	Feet below surface:	12.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-17	Feet below surface:	12.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-07-28	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1980-07-10	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-25	Feet below surface:	12.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-12	Feet below surface:	12.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-23	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-08	Feet below surface:	12.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-27	Feet below surface:	12.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-09	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-26	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-19	Feet below surface:	12.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-25	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-21	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-01-28	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-22	Feet below surface:	12.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-26	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-25	Feet below surface:	12.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-14	Feet below surface:	12.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-29	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-22	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-09-25	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-28	Feet below surface:	12.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-20	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1979-07-27	Feet below surface:	12.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-07-19	Feet below surface:	11.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-28	Feet below surface:	11.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-24	Feet below surface:	11.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-14	Feet below surface:	11.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-28	Feet below surface:	11.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-03	Feet below surface:	11.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-25	Feet below surface:	11.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-03-27	Feet below surface:	11.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-27	Feet below surface:	11.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-24	Feet below surface:	11.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-26	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-11-27	Feet below surface:	12.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-10-27	Feet below surface:	12.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-10-13	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-09-25	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-09-21	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-24	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-17	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-03	Feet below surface:	12.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-07-27	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1978-07-19	Feet below surface:	12.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-06-28	Feet below surface:	11.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-25	Feet below surface:	11.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-25	Feet below surface:	11.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-24	Feet below surface:	10.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-27	Feet below surface:	10.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-01-26	Feet below surface:	10.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-27	Feet below surface:	11.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-28	Feet below surface:	11.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-27	Feet below surface:	11.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-27	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-25	Feet below surface:	12.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-26	Feet below surface:	12.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-23	Feet below surface:	12.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-25	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-26	Feet below surface:	11.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-29	Feet below surface:	11.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-23	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-26	Feet below surface:	12.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-27	Feet below surface:	12.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-11-29	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1976-10-27	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-28	Feet below surface:	12.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-26	Feet below surface:	12.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-27	Feet below surface:	12.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-28	Feet below surface:	12.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-25	Feet below surface:	11.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-28	Feet below surface:	11.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-24	Feet below surface:	11.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-25	Feet below surface:	11.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-29	Feet below surface:	11.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-12-29	Feet below surface:	11.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-24	Feet below surface:	11.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-10-29	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-25	Feet below surface:	12.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-26	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-19	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-23	Feet below surface:	12.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-22	Feet below surface:	12.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-06-25	Feet below surface:	12.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-28	Feet below surface:	11.89
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-05-19	Feet below surface:	11.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-29	Feet below surface:	11.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-24	Feet below surface:	11.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-03-26	Feet below surface:	11.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-03-24	Feet below surface:	12.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-25	Feet below surface:	11.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-19	Feet below surface:	12.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-29	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-12-27	Feet below surface:	12.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-12-17	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-26	Feet below surface:	12.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-23	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-29	Feet below surface:	12.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-22	Feet below surface:	12.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-09-26	Feet below surface:	12.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-09-16	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-28	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-13	Feet below surface:	12.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-30	Feet below surface:	12.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-10	Feet below surface:	12.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-26	Feet below surface:	11.94
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-05-29	Feet below surface:	11.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	11.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-25	Feet below surface:	11.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	11.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-28	Feet below surface:	11.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	11.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-26	Feet below surface:	11.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-21	Feet below surface:	11.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-29	Feet below surface:	11.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	11.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-20	Feet below surface:	11.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-28	Feet below surface:	12.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	12.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-27	Feet below surface:	12.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-28	Feet below surface:	12.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-27	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	11.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-27	Feet below surface:	11.72
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-06-13	Feet below surface:	11.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-25	Feet below surface:	11.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	11.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-26	Feet below surface:	11.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	11.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-27	Feet below surface:	11.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	11.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-26	Feet below surface:	11.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	11.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-01-26	Feet below surface:	11.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-12-27	Feet below surface:	11.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-27	Feet below surface:	11.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-26	Feet below surface:	11.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-09-27	Feet below surface:	11.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-08-29	Feet below surface:	12.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-27	Feet below surface:	11.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-27	Feet below surface:	11.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	11.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-25	Feet below surface:	11.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-26	Feet below surface:	11.46
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1972-04-07	Feet below surface:	11.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-03-28	Feet below surface:	11.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-25	Feet below surface:	12.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-01-27	Feet below surface:	12.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-12-27	Feet below surface:	12.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-26	Feet below surface:	12.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-27	Feet below surface:	12.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-09-27	Feet below surface:	12.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-07-28	Feet below surface:	12.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-25	Feet below surface:	11.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-05-24	Feet below surface:	11.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-27	Feet below surface:	11.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-26	Feet below surface:	11.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-02-24	Feet below surface:	11.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-01-27	Feet below surface:	11.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-12-28	Feet below surface:	11.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-11-24	Feet below surface:	12.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-28	Feet below surface:	12.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-09-28	Feet below surface:	12.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-08-27	Feet below surface:	12.48
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1970-07-29	Feet below surface:	12.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-06-26	Feet below surface:	11.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-05-20	Feet below surface:	11.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-04-24	Feet below surface:	11.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-25	Feet below surface:	11.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-02-24	Feet below surface:	11.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-26	Feet below surface:	11.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-12-30	Feet below surface:	11.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-11-25	Feet below surface:	11.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-29	Feet below surface:	12.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-09-26	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-08-27	Feet below surface:	12.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-07-29	Feet below surface:	12.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-06-27	Feet below surface:	11.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-05-26	Feet below surface:	11.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-04-28	Feet below surface:	11.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-03-27	Feet below surface:	10.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-02-26	Feet below surface:	11.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-01-27	Feet below surface:	12.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-12-26	Feet below surface:	12.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-11-25	Feet below surface:	12.26
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1968-10-29	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-09-25	Feet below surface:	12.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-08-27	Feet below surface:	12.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-07-26	Feet below surface:	12.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-06-26	Feet below surface:	12.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-05-27	Feet below surface:	11.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-22	Feet below surface:	11.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-03-27	Feet below surface:	11.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-02-27	Feet below surface:	11.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-01-29	Feet below surface:	12.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-12-26	Feet below surface:	12.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-11-27	Feet below surface:	12.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-10-26	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-09-27	Feet below surface:	12.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-08-23	Feet below surface:	11.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-08-22	Feet below surface:	11.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-08-08	Feet below surface:	11.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-07-26	Feet below surface:	11.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-06-27	Feet below surface:	10.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-05-24	Feet below surface:	11.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-04-25	Feet below surface:	11.28
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1967-03-29	Feet below surface:	11.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-02-28	Feet below surface:	12.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-01-27	Feet below surface:	12.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-12-21	Feet below surface:	12.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-11-28	Feet below surface:	12.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-11-26	Feet below surface:	12.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-10-25	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-09-27	Feet below surface:	12.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-08-25	Feet below surface:	12.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-07-22	Feet below surface:	12.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-06-23	Feet below surface:	12.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-05-29	Feet below surface:	12.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-04-25	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-03-21	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-02-28	Feet below surface:	12.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-01-31	Feet below surface:	12.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-12-26	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-11-23	Feet below surface:	12.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-10-27	Feet below surface:	12.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-09-28	Feet below surface:	12.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-08-26	Feet below surface:	12.95
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1965-07-28	Feet below surface:	12.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-06-28	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-05-28	Feet below surface:	12.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-27	Feet below surface:	12.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-03-29	Feet below surface:	12.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-02-28	Feet below surface:	12.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-01-29	Feet below surface:	12.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-12-29	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-11-24	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-10-27	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-09-28	Feet below surface:	12.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-09-01	Feet below surface:	12.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-07-29	Feet below surface:	12.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-06-30	Feet below surface:	12.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-05-27	Feet below surface:	11.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-04-28	Feet below surface:	11.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-03-30	Feet below surface:	11.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-02-28	Feet below surface:	11.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-01-31	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-12-30	Feet below surface:	12.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-12-02	Feet below surface:	12.11
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1963-10-25	Feet below surface:	12.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-09-30	Feet below surface:	12.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-08-29	Feet below surface:	12.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-07-31	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-06-28	Feet below surface:	12.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-05-29	Feet below surface:	11.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-04-30	Feet below surface:	11.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-04-01	Feet below surface:	11.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-02-28	Feet below surface:	11.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-01-31	Feet below surface:	11.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-12-28	Feet below surface:	11.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-11-29	Feet below surface:	11.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-10-30	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-09-26	Feet below surface:	12.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-09-24	Feet below surface:	13.38
Feet to sea level:	Not Reported	Note:	Not Reported

**G40  
North  
1/2 - 1 Mile  
Lower**

**FED USGS USGS40000464270**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 241	Type:	Well
Description:	USED AS AUXILIARY WELL FOR TSW 89		
HUC:	01090002	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Units:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Unconfined single aquifer
Construction Date:	19891113	Well Depth:	26.15
Well Depth Units:	ft	Well Hole Depth:	30
Well Hole Depth Units:	ft		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels,Number of Measurements:	3	Level reading date:	1990-04-24
Feet below surface:	14.16	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1990-03-26	Feet below surface:	14.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-02-21	Feet below surface:	14.15
Feet to sea level:	Not Reported	Note:	Not Reported

**41  
East  
1/2 - 1 Mile  
Higher**

**MA WELLS    MA9000000002567**

PWS ID:	4242000	Site Name:	NORTH UNION FIELD WELL NO. 2
Type:	Community Groundwater Well	SubBasin:	CAPE COD
Facility Name:	Not Reported		
Basemap:	DOQ	Accuracy Estimate (ft):	100
Feature Type:	WF	Location Method:	MAP
Primary Location Source:	MS_OTH	Secondary Location Source:	MS_LMTQ
Tertiary Location Source:	Not Reported		
Source ID:	4242000-07G	PWS Name:	PROVINCETOWN WATER DEPARTMENT
Source Name:	NORTH UNION FIELD WELL NO. 2	Source Status:	A
PWS Status:	A	Source Availability:	ACTIVE
PWS Class:	COM		
Well Name:	NORTH UNION FIELD WELL NO. 2	Region:	4
Purveyor:	PROVINCETOWN WATER DEPARTMENT		
Basin:	BLACKSTONE		

**42  
NW  
1/2 - 1 Mile  
Lower**

**FED USGS    USGS40000464170**

Organization ID:	USGS-MA	Type:	Well
Organization Name:	USGS Massachusetts Water Science Center	HUC:	01090002
Monitor Location:	MA-TSW 141	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	Sand and gravel aquifers (glaciated regions)	Aquifer Type:	Not Reported
Formation Type:	Not Reported	Well Depth:	13.3
Construction Date:	19720518	Well Hole Depth:	13.3
Well Depth Units:	ft		
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:	19	Level reading date:	1975-05-21
Feet below surface:	1.28	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1974-09-04	Feet below surface:	2.51

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	0.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	0.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	0.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-21	Feet below surface:	0.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-30	Feet below surface:	0.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	0.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	1.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-18	Feet below surface:	1.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	1.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	0.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-14	Feet below surface:	0.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	0.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	0.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	0.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	0.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	0.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-18	Feet below surface:	0.55
Feet to sea level:	Not Reported	Note:	Not Reported

**F43  
East  
1/2 - 1 Mile  
Higher**

**MA WELLS MA9000000002566**

PWS ID:	4242000	Site Name:	NORTH UNION FIELD WELL NO. 1
Type:	Community Groundwater Well	SubBasin:	CAPE COD
Facility Name:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Basemap:	DOQ	Accuracy Estimate (ft):	100
Feature Type:	WF	Location Method:	MAP
Primary Location Source:	MS_OTH	Secondary Location Source:	MS_LMTQ
Tertiary Location Source:	Not Reported		

Source ID:	4242000-06G	PWS Name:	PROVINCETOWN WATER DEPARTMENT
Source Name:	NORTH UNION FIELD WELL NO. 1		
PWS Status:	A	Source Status:	A
PWS Class:	COM	Source Availability:	ACTIVE

Well Name:	NORTH UNION FIELD WELL NO. 1		
Purveyor:	PROVINCETOWN WATER DEPARTMENT		
Basin:	UNK	Region:	4

**44**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000463837**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 161	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720519	Well Depth:	9.5
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	4	Level reading date:	1973-02-08
Feet below surface:	6.66	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1972-11-10	Feet below surface:	6.39
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-06-05	Feet below surface:	6.94
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-05-19	Feet below surface:	6.71
Feet to sea level:	Not Reported	Note:	Not Reported

**45**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464215**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 153	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720525	Well Depth:	45.4
Well Depth Units:	ft	Well Hole Depth:	45.4
Well Hole Depth Units:	ft		
Ground water levels, Number of Measurements:	71	Level reading date:	1980-08-17
Feet below surface:	39.08	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1980-07-10	Feet below surface:	38.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-12	Feet below surface:	38.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-08	Feet below surface:	38.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-09	Feet below surface:	38.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-19	Feet below surface:	38.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-21	Feet below surface:	38.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-26	Feet below surface:	38.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-14	Feet below surface:	38.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-22	Feet below surface:	38.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-09	Feet below surface:	38.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-20	Feet below surface:	38.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-07-19	Feet below surface:	39.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-28	Feet below surface:	39.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-14	Feet below surface:	37.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-03	Feet below surface:	38.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-10-13	Feet below surface:	38.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-09-21	Feet below surface:	38.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-17	Feet below surface:	38.36

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-03	Feet below surface:	38.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-31	Feet below surface:	38.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-11	Feet below surface:	38.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-01	Feet below surface:	38.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-06	Feet below surface:	39.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-29	Feet below surface:	39.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-04	Feet below surface:	39.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-31	Feet below surface:	39.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-03	Feet below surface:	39.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-02	Feet below surface:	38.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-24	Feet below surface:	37.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-28	Feet below surface:	37.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-05	Feet below surface:	37.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-01	Feet below surface:	37.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-29	Feet below surface:	38.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-12-29	Feet below surface:	38.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-26	Feet below surface:	38.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-10-22	Feet below surface:	38.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	39.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-19	Feet below surface:	39.21
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-07-22	Feet below surface:	39.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-06-25	Feet below surface:	38.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-19	Feet below surface:	38.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-24	Feet below surface:	40.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-03-24	Feet below surface:	38.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-19	Feet below surface:	38.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-17	Feet below surface:	39.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-12-17	Feet below surface:	39.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-23	Feet below surface:	39.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-22	Feet below surface:	39.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-09-16	Feet below surface:	39.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-14	Feet below surface:	38.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-10	Feet below surface:	38.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	37.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-08	Feet below surface:	38.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	37.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-19	Feet below surface:	37.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-28	Feet below surface:	38.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	38.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	38.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	38.62
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-09-12	Feet below surface:	38.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	38.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	38.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	37.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	37.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	37.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	37.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	37.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-11	Feet below surface:	38.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	38.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-31	Feet below surface:	38.04
Feet to sea level:	Not Reported	Note:	Not Reported

**H46  
SSE  
1/2 - 1 Mile  
Higher**

**MA WELLS    MA9000000001955**

PWS ID:	4300026	Site Name:	TRURO MOTOR INN
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	CAPE COD		
Basemap:	NA	Accuracy Estimate (ft):	16
Feature Type:	GW	Location Method:	GP_2
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		
Source ID:	4300026-02G	PWS Name:	TRURO MOTOR INN
Source Name:	WELL #2	PWS Status:	A
Source Status:	A	PWS Class:	NC
Source Availability:	ACTIVE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**H47**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**MA WELLS      MA9000000003627**

PWS ID:	4300026	Site Name:	TRURO MOTOR INN
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	CAPE COD		

Basemap:	NA	Accuracy Estimate (ft):	100
Feature Type:	GW	Location Method:	GP_6
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		

Source ID:	4300026-01G	PWS Name:	TRURO MOTOR INN
Source Name:	WELL #1	PWS Status:	A
Source Status:	A	PWS Class:	NC
Source Availability:	ACTIVE		

**48**  
**SE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000463868**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 289	Type:	Well
Description:	CCC OBS WELL A7	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Stratified Deposits, Undifferentiated		
Aquifer Type:	Unconfined single aquifer	Construction Date:	20020401
Well Depth:	63	Well Depth Units:	ft
Well Hole Depth:	63	Well Hole Depth Units:	ft

**49**  
**North**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000464319**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 149	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720529	Well Depth:	43.2
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels,Number of Measurements:	24	Level reading date:	1975-05-21
Feet below surface:	34.78	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1974-09-04	Feet below surface:	35.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-13	Feet below surface:	35.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-10	Feet below surface:	34.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	34.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	34.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	34.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-19	Feet below surface:	34.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-28	Feet below surface:	34.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	34.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	34.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	34.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	34.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	34.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	34.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-13	Feet below surface:	34.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	33.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-13	Feet below surface:	33.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-14	Feet below surface:	34.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-08	Feet below surface:	33.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	34.63

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-05	Feet below surface:	34.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-02	Feet below surface:	34.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-31	Feet below surface:	34.29
Feet to sea level:	Not Reported	Note:	Not Reported

**50  
NNW  
1/2 - 1 Mile  
Lower**

**MA WELLS    MA9000000001405**

PWS ID:	4300033	Site Name:	BABES BAKERY AND RESTAURANT
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	CAPE COD		
Basemap:	NA	Accuracy Estimate (ft):	16
Feature Type:	GW	Location Method:	GP_2
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		
Source ID:	4300033-01G	PWS Name:	BABES BAKERY AND RESTAURANT
Source Name:	WELL # 1	PWS Status:	A
Source Status:	A	PWS Class:	NC
Source Availability:	ACTIVE		

**51  
South  
1/2 - 1 Mile  
Lower**

**FED USGS    USGS40000463806**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-TSW 164	Type:	Well
Description:	Not Reported	HUC:	01090002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19730515	Well Depth:	13.1
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		
Ground water levels,Number of Measurements:	17	Level reading date:	1975-05-21
Feet below surface:	3.26	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1974-09-04	Feet below surface:	3.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08-14	Feet below surface:	3.62
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-07-10	Feet below surface:	3.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	3.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-07	Feet below surface:	3.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-13	Feet below surface:	2.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-19	Feet below surface:	2.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-28	Feet below surface:	2.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-02	Feet below surface:	2.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-20	Feet below surface:	3.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-17	Feet below surface:	3.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	2.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	3.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-22	Feet below surface:	3.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-12	Feet below surface:	2.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-15	Feet below surface:	2.68
Feet to sea level:	Not Reported	Note:	Not Reported

**52  
NE  
1/2 - 1 Mile  
Higher**

**FRDS PWS MA4300001**

Epa region:	01	State:	MA
Pwsid:	MA4300001		
Pwsname:	ADVENTURE BOUND CAMPING, CC @ HORTONS		
Cityserved:	Not Reported	Stateserved:	MA
Ziperved:	Not Reported	Fipscounty:	25001
Status:	Active	Retpopsrvd:	438
Pwssvconn:	1	Psource longname:	Groundwater
Pwstype:	TNCWS	Owner:	Private
Contact:	WAYNE KLEKAMP		
Contactorgname:	ADVENTURE BOUND CAMPING, CC @ HORTON'S		
Contactphone:	5084871847	Contactaddress1:	ADVENTURE BOUND CAMPING, INC.
Contactaddress2:	905 16TH PLACE	Contactcity:	VERO BEACH
Contactstate:	FL	Contactzip:	32960
Pwsactivitycode:	A		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

PWS ID:	MA4300001	PWS type:	Mailing
PWS name:	ROBERT S HORTON	PWS address:	71 SO. HIGHLAND ROAD
PWS city:	NORTH TRURO	PWS state:	MA
PWS zip:	026520000	PWS ID:	MA4300001
Activity status:	Active	Date system activated:	9003
Date system deactivated:	Not Reported	Retail population:	00000250
System name:	HORTONS TRAILER PARK	System address:	71 SO. HIGHLAND ROAD
System city:	NORTH TRURO	System state:	MA
System zip:	026520000		
Population served:	101 - 500 Persons	Treatment:	Untreated
Latitude:	420200	Longitude:	0700400
Violation id:	4	Orig code:	S
State:	MA	Violation Year:	2011
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2011
Cmp edt:	12/31/2011		
Violation ID:	4	Orig Code:	S
Enforcemnt FY:	2012	Enforcement Action:	02/29/2012
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: MA Radon

### Radon Test Results

County	% of sites > 4 pCi/L	Median
BARNSTABLE	15	1.6

Federal EPA Radon Zone for BARNSTABLE County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level  $\geq$  2 pCi/L and  $\leq$  4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 02652

Number of sites tested: 1

Area	Average Activity	% < 4 pCi/L	% 4-20 pCi/L	% > 20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.900 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: MassDEP

Telephone: 617-292-5907

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Massachusetts Geographic Information System (MassGIS) Datalayers

Source: Executive Office of Environmental Affairs

Telephone:

#### Public Water Supply Database

Telephone:

The Public Water Supply datalayer contains the locations of public community surface and groundwater supply sources and public non-community supply sources as defined in 310 CMR 22.00.

#### Areas of Critical Environmental Concern

Telephone:

The Areas of Critical Environmental Concern (ACEC) datalayer shows the location of areas that have been designated ACECs by the Secretary of Environmental Affairs. ACEC designation requires greater environmental review of certain kinds of proposed development under state jurisdiction within the ACEC boundaries. The ACEC Program is administered by the Department of Environmental Management (DEM) on behalf of the Secretary of Environmental Affairs. The Massachusetts Coastal Zone Management (MCZM) Office managed the original Coastal ACEC Program from 1978 to 1993, and continues to play a key role in monitoring coastal ACECs. Procedures for ACEC designation and the general policies governing the effects of designation are contained in the ACEC regulations (301 CMR 12.00). The ACEC datalayer has been compiled by MCZM and DEM and includes both coastal and inland areas.

#### EPA Designated Sole Source Aquifers

Telephone:

The Sole Source Aquifer datalayer was compiled by the Department of Environmental Protection (DEP) Division of Water Supply (DWS). Seven Sole Source Aquifers have been designated by the US Environmental Protection Agency (EPA) for Massachusetts. A Sole Source Aquifer (SSA) is an aquifer designated by US EPA as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should that aquifer become contaminated. The aquifers were defined by an EPA hydrogeologist.

#### Aquifers

Telephone:

MassGIS produced an aquifer datalayer composed of 20 individual panels, generally based on the boundaries of the major drainage basins. Areas of high and medium yield were mapped. This datalayer includes polygon attribute coding to help in the identification of areas in which cleanup of hazardous waste sites must meet drinking water standards, as defined in the Massachusetts Contingency Plan (MCP) (310 CMR 40.00000).

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## Non-Potential Drinking Water Source Areas

### Telephone:

Non-Potential Drinking Water Source Areas (NPDWSA) are regulatory in nature representing one of many considerations used in determining the standards to which ground water must be cleaned in the event of a release of oil or hazardous material. NPDWSAs are not based on existing water quality and do not indicate poor ambient conditions.

## DEP Approved Zone IIs

### Telephone:

The Department of Environmental Protection (DEP) approved Zone IIs datalayer was compiled by the DEP Division of Water Supply (DWS). The database contains 281 approved Zone IIs statewide. As stated in 310 CMR 22.02, a Zone II is 'that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation.) It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone IIs shall extend up gradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary).' These data are used in association with the Public Water Supplies datalayer. The following describes certain unique features of this association.\n - Any proposed new well which will pump at least 100,000 gallons per day must have a Zone II delineation completed and approved by DEP prior to the well coming on line. \n- Additionally, a new source may not be on-line yet, but other, older wells may fall within its Zone II boundary.\n - Further, existing wells must have a Zone II delineated as a condition of receiving a water withdrawal permit under the Water Management Act.

## OTHER STATE DATABASE INFORMATION

### RADON

#### State Database: MA Radon

Source: Department of Health  
Telephone: 413-586-7525  
Radon Test Results

#### Area Radon Information

Source: USGS  
Telephone: 703-356-4020  
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA  
Telephone: 703-356-4020  
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

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Sand Pit Road

2 Sand Pit Rd

North Truro, MA 02652

Inquiry Number: 7207544.3

December 19, 2022

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

12/19/22

**Site Name:**

Sand Pit Road  
2 Sand Pit Rd  
North Truro, MA 02652  
EDR Inquiry # 7207544.3

**Client Name:**

Horsley Witten Group, Inc.  
90 Route 6A  
Sandwich, MA 02563  
Contact: Caroline Armstrong



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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** 341B-4492-82E7  
**PO #** 22129  
**Project** Sand Pit Road Truro

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 341B-4492-82E7

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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**Sand Pit Road**

2 Sand Pit Rd

North Truro, MA 02652

Inquiry Number: 7207544.8

December 20, 2022

# The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

12/20/22

**Site Name:**

Sand Pit Road  
2 Sand Pit Rd  
North Truro, MA 02652  
EDR Inquiry # 7207544.8

**Client Name:**

Horsley Witten Group, Inc.  
90 Route 6A  
Sandwich, MA 02563  
Contact: Caroline Armstrong



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

**Search Results:**

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2018	1"=500'	Flight Year: 2018	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
1995	1"=500'	Acquisition Date: April 03, 1995	USGS/DOQQ
1991	1"=500'	Flight Date: April 04, 1991	USGS
1985	1"=500'	Flight Date: March 26, 1985	USDA
1977	1"=500'	Flight Date: April 01, 1977	USGS
1971	1"=500'	Flight Date: May 07, 1971	USGS
1960	1"=500'	Flight Date: May 19, 1960	USGS
1952	1"=500'	Flight Date: July 25, 1952	USDA
1938	1"=500'	Flight Date: November 21, 1938	USGS

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INQUIRY #: 7207544.8

YEAR: 2018

— = 500'





INQUIRY #: 7207544.8

YEAR: 2014

— = 500'





INQUIRY #: 7207544.8

YEAR: 2010

 = 500'





INQUIRY #: 7207544.8

YEAR: 1995

 = 500'



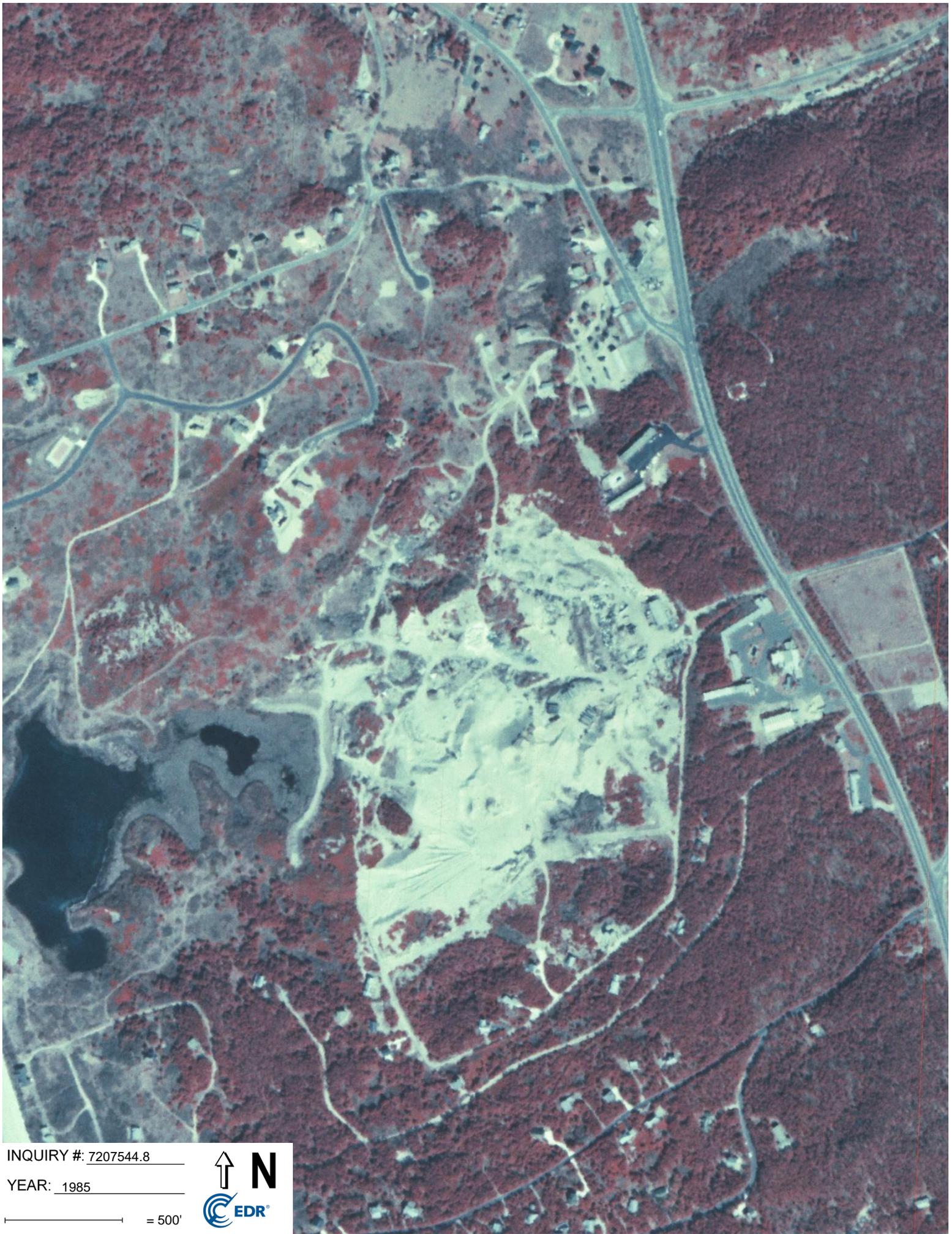


INQUIRY #: 7207544.8

YEAR: 1991

— = 500'





INQUIRY #: 7207544.8

YEAR: 1985

— = 500'





INQUIRY #: 7207544.8

YEAR: 1977

 = 500'





INQUIRY #: 7207544.8

YEAR: 1971

— = 500'





INQUIRY #: 7207544.8

YEAR: 1960

— = 500'





INQUIRY #: 7207544.8

YEAR: 1952

— = 500'





INQUIRY #: 7207544.8

YEAR: 1938

— = 500'



Sand Pit Road

2 Sand Pit Rd

North Truro, MA 02652

Inquiry Number: 7207544.4

December 19, 2022

# EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Historical Topo Map Report

12/19/22

**Site Name:**

Sand Pit Road  
2 Sand Pit Rd  
North Truro, MA 02652  
EDR Inquiry # 7207544.4

**Client Name:**

Horsley Witten Group, Inc.  
90 Route 6A  
Sandwich, MA 02563  
Contact: Caroline Armstrong



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Horsley Witten Group, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:****Coordinates:**

<b>P.O.#</b>	22129	<b>Latitude:</b>	42.023493 42° 1' 25" North
<b>Project:</b>	Sand Pit Road Truro	<b>Longitude:</b>	-70.079727 -70° 4' 47" West
		<b>UTM Zone:</b>	Zone 19 North
		<b>UTM X Meters:</b>	410611.92
		<b>UTM Y Meters:</b>	4652948.50
		<b>Elevation:</b>	46.51' above sea level

**Maps Provided:**

2018	1898
2015	1889
2012	
1977	
1972	
1958	
1948, 1949	
1944	

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## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2018 Source Sheets



North Truro  
2018  
7.5-minute, 24000



Wellfleet  
2018  
7.5-minute, 24000

### 2015 Source Sheets



North Truro  
2015  
7.5-minute, 24000



Wellfleet  
2015  
7.5-minute, 24000

### 2012 Source Sheets

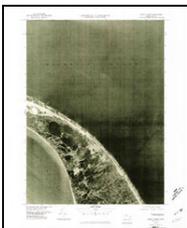


North Truro  
2012  
7.5-minute, 24000

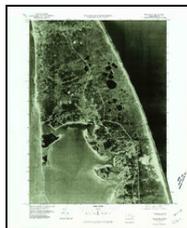


Wellfleet  
2012  
7.5-minute, 24000

### 1977 Source Sheets



North Truro  
1977  
7.5-minute, 25000  
Aerial Photo Revised 1977

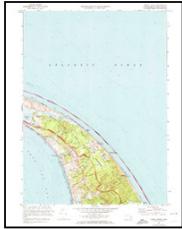


Wellfleet  
1977  
7.5-minute, 25000  
Aerial Photo Revised 1977

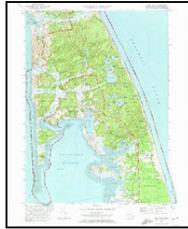
## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1972 Source Sheets



North Truro  
1972  
7.5-minute, 24000  
Aerial Photo Revised 1971



Wellfleet  
1972  
7.5-minute, 24000  
Aerial Photo Revised 1971

### 1958 Source Sheets



Wellfleet  
1958  
7.5-minute, 24000



North Truro  
1958  
7.5-minute, 24000

### 1948, 1949 Source Sheets

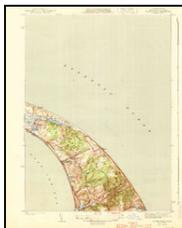


North Truro  
1948  
7.5-minute, 24000



Wellfleet  
1949  
7.5-minute, 24000

### 1944 Source Sheets



North Truro  
1944  
7.5-minute, 31680



Wellfleet  
1944  
7.5-minute, 31680

## ***Topo Sheet Key***

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **1898 Source Sheets**



Provincetown  
1898  
15-minute, 62500

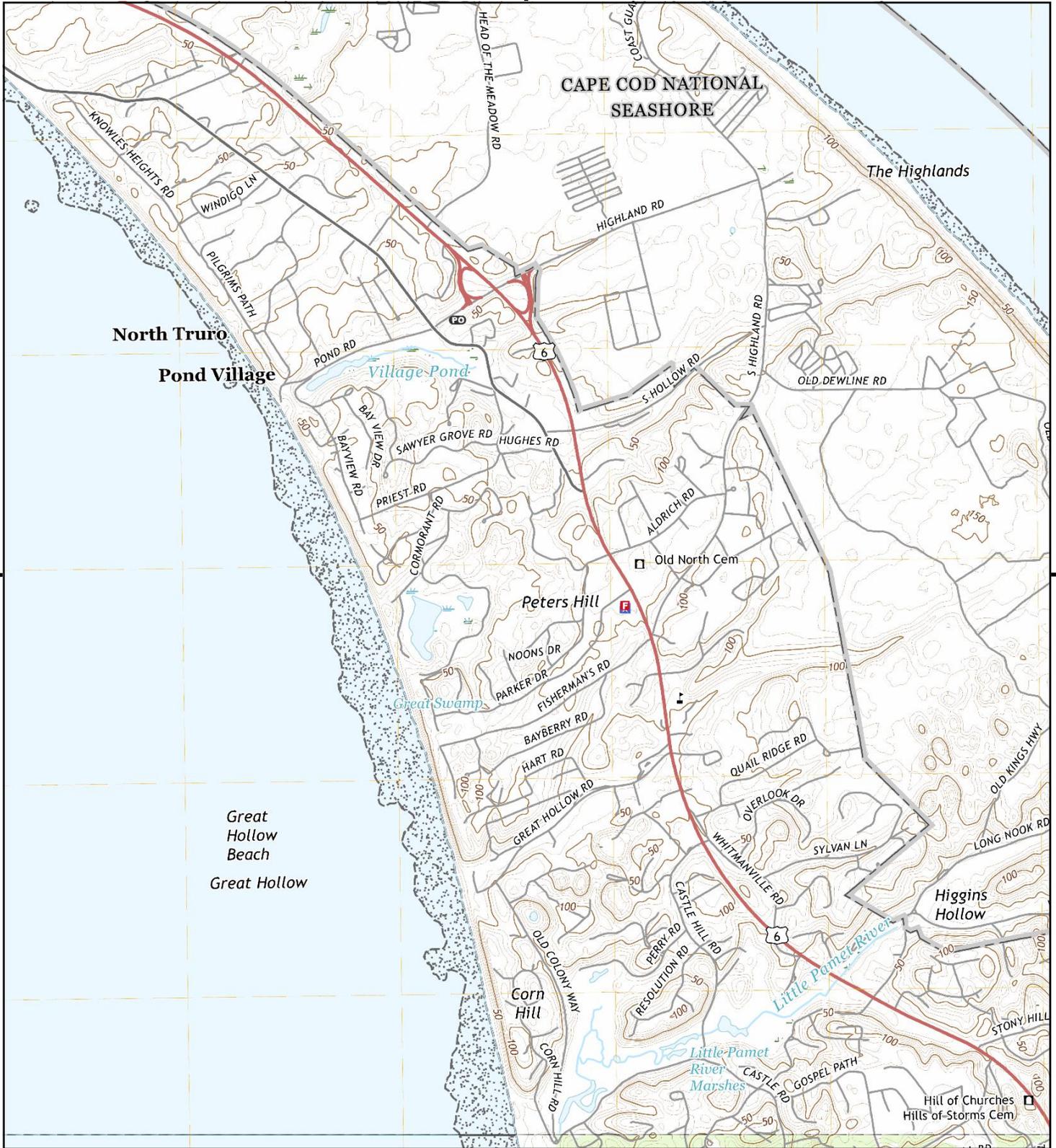
### **1889 Source Sheets**



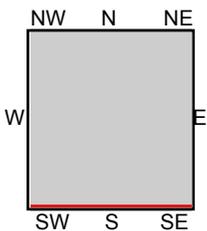
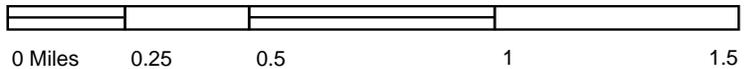
Provincetown  
1889  
15-minute, 62500



Wellfleet  
1889  
15-minute, 62500



This report includes information from the following map sheet(s).



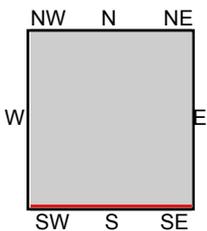
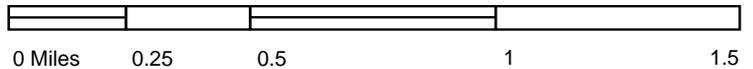
TP, North Truro, 2018, 7.5-minute  
S, Wellfleet, 2018, 7.5-minute

**SITE NAME:** Sand Pit Road  
**ADDRESS:** 2 Sand Pit Rd  
 North Truro, MA 02652  
**CLIENT:** Horsley Witten Group, Inc.





This report includes information from the following map sheet(s).



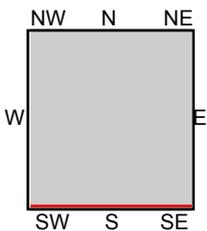
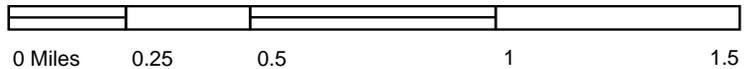
TP, North Truro, 2015, 7.5-minute  
S, Wellfleet, 2015, 7.5-minute

**SITE NAME:** Sand Pit Road  
**ADDRESS:** 2 Sand Pit Rd  
North Truro, MA 02652  
**CLIENT:** Horsley Witten Group, Inc.





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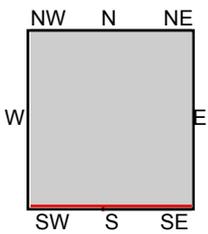
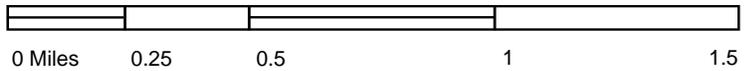
TP, North Truro, 2012, 7.5-minute  
S, Wellfleet, 2012, 7.5-minute

**SITE NAME:** Sand Pit Road  
**ADDRESS:** 2 Sand Pit Rd  
 North Truro, MA 02652  
**CLIENT:** Horsley Witten Group, Inc.





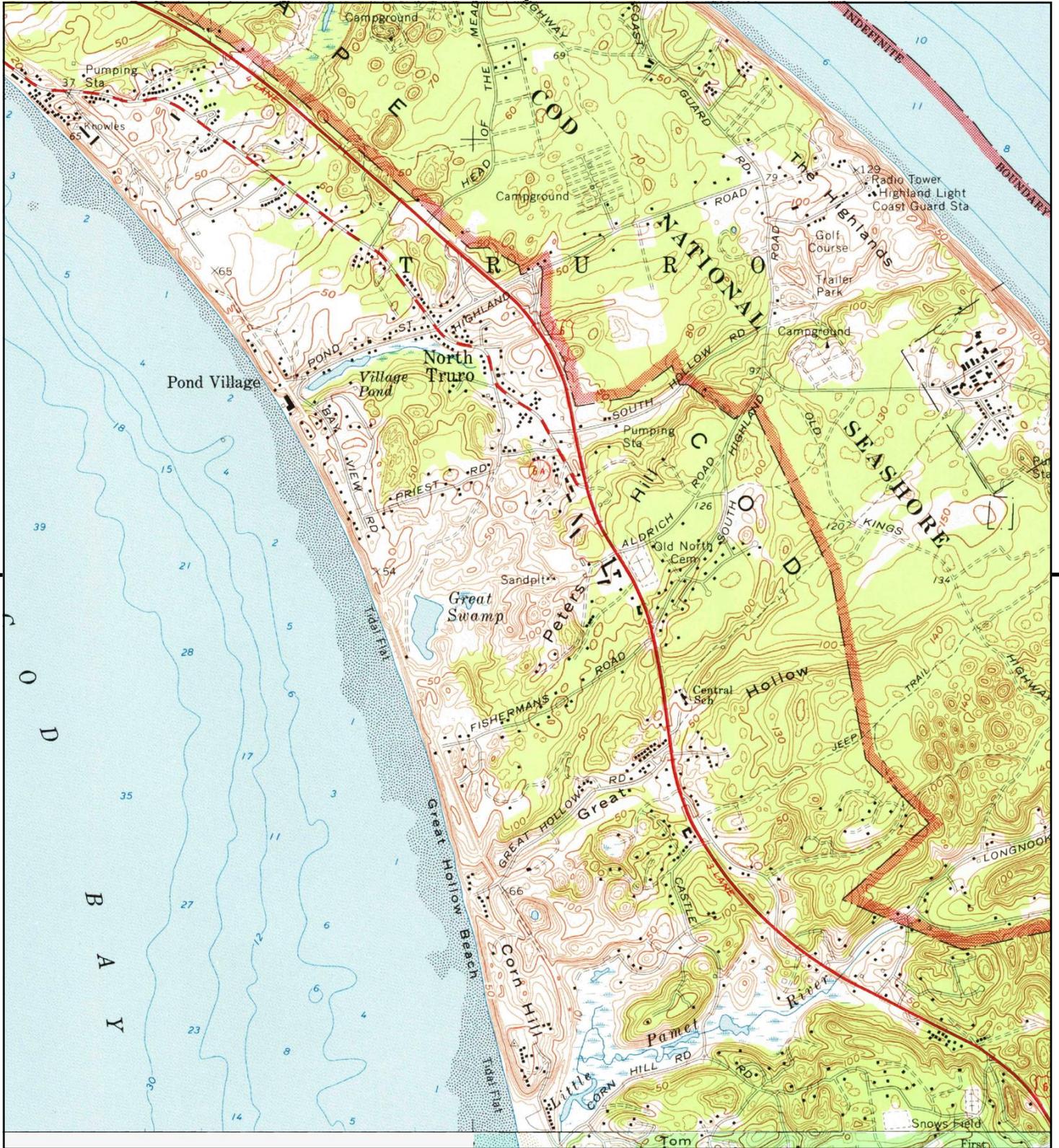
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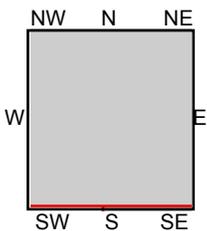
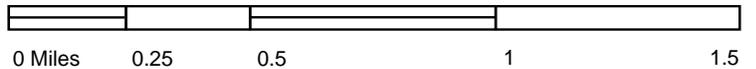
TP, North Truro, 1977, 7.5-minute  
SE, Wellfleet, 1977, 7.5-minute

**SITE NAME:** Sand Pit Road  
**ADDRESS:** 2 Sand Pit Rd  
North Truro, MA 02652  
**CLIENT:** Horsley Witten Group, Inc.





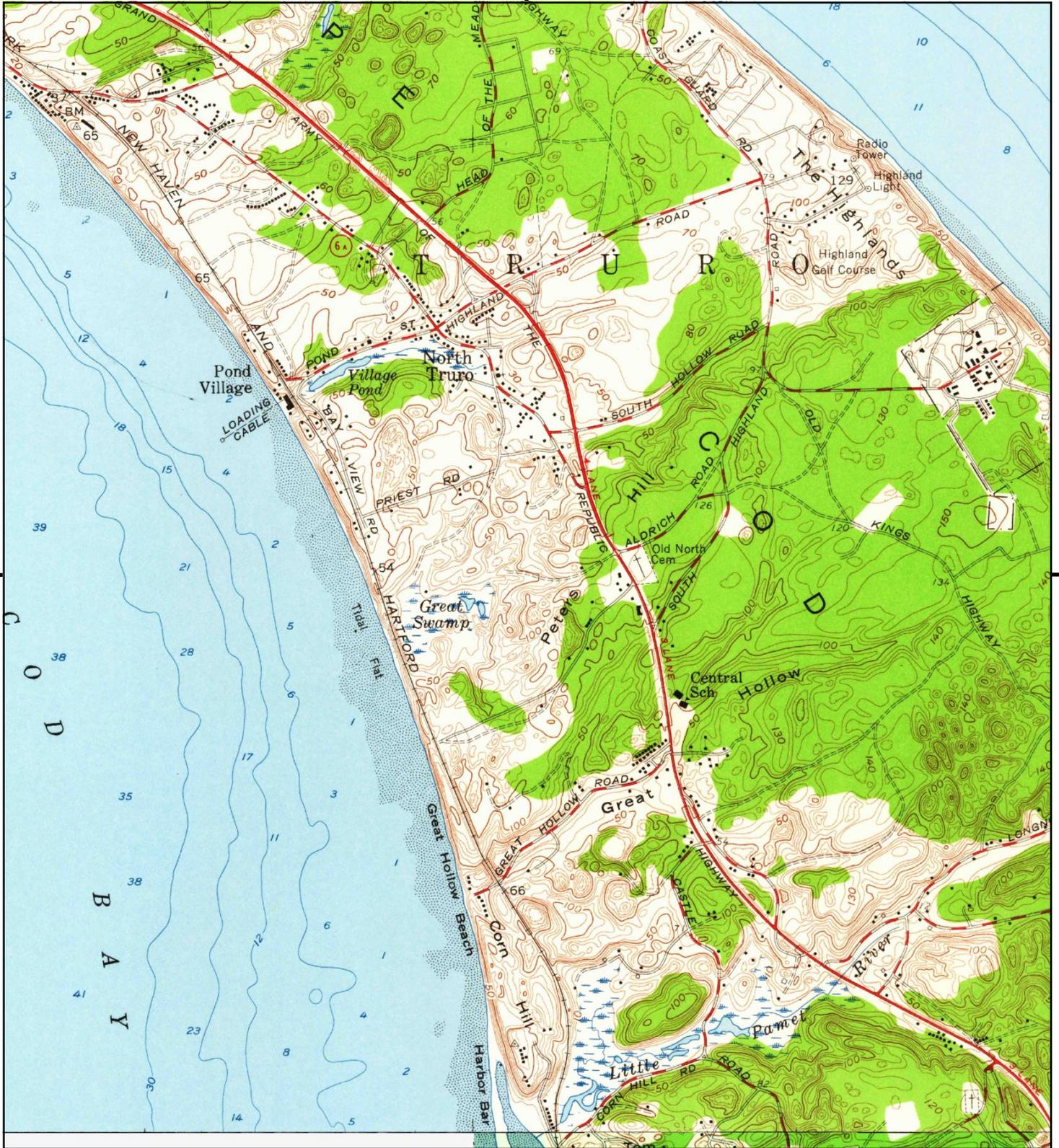
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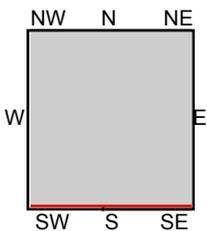
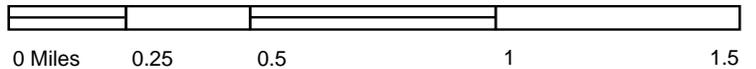
TP, North Truro, 1972, 7.5-minute  
SE, Wellfleet, 1972, 7.5-minute

**SITE NAME:** Sand Pit Road  
**ADDRESS:** 2 Sand Pit Rd  
North Truro, MA 02652  
**CLIENT:** Horsley Witten Group, Inc.





This report includes information from the following map sheet(s).

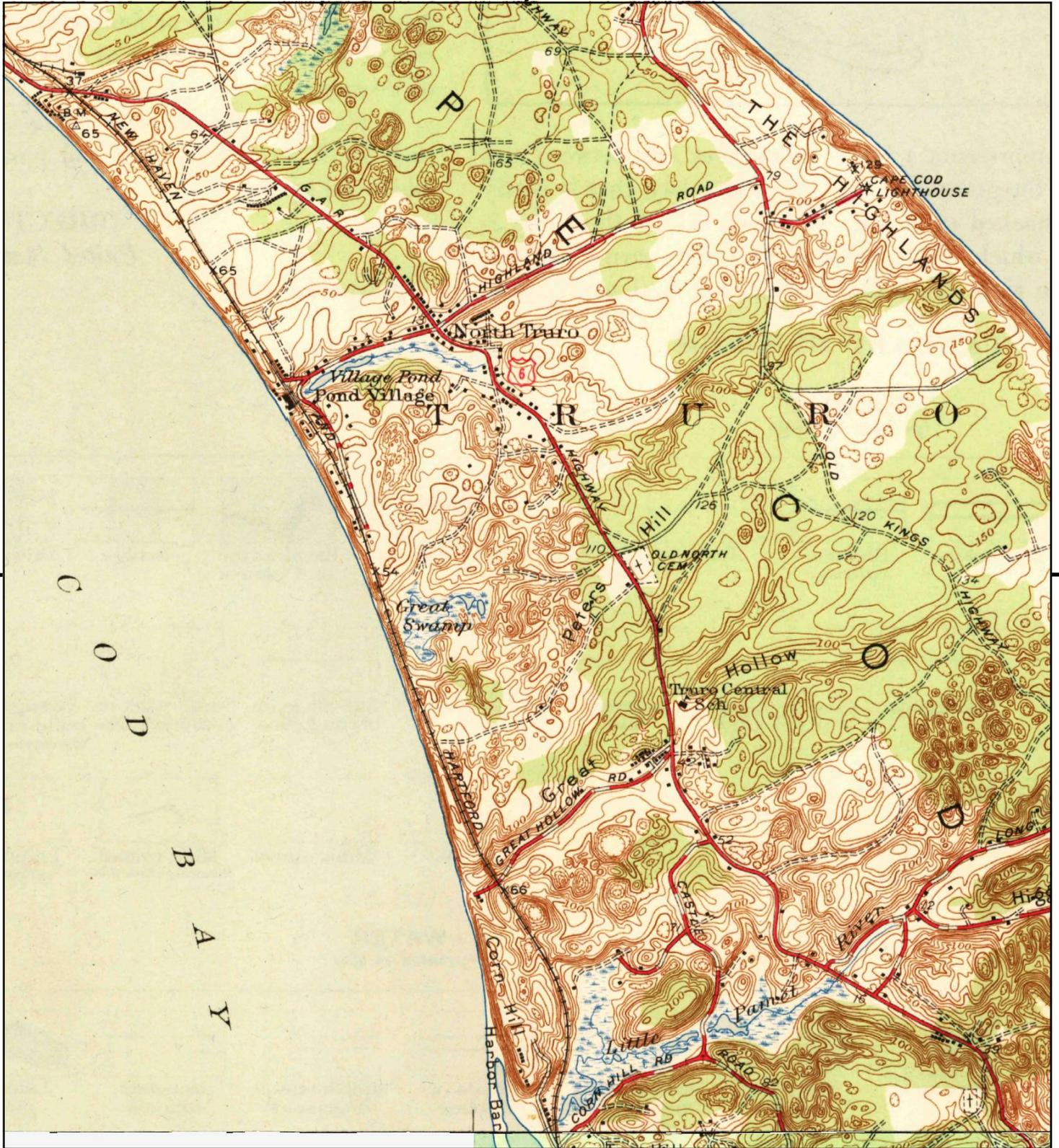


TP, North Truro, 1958, 7.5-minute  
SE, Wellfleet, 1958, 7.5-minute

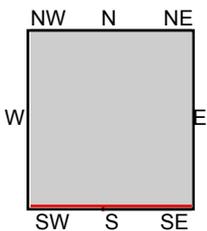
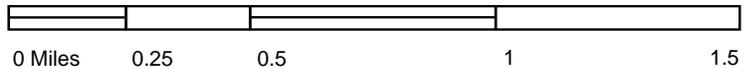
**SITE NAME:** Sand Pit Road  
**ADDRESS:** 2 Sand Pit Rd  
North Truro, MA 02652  
**CLIENT:** Horsley Witten Group, Inc.







This report includes information from the following map sheet(s).



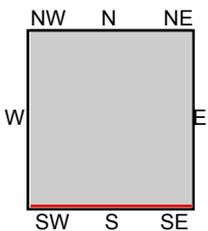
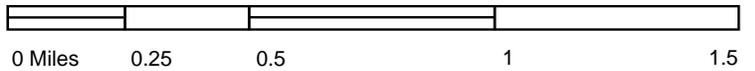
TP, North Truro, 1944, 7.5-minute  
SE, Wellfleet, 1944, 7.5-minute

**SITE NAME:** Sand Pit Road  
**ADDRESS:** 2 Sand Pit Rd  
North Truro, MA 02652  
**CLIENT:** Horsley Witten Group, Inc.





This report includes information from the following map sheet(s).



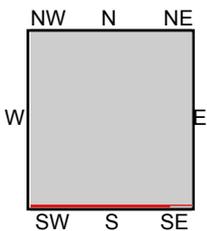
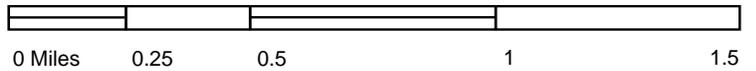
TP, Provincetown, 1898, 15-minute

SITE NAME: Sand Pit Road  
 ADDRESS: 2 Sand Pit Rd  
 North Truro, MA 02652  
 CLIENT: Horsley Witten Group, Inc.





This report includes information from the following map sheet(s).



TP, Provincetown, 1889, 15-minute  
S, Wellfleet, 1889, 15-minute

SITE NAME: Sand Pit Road  
ADDRESS: 2 Sand Pit Rd  
North Truro, MA 02652  
CLIENT: Horsley Witten Group, Inc.



**Sand Pit Road**

2 Sand Pit Rd  
North Truro, MA 02652

Inquiry Number: 7207544.5  
December 20, 2022

# The EDR-City Directory Image Report

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*Thank you for your business.*

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with any questions or comments.

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

### RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2014	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1989	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Criss-Cross Directory
1984	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Criss-Cross Directory

## FINDINGS

### TARGET PROPERTY STREET

2 Sand Pit Rd  
North Truro, MA 02652

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
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### SAND PIT RD

2017	-	EDR Digital Archive	Street not listed in Source
2014	-	EDR Digital Archive	Street not listed in Source
2010	-	EDR Digital Archive	Street not listed in Source
2005	-	EDR Digital Archive	Street not listed in Source
2000	-	EDR Digital Archive	Street not listed in Source
1995	-	EDR Digital Archive	Street not listed in Source
1992	-	EDR Digital Archive	Street not listed in Source
1989	pg A1	Cole Criss-Cross Directory	
1984	pg A2	Cole Criss-Cross Directory	

## FINDINGS

### CROSS STREETS

No Cross Streets Identified

## **City Directory Images**

**SAND PIT RD 1989**

*North Truro*  
 NO # Leonard J Hansen . . . . .71 487-9410  
 NO # ★ The Window Washers . . . - 487-2330  
 1 RESIDENCE 1 BUSINESS

● **SANDPIPER AVE 02652**  
 New Street-1985.

*North Truro*  
 1- END CT 145 \$C..A 6  
 7 Vincent Dalo . . . . .86 487-4192  
 NO # Donald Berch . . . . .85 487-4573  
 NO # Henry Greenblatt . . . . .85 487-2848  
 3 RESIDENCE

● **SANDPIPER RD 02666**

1- 99 CT 148 \$A..A 6  
 8 Paul Severino . . . . .87 349-1832  
 20★ Dr R A Cooper . . . . .78 349-9484  
 NO # Richard D Colombo . . . . .87 349-1985  
 NO # Paul Kolton . . . . .83 349-7229  
 NO # Susan S Lapidus . . . . .80 349-9039  
 NO # Richard Lettieri . . . . .82 349-9662  
 NO # Walter Londergan . . . . .87 487-9054  
 NO # Sten Lukin . . . . .82 349-3606  
 NO # Nathan Richman . . . . .82 349-3606  
 8 RESIDENCE 1 BUSINESS

● **SANDPIT RD 02652**

*North Truro*  
 NO # Alan S Bergman . . . . .72 487-1429  
 NO # Kenneth S Brock . . . . .77 487-3502  
 NO # A Freed . . . . .79 487-2158  
 NO # Morris Gerber . . . . .72 487-1559  
 NO # Leonard Howard . . . . .78 487-3342  
 5 RESIDENCE

● **SANDY LN 02666**

New Street-1988.  
 1- END CT 144 \$A..A 6  
 NO # Melissa Cohen . . . . . 487-4990  
 NO # Michael Jerace . . . . . - 487-4990  
 2 RESIDENCE

● **SCRIMSHAW RD 02666**

O 1- 99 CT 149 \$A..A 6  
 E 2- 98 CT 147 \$B..A 6  
 7 Arnold W Williams . . . . .85 349-2118  
 9 Michael S Rice . . . . .73 349-6602  
 2 RESIDENCE

● **SHORE RD 02652**

*North Truro*  
 1- END CT 145 \$C..A 6  
 538 Edward J Sheats . . . . . - 487-2494  
 NO # Jos Amodio . . . . .87 487-3254  
 NO # M E Coughlan . . . . . 487-3126  
 NO # Mark Dionne . . . . . 487-0999  
 NO # David Ditacchio . . . . .86 487-1165  
 NO # David Fleming . . . . .87 487-3670  
 NO # David Foster Jr . . . . .87 487-3087  
 NO # Angelo Garofalo . . . . .87 487-2635  
 NO # Gerard J Kinahan . . . . .87 487-3645  
 NO # Valinda J McClure . . . . . - 487-1141  
 NO # Robin E Morin . . . . .87 487-9211  
 NO # Laura L Murphy . . . . . 487-4514  
 NO # Gerald Nelson . . . . .87 487-1464  
 NO # Daniel Prelack . . . . .87 487-0236  
 NO # Stephen Robbins . . . . . 487-4260  
 NO # D Russell . . . . . 487-4659  
 NO # John W Sieverding . . . . . 487-4263  
 NO # Francis Veara . . . . .87 487-4891

**SAND PIT RD 1984**

**SANDPIPER RD 02666**

Truro

**073680**

20★Dr R A Cooper . . . . . 349-9484

No # Paul Kolton . . . . . 349-7229

No # Roy Lapidus . . . . .80 349-9039

No # Richard Lettieri . . . . .82 349-9662

No # Sten Lukin . . . . .82 349-3606

No # Nathan Richman . . . . .82 349-3606

5 Residence 1 Business

**SANDPIPER RD 02667**

Wellfleet

**073690**

No # Anthony Francoline . . . . .80 349-9607

No # David Kuzmak . . . . .80 349-9607

2 Residence

**SANDPIT RD 02652**

North Truro

**073700**

No # Alan S Bergman . . . . .72 487-1429

No # Kenneth S Brock . . . . .77 487-3502

No # A Freed . . . . .79 487-2158

No # Morris Gerber . . . . .72 487-1559

No # Leonard Howard . . . . .78 487-3342

5 Residence

**SAND PT SHORES DR 02536**

East Falmouth

**073710**

4 Ernest J Butler . . . . . 540-4954

9★Solartec Developer . . . . . 548-8861

Richard W Yarosh . . . . .78 540-2897

10 Fabian Aylward . . . . .78 548-7188

22 Edward J Curley . . . . .79 548-9367

40 Richard McIntosh . . . . .79 548-6015

52 59 . . . . .NP

60 Wilfred J Mendosa . . . . .68 540-0265

96 Lillian Monacci . . . . .72 540-2449

99 Stephen O Swain . . . . .80 548-0852

100 Alfred C Bourbeau . . . . .77 548-7374

164 . . . . .NP

No # James L Sullivan . . . . .82 540-3943

13 Residence 1 Business

**SANDS COVE 02534**

Cataumet

**073720**

Arthur F Sands . . . . .68 563-2841

1 Residence

**SANDS RD 02642**

Eastham

**073730**

11 George McCarthy . . . . .79 255-4623

No # Warren R Berg . . . . .69 255-2043

## APPENDIX D

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### TEST PIT AND SOIL BORING LOGS



## BORING LOG: MW-1/SB-1

Project: 22129

Client: Truro DPW

Drilling Contractor: Desmond Well Driling

Drilling Equipment: Split-spoon

Drilling Location: SB-1/MW-1

Date: 2/10/2023

Completion Depth: 77' BGS

Elevation: N/A

Inspector: CA

Depth to Water: 72' BGS

Proportions	Color	USCS Code	Size	Misc.
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fragments (frag.)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Cement (cem.)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	Below Ground Surface (BGS)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures	Dark = (dk)	Total Organic Vapors (TOV)
	Rust (Ru)	Well-Graded Sand (SW)	Fine to Coarse = (f-c)	Parts per million (PPM)
	Brown (Br)	Poorly-Graded Sand (SP)	Very = (v)	Not Available (N/A)
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)	More/Less = (+/-)	Depth to Water (DTW)
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	Angular	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		
		Inorganic Clays of High Plasticity, Fat Clays, Sandy Clays of High Plasticity (CH)		
		Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays		
		Organic Silts and Clays of High Plasticity, Sandy Organic Silts and Clays (OH)		
		Peat (PT)		

Depth Feet	Description	TOV (PPM)	Recovery	USCS Code	Color	Comments	Well Details	Depth Feet
						Stand Pipe ~3.5' above grade →		
0-2	DRY, brown, f to m sand, trace gravel	0.10	24"	SW	lt. Br			
2-4	DRY, brown, f to m sand	0.10	20"	SW	lt. Br			
4-6	DRY, blue-gray clay, bottom 3" is f to m red/brown sand	0.20	22"	CH/SW	Bl/G/Br			
6-8	DRY light brown fine-medium coarse sand, trace blue clay	<0.1	18"	SW	lt. Br			
8-10	DRY, red/brown to light brown, f to m sand	<0.1	15"	SW	R/Br/lt Br			
10-12	DRY, light brown, f to m sand	<0.1	16"	SW	lt. Br			
12-14	DRY, light brown, f to c sand	<0.1	15"	SW	lt. Br			
14-16	DRY, light brown, f to c sand	<0.1	18"	SW	lt. Br			
16-18	DRY, light brown, f to c sand	0.10	15"	SW	lt. Br			
18-20	DRY, light brown, f to c sand	0.20	15"	SW	lt. Br			
20-21	NA	NA	NA	NA	NA			
21-22	NA	NA	NA	NA	NA			
22-24	DRY, light brown, f to c sand	<0.1	15"	SW	lt. Br			
24-25	NA	NA	NA	NA	NA			
25-26	NA	NA	NA	NA	NA			
26-27	NA	NA	NA	NA	NA			
27-29	DRY, light brown, f to c sand	0.10	18"	SW	Br			
29-30	NA	NA	NA	NA	NA			
30-31	NA	NA	NA	NA	NA			
31-32	NA	NA	NA	NA	NA			
32-34	DRY, light brown, f to c sand	<0.1	17"	SW	Br			
34-35	NA	NA	NA	NA	NA			
35-36	NA	NA	NA	NA	NA			
36-37	NA	NA	NA	NA	NA			
37-39	DRY, light brown, f to c sand	0.10	20"	SW	Br			
39-40	NA	NA	NA	NA	NA			
40-41	NA	NA	NA	NA	NA			
41-42	NA	NA	NA	NA	NA			
42-44	DRY, light brown, f to c sand	0.30	19"	SW	Br			
44-45	NA	NA	NA	NA	NA			
45-46	NA	NA	NA	NA	NA			
46-47	NA	NA	NA	NA	NA			
47-49	DRY, light brown, f to c sand	0.30	16"	SW	Br			
49-50	NA	NA	NA	NA	NA			



## BORING LOG: MW-1/SB-1

Project: 22129

Client: Truro DPW

Drilling Contractor: Desmond Well Drilling

Drilling Equipment: Split-spoon

Drilling Location: SB-1/MW-1

Date: 2/10/2023

Completion Depth: 77' BGS

Elevation: N/A

Inspector: CA

Depth to Water: 72' BGS

Proportions	Color	USCS Code	Size	Misc.
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fragments (frag.)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Cement (cem.)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	Below Ground Surface (BGS)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures	Dark = (dk)	Total Organic Vapors (TOV)
	Rust (Ru)	Well-Graded Sand (SW)	Fine to Coarse = (f-c)	Parts per million (PPM)
	Brown (Br)	Poorly-Graded Sand (SP)	Very = (v)	Not Available (N/A)
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)	More/Less = (+/-)	Depth to Water (DTW)
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	Angular	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		
		Inorganic Clays of High Plasticity, Fat Clays, Sandy Clays of High Plasticity (CH)		
		Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays		
		Organic Silts and Clays of High Plasticity, Sandy Organic Silts and Clays (OH)		
		Peat (PT)		

Depth Feet	Description	TOV (PPM)	Recovery	USCS Code	Color	Comments	Well Details	Depth Feet
50-51	NA	NA	NA	NA	NA			
51-52	NA	NA	NA	NA	NA			
52-54	DRY, light brown, f to c sand	0.20	19"	SW	Br			
54-55	NA	NA	NA	NA	NA			
55-56	NA	NA	NA	NA	NA			
56-57	NA	NA	NA	NA	NA			
57-59	DRY, light brown, f to c sand	0.10	14"	SW	Br			
59-60	NA	NA	NA	NA	NA			
60-61	NA	NA	NA	NA	NA			
61-62	NA	NA	NA	NA	NA			
62-64	DRY, light brown, f to c sand	0.20	18"	SW	Br			
64-65	NA	NA	NA	NA	NA			
65-66	NA	NA	NA	NA	NA			
66-67	NA	NA	NA	NA	NA			
67-69	DRY, light brown, f to c sand	0.10	19"	SW	Br			
69-70	NA	NA	NA	NA	NA			
70-71	NA	NA	NA	NA	NA			
71-72	NA	NA	NA	NA	NA			
72-74	No recover	NA	0"	NA	NA			
74-75	NA	NA	NA	NA	NA			
75-76	NA	NA	NA	NA	NA			
76-77	NA	NA	NA	NA	NA			



## BORING LOG: MW-2/SB-2

Project: 22129

Client: Truro DPW

Drilling Contractor: Desmond Well Drilling

Drilling Equipment: Split-spoon

Drilling Location: SB-2/MW-2

Date: 2/10-14/2023

Completion Depth: 57' BGS

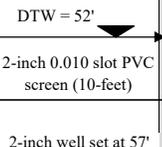
Elevation: N/A

Inspector: JG/CA

Depth to Water: 52' BGS

Proportions	Color	USCS Code	Size	Misc.
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fragments (frag.)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Cement (cem.)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	Below Ground Surface (BGS)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures	Dark = (dk)	Total Organic Vapors (TOV)
	Rust (Ru)	Well-Graded Sand (SW)	Fine to Coarse = (f-c)	Parts per million (PPM)
	Brown (Br)	Poorly-Graded Sand (SP)	Very = (v)	Not Available (N/A)
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)	More/Less = (+/-)	Depth to Water (DTW)
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	Angular	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		
		Inorganic Clays of High Plasticity, Fat Clays, Sandy Clays of High Plasticity (CH)		
		Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays		
		Organic Silts and Clays of High Plasticity, Sandy Organic Silts and Clays (OH)		
		Peat (PT)		

Depth Feet	Description	TOV (PPM)	Recovery	USCS Code	Color	Comments	Well Details	Depth Feet
						Stand Pipe ~2' above grade		
0-2	DRY, brown, f to m sand, trace silt	0.60	24"	SW/SM	Br			
2-4	DRY, brown, f sand	0.20	20"	SW	Br			
4-6	DRY, brown, f to m sand	0.20	18"	SW	Br			
6-8	DRY, brown, f to m sand	0.20	16"	SW	Br			
8-10	DRY, brown, f to c sand	0.20	17"	SW	Br			
10-12	DRY, brown, f to m sand	0.20	15"	SW	Br			
12-14	DRY brown fine sand	0.20	21"	SW	Br			
14-16	DRY, brown, f to c sand	0.20	14"	SW	Br			
16-18	DRY, light brown, f to c sand	0.30	17"	SW	lt Br			
18-20	DRY, brown, f to c sand	0.60	16"	SW	Br			
20-21	NA	NA	NA	NA	NA			
21-22	NA	NA	NA	NA	NA			
22-23	NA	NA	NA	NA	NA			
23-25	DRY, brown, f to c sand	<0.1	14"	SW	Br			
25-26	NA	NA	NA	NA	NA			
26-27	NA	NA	NA	NA	NA			
27-28	NA	NA	NA	NA	NA			
28-30	DRY, brown, f to c sand	0.10	16"	SW	Br			
30-31	NA	NA	NA	NA	NA			
31-32	NA	NA	NA	NA	NA			
32-33	NA	NA	NA	NA	NA			
33-35	DRY, brown, f to c sand	<0.1	16"	SW	Br			
35-36	NA	NA	NA	NA	NA			
36-37	NA	NA	NA	NA	NA			
37-38	NA	NA	NA	NA	NA			
38-40	DRY, brown, m to c sand	<0.1	N/A	SW	Br			
40-41	NA	NA	NA	NA	NA			
41-42	NA	NA	NA	NA	NA			
42-43	NA	NA	NA	NA	NA			
43-45	DRY, brown, f to c sand	<0.1	N/A	SW	Br			2' Betonite
45-46	NA	NA	NA	NA	NA			
46-47	NA	NA	NA	NA	NA			
47-48	NA	NA	NA	NA	NA			
48-50	DRY, brown, f to c sand	<0.1	N/A	SW	Br			
50-51	NA	NA	NA	NA	NA			
51-52	NA	NA	NA	NA	NA			
52-53	NA	NA	NA	NA	NA			
53-55	Saturated, brown, f to c sand, trace cobbles	0.10	12"	SW	Br			
55-56	NA	NA	NA	NA	NA			
56-57	NA	NA	NA	NA	NA			





## BORING LOG: MW-2/SB-2

Project: 22129

Client: Truro DPW

Drilling Contractor: Desmond Well Drilling

Drilling Equipment: Split-spoon

Drilling Location: SB-2/MW-2

Date: 2/14-15/2023

Completion Depth: 36' BGS

Elevation: N/A

Inspector: CA

Depth to Water: 28' BGS

Proportions	Color	USCS Code	Size	Misc.
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fragments (frag.)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Cement (cem.)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	Below Ground Surface (BGS)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures	Dark = (dk)	Total Organic Vapors (TOV)
	Rust (Ru)	Well-Graded Sand (SW)	Fine to Coarse = (f-c)	Parts per million (PPM)
	Brown (Br)	Poorly-Graded Sand (SP)	Very = (v)	Not Available (N/A)
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)	More/Less = (+/-)	Depth to Water (DTW)
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	Angular	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		
		Inorganic Clays of High Plasticity, Fat Clays, Sandy Clays of High Plasticity (CH)		
		Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays		
		Organic Silts and Clays of High Plasticity, Sandy Organic Silts and Clays (OH)		
		Peat (PT)		

Depth Feet	Description	TOV (PPM)	Recovery	USCS Code	Color	Comments	Well Details	Depth Feet
0-2	DRY, brown, f to m sand, trace gravel, trace organics	0.20	15"	SW	lBr	Stand Pipe ~1.5' above		
2-4	DRY, brown, f to m sand, trace gravel	<0.1	15"	SW	Br			
4-6	DRY, brown, f to m sand, trace gravel	<0.1	4"	SW	Br			
6-8	DRY, brown, f to m sand, trace gravel	<0.1	8"	SW	Br			
8-10	DRY, brown, f to m sand, trace gravel	0.10	15"	SW	Br			
10-12	DRY, brown, f to m sand, bottom 3" is light brown, f to m sand, trace gravel	0.30	17"	SW	Br/lr Br			
12-14	DRY, brown/light brown to red f to c sand, trace fines, trace gravel	0.30	19"	SW	Br/lr Br/R			
14-16	DRY brown-light brown fine medium coarse sand, trace gravel	0.20	18"	SW	Br/lr Br			
16-18	DRY brown fine medium coarse sand, trace gravel	0.10	17"	SW	Br			
18-20	DRY, brown/light brown, f to c sand, trace gravel	0.10	18"	SW	Br/lr Br			
20-21	NA	NA	NA	NA	NA			
21-22	NA	NA	NA	NA	NA			
22-23	NA	NA	NA	NA	NA			
23-25	DRY, brown, f to c sand, trace gravel	0.10	18"	SW	Br			2' Betonite
25-26	NA	NA	NA	NA	NA			
26-27	NA	NA	NA	NA	NA			
27-28	NA	NA	NA	NA	NA			
28-30	DRY, brown, m to c sand, trace gravel	0.20	17"	SW	Br	DTW = 28'		
30-31	NA	NA	NA	NA	NA			
31-32	NA	NA	NA	NA	NA			
32-33	NA	NA	NA	NA	NA			
33-35	Saturated, brown, f to c sand	NA	0"	SW	Br	2-inch 0.010 slot PVC screen (10-feet)		
35-36	NA	NA	NA	NA	NA	2-inch well set at 36'		12' Sand



**TEST PIT LOG: TP-1**

**Project:** 22129 **Date:** 2/2/23  
**Client:** Town of Truro **Completion Depth:** 10'  
**Contractor:** Truro DPW **Elevation:** TBD  
**Equipment:** Excavator **Inspector:** CA  
**Location:** Sand Pit Property; test pit completed near asphalt pile **Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (tr) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)		
	Rust (Ru)	Well-Graded Sand (SW)		
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Light brown, dry, f to m sand	SW	lt Br		0.2
2-4'	Light brown, dry, f to m sand	SW	lt Br		0.2
4-6'	Light brown, dry, f to m sand	SW	lt Br	Consistent soil throughout test pit	0.2
6-8'	Light brown, dry, f to m sand	SW	lt Br		0.1
8-10'	Light brown, dry, f to m sand	SW	lt Br		0.1
Total depth: 10'					



**TEST PIT LOG: TP-2**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit completed near asphalt pile and lobster traps

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (tr) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)		
	Rust (Ru)	Well-Graded Sand (SW)		
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Light brown, dry m to f sand, trace silt	SW	lt Br		0.2
2-4'	Light brown, dry, f to c sand and clayey sand	SW/SC	lt Br		0.3*
4-6'	Light brown, dry sand and sandy clay	SW/SC	lt Br		0.2
6-8'	Light brown dry, sand, some orange sandy clay	SW/SC	lt Br/Or		0.1
8-10'	Light brown, dry, sand and orange sandy clay	SW	lt Br/Or		0.1
Note: *Sample collected for analytical purposes					Total depth: 10'



**TEST PIT LOG: TP-3**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit completed near trailers and lobster trap

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (tr) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)		
	Rust (Ru)	Well-Graded Sand (SW)		
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Dark brown, dry, c sand, trace roots, trace clay	SW	lt Br		0.1*
2-4'	Light brown, dry, c sand and f to c sand	SW	lt Br		0.1
4-6'	Light brown, dry, c sand and f to c sand	SW	lt Br		<0.1
6-8'	Light brown, dry, c sand	SW	lt Br		<0.1
8-10'	Light brown, dry, c sand	SW	lt Br		<0.1
Note: *Sample collected from depth for analytical purposes					Total depth: 10'



**TEST PIT LOG: TP-4**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit completed behind compost pile

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)		
	Rust (Ru)	Well-Graded Sand (SW)		
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Brown, dry, c sand	SW	Br		<0.1
2-4'	Brown, dry, c sand AND brown, dry, f sand	SW	Br		<0.1
4-6'	Brown, dry, c sand AND brown, dry f sand, trace cobbles	SW	Br		0.0
6-8'	Brown, dry, c sand AND brown, dry, f sand	SW	Br		0.0
8-10'	Brown, dry, c sand AND brown, dry, f sand	SW	Br		0.0
Total depth: 10'					



**TEST PIT LOG: TP-5**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit completed near treeline

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Inorganic Clays of High Plasticity, Fat Clays,	Fine = (f)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Sandy Clays of High Plasticity (CH)	Medium = (m)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays (OL)	Coarse = (c)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)	Organic Silts and Clays of High Plasticity, Sandy Organic Silts and Clays (OH)	More/Less = (+/-)
	Rust (Ru)	Well-Graded Sand (SW)	Peat (PT)	
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-1'	Dark brown/black organics	-	dk Br	Manure like odor throughout first 4' of test pit	0.2*
1-2'	Dark, dry, brown c sand	SW	dk Br		
2-4'	Brown, dry, c sand AND dry m to c sand	SW	Br		
4-6'	Brown, dry, c sand AND dry f to m sand, with trace plastic and wood debris intermixed	SW	Br		
6-8'	Light brown, dry, c sand	SW	Br		
8-10'	Light brown, dry, c sand	SW	Br		
Note: *Sample collected for analytical purposes					Total depth: 10'



**TEST PIT LOG: TP-6**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit near wooden utility poles

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)		
	Rust (Ru)	Well-Graded Sand (SW)		
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-0.5'	organic topsoil	-	Br		
0.5-2'	Brown, dry, f sand, with trace wood and brick debris	SW	Br		0.3*
2-4'	Brown, dry, f sand, trace clayey sand	SW	Br		<0.1
4-6'	Brown, dry, f sand, trace wood and brick debris	SW	Br		<0.1
6-8'	Brown, dry, f sand	SW	Br		<0.1
8-10'	Brown, dry, f sand	SW	Br		<0.1

Note:  
\*Sample collected for analytical purposes

Total depth: 10'



**TEST PIT LOG: TP-7**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit completed near shell pile

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)		
	Rust (Ru)	Well-Graded Sand (SW)		
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-0.5'	Shells and organic soil	-	Br		
0.5-2'	Light brown, dry, f sand	SW	lt Br		<0.1
2-4'	Light brown, dry, f sand, some gray c sand	SW	lt Br		<0.1
4-6'	Light brown, dry, f sand AND brown c sand	SW	lt Br		<0.1
6-8'	Light brown, dry, f sand AND brown c sand	SW	lt Br		<0.1
8-10'	Light brown, dry, f sand AND brown c sand	SW	lt Br		<0.1
Total depth: 10'					



**TEST PIT LOG: TP-8**

**Project:** 22129 **Date:** 2/2/23  
**Client:** Town of Truro **Completion Depth:** 10'  
**Contractor:** Truro DPW **Elevation:** TBD  
**Equipment:** Excavator **Inspector:** CA  
**Location:** Sand Pit Property; test pit completed near the edge of Noons Drive **Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>	<u>Size</u>	<u>Misc.</u>
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)		
	Rust (Ru)	Well-Graded Sand (SW)		
	Brown (Br)	Poorly-Graded Sand (SP)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)		
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)		
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)		
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)		

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Light brown, dry, f sand, some organics	SW	lt Br		<0.1
2-4'	Light brown, dry, f sand, some gray clayey sand	SW/SC	lt Br		2.3*
4-6'	Light brown, dry, f sand, trace clay, trace cobbles	SW/SC	lt Br		0.7
6-8'	Light brown, dry, f sand, some coarse sand	SW	lt Br		<0.1
8-10'	Light brown, dry, f sand, some coarse sand	SW	lt Br		<0.1
Note: *Sample collected for analytical purposes					Total depth: 10'



**TEST PIT LOG: TP-9**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit completed near trees and Noons Drive by sand piles

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>		<u>Size</u>	<u>Misc.</u>
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Inorganic Clays of High Plasticity, Fat Clays,	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Sandy Clays of High Plasticity (CH)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays (OL)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)			
	Rust (Ru)	Well-Graded Sand (SW)	Organic Silts and Clays of High Plasticity, Sandy		
	Brown (Br)	Poorly-Graded Sand (SP)	Organic Silts and Clays (OH)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)	Peat (PT)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)			
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)			
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)			
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)			

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Light brown, dry, m to c sand, trace fines	SW	lt Br		0.1*
2-4'	Light brown, dry, m to c sand, trace fines	SW	lt Br		<0.1
4-6'	Light brown, dry, m to c sand, trace fines	SW	lt Br	Consistent soil throughout test pit	<0.1
6-8'	Light brown, dry, m to c sand, trace fines	SW	lt Br		<0.1
8-10'	Light brown, dry, m to c sand, trace fines	SW	lt Br		<0.1
Note: *Sample collected for analytical purposes					Total depth: 10'



**TEST PIT LOG: TP-10**

**Project:** 22129

**Client:** Town of Truro

**Contractor:** Truro DPW

**Equipment:** Excavator

**Location:** Sand Pit Property; test pit completed near trees and Noons Drive by sand piles

**Date:** 2/2/23

**Completion Depth:** 10'

**Elevation:** TBD

**Inspector:** CA

**Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>		<u>Size</u>	<u>Misc.</u>
trace (trc) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Inorganic Clays of High Plasticity, Fat Clays,	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Sandy Clays of High Plasticity (CH)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays (OL)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)			
	Rust (Ru)	Well-Graded Sand (SW)	Organic Silts and Clays of High Plasticity, Sandy		
	Brown (Br)	Poorly-Graded Sand (SP)	Organic Silts and Clays (OH)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)	Peat (PT)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)			
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)			
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)			
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)			

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Light brown, dry, m to c sand, trace fines	SW	lt br lt Br		<0.1
2-4'	Light brown, dry, m to c sand, gray sandy clay	SW/SC	lt Br		<0.1
4-6'	Light brown, dry, m to c sand, gray sandy clay	SW/SC	lt Br		<0.1
6-8'	Light brown, dry, m to c sand, gray sandy clay	SW/SC	lt Br		0.1*
8-10'	Light brown, dry, m to c sand	SW	lt Br		<0.1
Note: *Sample collected for analytical purposes					Total depth: 10'



**TEST PIT LOG: TP-11**

**Project:** 22129 **Date:** 2/2/23  
**Client:** Town of Truro **Completion Depth:** 10'  
**Contractor:** Truro DPW **Elevation:** TBD  
**Equipment:** Excavator **Inspector:** CA  
**Location:** Sand Pit Property; test pit completed on southeast plateau of property **Depth to Water:** N/A

<u>Proportions</u>	<u>Color</u>	<u>USCS Code</u>		<u>Size</u>	<u>Misc.</u>
trace (tr) 0 - 10%	Blue (Bl)	Well-Graded Gravel (GW)	Inorganic Clays of High Plasticity, Fat Clays,	Fine = (f)	Fine to Coarse = (f-c)
little (li) 10 - 20%	Red (R)	Poorly-Graded Gravel (GP)	Sandy Clays of High Plasticity (CH)	Medium = (m)	Very = (v)
some (so) 20 - 35%	Light (lt)	Silty Gravels, Gravel-Sand-Silt Mixtures (GM)	Organic Silts and Clays of Low to Medium Plasticity, Sandy Organic Silts, and Clays (OL)	Coarse = (c)	More/Less = (+/-)
and 35 - 50%	Dark (dk)	Clayey Gravels, Gravel-Sand-Clay Mixtures (GC)			
	Rust (Ru)	Well-Graded Sand (SW)	Organic Silts and Clays of High Plasticity, Sandy		
	Brown (Br)	Poorly-Graded Sand (SP)	Organic Silts and Clays (OH)		
	Orange (Or)	Silty Sands, Sand Silt Mixtures (SM)	Peat (PT)		
	Black (Blk)	Clayey Sands, Sand-Clay Mixtures (SC)			
	<u>Angular</u>	Inorganic Silts, Clayey Silts of Low to Medium Plasticity (ML)			
	Round (rnd.)	Inorganic Silts, Micaceous, or Diatomaceous Silty Soils, Elastic Silts (MH)			
	Angular (ang.)	Inorganic Clays of Low to Medium Plasticity, Gravely, Sandy, and Silty Clays (CL)			

Depth Feet	Description	USCS Code	Color	Comments	TOV (PPM)
0-2'	Light brown, dry, m to c sand	SW	lt br lt Br		0.1*
2-4'	Light brown, dry, m to c sand	SW	lt Br		0.5
4-6'	Light brown, dry, m to c sand	SW	lt Br	Consistent soil throughout test pit	<0.1
6-8'	Light brown, dry, m to c sand	SW	lt Br		<0.1
8-10'	Light brown, dry, m to c sand	SW	lt Br		<0.1
Note: *Sample collected for analytical purposes					Total depth: 10'

APPENDIX E  
LABORATORY REPORTS

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March 6, 2023

Bryan Massa  
Horsley Witten Group  
90 Route 6A Unit #1  
Sandwich, MA 02563

Project Location: Sand Pit Rd, Truro, MA  
Client Job Number:  
Project Number: 22129  
Laboratory Work Order Number: 23B0764

Enclosed are results of analyses for samples as received by the laboratory on February 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kaitlyn A. Feliciano  
Project Manager

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Horsley Witten Group  
90 Route 6A Unit #1  
Sandwich, MA 02563  
ATTN: Bryan Massa

REPORT DATE: 3/6/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 22129

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 23B0764

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Sand Pit Rd, Truro, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TP-2 (2-4)	23B0764-01	Soil		SM 2540G SOP-466 PFAS	
TP-5 (0-2)	23B0764-02	Soil		SM 2540G SOP-466 PFAS	
TP-6 (0-2)	23B0764-03	Soil		SM 2540G SOP-466 PFAS	
TP-9 (0-2)	23B0764-04	Soil		SM 2540G SOP-466 PFAS	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

**SOP-466 PFAS**

**Qualifications:**

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**S-29**

Extracted Internal Standard is outside of control limits.

**Analyte & Samples(s) Qualified:**

**M2-6:2FTS**

23B0764-01[TP-2 (2-4)], 23B0764-02[TP-5 (0-2)], 23B0764-03[TP-6 (0-2)]

**M2PFTA**

23B0764-03[TP-6 (0-2)]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington  
Technical Representative

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Field Sample #: TP-2 (2-4)

Sampled: 2/2/2023 12:30

Sample ID: 23B0764-01

Sample Matrix: Soil

## Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.48	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorobutanesulfonic acid (PFBS)	ND	0.48	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoropentanoic acid (PFPeA)	ND	0.48	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorohexanoic acid (PFHxA)	ND	0.48	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
11Cl-PF3OUdS (F53B Major)	ND	0.48	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
9Cl-PF3ONS (F53B Minor)	ND	0.48	0.26	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.48	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.48	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.48	0.21	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorodecanoic acid (PFDA)	ND	0.48	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.48	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.48	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.48	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
N-EtFOSAA (NEtFOSAA)	ND	0.48	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.48	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorotetradecanoic acid (PFTA)	ND	0.48	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.48	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.48	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.48	0.23	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorooctanesulfonamide (FOSA)	ND	0.48	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.48	0.21	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.48	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoro-1-butanesulfonamide (FBSA)	ND	0.48	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorohexanesulfonic acid (PFHxS)	ND	0.48	0.22	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.48	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.48	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.48	0.24	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.48	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.48	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.48	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluoroheptanoic acid (PFHpA)	ND	0.48	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorooctanoic acid (PFOA)	ND	0.48	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorooctanesulfonic acid (PFOS)	ND	0.48	0.29	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB
Perfluorononanoic acid (PFNA)	ND	0.48	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:16	RRB

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Sampled: 2/2/2023 12:30

Field Sample #: TP-2 (2-4)

Sample ID: 23B0764-01

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.5		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0764-02

Sample Matrix: Soil

## Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.47	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorobutanesulfonic acid (PFBS)	ND	0.47	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoropentanoic acid (PFPeA)	ND	0.47	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorohexanoic acid (PFHxA)	ND	0.47	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
11Cl-PF3OUdS (F53B Major)	ND	0.47	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
9Cl-PF3ONS (F53B Minor)	ND	0.47	0.25	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.47	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.47	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.47	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorodecanoic acid (PFDA)	ND	0.47	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.47	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.47	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.47	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
N-EtFOSAA (NEtFOSAA)	ND	0.47	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.47	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorotetradecanoic acid (PFTA)	ND	0.47	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.47	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.47	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.47	0.22	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorooctanesulfonamide (FOSA)	ND	0.47	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.47	0.21	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.47	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoro-1-butanesulfonamide (FBSA)	ND	0.47	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorohexanesulfonic acid (PFHxS)	ND	0.47	0.21	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.47	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.47	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.47	0.23	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.47	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.47	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.47	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluoroheptanoic acid (PFHpA)	ND	0.47	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorooctanoic acid (PFOA)	ND	0.47	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorooctanesulfonic acid (PFOS)	ND	0.47	0.29	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB
Perfluorononanoic acid (PFNA)	ND	0.47	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:23	RRB

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Sampled: 2/2/2023 10:15

Field Sample #: TP-5 (0-2)

Sample ID: 23B0764-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.9		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Field Sample #: TP-6 (0-2)

Sampled: 2/2/2023 08:30

Sample ID: 23B0764-03

Sample Matrix: Soil

## Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.45	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorobutanesulfonic acid (PFBS)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoropentanoic acid (PFPeA)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorohexanoic acid (PFHxA)	ND	0.45	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
11Cl-PF3OUdS (F53B Major)	ND	0.45	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
9Cl-PF3ONS (F53B Minor)	ND	0.45	0.24	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.45	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.45	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.45	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorodecanoic acid (PFDA)	ND	0.45	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.45	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.45	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.45	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
N-EtFOSAA (NEtFOSAA)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.45	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorotetradecanoic acid (PFTA)	ND	0.45	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.45	0.12	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.45	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.45	0.21	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorooctanesulfonamide (FOSA)	ND	0.45	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.45	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.45	0.12	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoro-1-butanesulfonamide (FBSA)	ND	0.45	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorohexanesulfonic acid (PFHxS)	ND	0.45	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.45	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.45	0.22	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.45	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.45	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluoroheptanoic acid (PFHpA)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorooctanoic acid (PFOA)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorooctanesulfonic acid (PFOS)	ND	0.45	0.27	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB
Perfluorononanoic acid (PFNA)	ND	0.45	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:31	RRB

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Sampled: 2/2/2023 08:30

Field Sample #: TP-6 (0-2)

Sample ID: 23B0764-03

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.7		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Field Sample #: TP-9 (0-2)

Sampled: 2/2/2023 11:00

Sample ID: 23B0764-04

Sample Matrix: Soil

## Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.43	0.17	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorobutanesulfonic acid (PFBS)	ND	0.43	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoropentanoic acid (PFPeA)	ND	0.43	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorohexanoic acid (PFHxA)	ND	0.43	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
11Cl-PF3OUdS (F53B Major)	ND	0.43	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
9Cl-PF3ONS (F53B Minor)	ND	0.43	0.23	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.43	0.12	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.43	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.43	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorodecanoic acid (PFDA)	ND	0.43	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.43	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.43	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.43	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
N-EtFOSAA (NEtFOSAA)	ND	0.43	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.43	0.18	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorotetradecanoic acid (PFTA)	ND	0.43	0.13	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.43	0.12	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.43	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.43	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorooctanesulfonamide (FOSA)	ND	0.43	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.43	0.19	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.43	0.12	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoro-1-butanesulfonamide (FBSA)	ND	0.43	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorohexanesulfonic acid (PFHxS)	ND	0.43	0.20	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.43	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.43	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.43	0.21	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.43	0.16	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.43	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.43	0.12	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluoroheptanoic acid (PFHpA)	ND	0.43	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorooctanoic acid (PFOA)	ND	0.43	0.14	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorooctanesulfonic acid (PFOS)	ND	0.43	0.26	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB
Perfluorononanoic acid (PFNA)	ND	0.43	0.15	µg/kg dry	1		SOP-466 PFAS	2/17/23	2/24/23 2:38	RRB

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0764

Date Received: 2/6/2023

Sampled: 2/2/2023 11:00

Field Sample #: TP-9 (0-2)

Sample ID: 23B0764-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	96.6		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

**Sample Extraction Data****Prep Method: % Solids      Analytical Method: SM 2540G**

<b>Lab Number [Field ID]</b>	<b>Batch</b>	<b>Date</b>
23B0764-01 [TP-2 (2-4)]	B330944	02/08/23
23B0764-02 [TP-5 (0-2)]	B330944	02/08/23
23B0764-03 [TP-6 (0-2)]	B330944	02/08/23
23B0764-04 [TP-9 (0-2)]	B330944	02/08/23

**Prep Method: SOP 465-PFAAS      Analytical Method: SOP-466 PFAS**

<b>Lab Number [Field ID]</b>	<b>Batch</b>	<b>Initial [g]</b>	<b>Final [mL]</b>	<b>Date</b>
23B0764-01 [TP-2 (2-4)]	B330939	5.92	5.00	02/17/23
23B0764-02 [TP-5 (0-2)]	B330939	5.96	5.00	02/17/23
23B0764-03 [TP-6 (0-2)]	B330939	5.91	5.00	02/17/23
23B0764-04 [TP-9 (0-2)]	B330939	5.96	5.00	02/17/23

**QUALITY CONTROL**
**Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330939 - SOP 465-PFAAS**
**Blank (B330939-BLK1)**

Prepared: 02/17/23 Analyzed: 02/23/23

Perfluorobutanoic acid (PFBA)	ND	0.44	µg/kg wet							
Perfluorobutanesulfonic acid (PFBS)	ND	0.44	µg/kg wet							
Perfluoropentanoic acid (PFPeA)	ND	0.44	µg/kg wet							
Perfluorohexanoic acid (PFHxA)	ND	0.44	µg/kg wet							
11Cl-PF3OUdS (F53B Major)	ND	0.44	µg/kg wet							
9Cl-PF3ONS (F53B Minor)	ND	0.44	µg/kg wet							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.44	µg/kg wet							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.44	µg/kg wet							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.44	µg/kg wet							
Perfluorodecanoic acid (PFDA)	ND	0.44	µg/kg wet							
Perfluorododecanoic acid (PFDoA)	ND	0.44	µg/kg wet							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	0.44	µg/kg wet							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.44	µg/kg wet							
N-EtFOSAA (NEtFOSAA)	ND	0.44	µg/kg wet							
N-MeFOSAA (NMeFOSAA)	ND	0.44	µg/kg wet							
Perfluorotetradecanoic acid (PFTA)	ND	0.44	µg/kg wet							
Perfluorotridecanoic acid (PFTrDA)	ND	0.44	µg/kg wet							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.44	µg/kg wet							
Perfluorodecanesulfonic acid (PFDS)	ND	0.44	µg/kg wet							
Perfluorooctanesulfonamide (FOSA)	ND	0.44	µg/kg wet							
Perfluorononanesulfonic acid (PFNS)	ND	0.44	µg/kg wet							
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.44	µg/kg wet							
Perfluoro-1-butanesulfonamide (FBSA)	ND	0.44	µg/kg wet							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.44	µg/kg wet							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.44	µg/kg wet							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.44	µg/kg wet							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.44	µg/kg wet							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.44	µg/kg wet							
Perfluoroundecanoic acid (PFUnA)	ND	0.44	µg/kg wet							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.44	µg/kg wet							
Perfluoroheptanoic acid (PFHpA)	ND	0.44	µg/kg wet							
Perfluorooctanoic acid (PFOA)	ND	0.44	µg/kg wet							
Perfluorooctanesulfonic acid (PFOS)	ND	0.44	µg/kg wet							
Perfluorononanoic acid (PFNA)	ND	0.44	µg/kg wet							

**LCS (B330939-BS1)**

Prepared: 02/17/23 Analyzed: 02/23/23

Perfluorobutanoic acid (PFBA)	2.07	0.44	µg/kg wet	2.22	93.1	71-135
Perfluorobutanesulfonic acid (PFBS)	1.76	0.44	µg/kg wet	1.97	89.5	72-128
Perfluoropentanoic acid (PFPeA)	2.03	0.44	µg/kg wet	2.22	91.3	69-132
Perfluorohexanoic acid (PFHxA)	2.08	0.44	µg/kg wet	2.22	93.4	70-132
11Cl-PF3OUdS (F53B Major)	2.01	0.44	µg/kg wet	2.10	95.7	41.8-128
9Cl-PF3ONS (F53B Minor)	1.83	0.44	µg/kg wet	2.07	88.4	51.1-141
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	0.44	µg/kg wet	2.10	90.0	55.2-122
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.84	0.44	µg/kg wet	2.22	82.8	27.6-137
8:2 Fluorotelomersulfonic acid (8:2FTS A)	1.99	0.44	µg/kg wet	2.14	93.4	65-137
Perfluorodecanoic acid (PFDA)	1.90	0.44	µg/kg wet	2.22	85.5	69-133
Perfluorododecanoic acid (PFDoA)	1.91	0.44	µg/kg wet	2.22	85.8	69-135
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	2.03	0.44	µg/kg wet	1.98	103	56.7-133

**QUALITY CONTROL**
**Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330939 - SOP 465-PFAAS**
**LCS (B330939-BS1)**

Prepared: 02/17/23 Analyzed: 02/23/23

Perfluoroheptanesulfonic acid (PFHpS)	1.95	0.44	µg/kg wet	2.13		91.5	70-132			
N-EtFOSAA (NEtFOSAA)	1.73	0.44	µg/kg wet	2.22		77.6	61-139			
N-MeFOSAA (NMeFOSAA)	2.43	0.44	µg/kg wet	2.22		109	63-144			
Perfluorotetradecanoic acid (PFTA)	1.94	0.44	µg/kg wet	2.22		87.0	69-133			
Perfluorotridecanoic acid (PFTTrDA)	1.99	0.44	µg/kg wet	2.22		89.2	66-139			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	1.79	0.44	µg/kg wet	2.08		86.0	62-145			
Perfluorodecanesulfonic acid (PFDS)	1.80	0.44	µg/kg wet	2.14		83.8	59-134			
Perfluorooctanesulfonamide (FOSA)	1.95	0.44	µg/kg wet	2.22		87.6	67-137			
Perfluorononanesulfonic acid (PFNS)	1.85	0.44	µg/kg wet	2.14		86.4	69-125			
Perfluoro-1-hexanesulfonamide (FHxSA)	1.97	0.44	µg/kg wet	2.22		88.5	51.4-142			
Perfluoro-1-butanesulfonamide (FBSA)	2.05	0.44	µg/kg wet	2.22		92.2	53.5-129			
Perfluorohexanesulfonic acid (PFHxS)	1.77	0.44	µg/kg wet	2.04		87.0	67-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	2.06	0.44	µg/kg wet	2.22		92.4	57.8-127			
Perfluoro-5-oxahexanoic acid (PFMBA)	2.22	0.44	µg/kg wet	2.22		99.6	56.5-132			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	2.11	0.44	µg/kg wet	2.11		99.8	64-140			
Perfluoropentanesulfonic acid (PFPeS)	1.80	0.44	µg/kg wet	2.09		86.3	73-123			
Perfluoroundecanoic acid (PFUnA)	1.97	0.44	µg/kg wet	2.22		88.4	64-136			
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	2.36	0.44	µg/kg wet	2.22		106	54.5-128			
Perfluoroheptanoic acid (PFHpA)	2.12	0.44	µg/kg wet	2.22		95.5	71-131			
Perfluorooctanoic acid (PFOA)	1.91	0.44	µg/kg wet	2.22		85.9	69-133			
Perfluorooctanesulfonic acid (PFOS)	1.94	0.44	µg/kg wet	2.06		94.3	68-136			
Perfluorononanoic acid (PFNA)	2.06	0.44	µg/kg wet	2.22		92.6	72-129			

**Matrix Spike (B330939-MS1)**
**Source: 23B0764-01**

Prepared: 02/17/23 Analyzed: 02/23/23

Perfluorobutanoic acid (PFBA)	2.84	0.50	µg/kg dry	2.53	ND	112	71-135			
Perfluorobutanesulfonic acid (PFBS)	2.33	0.50	µg/kg dry	2.24	ND	104	72-128			
Perfluoropentanoic acid (PFPeA)	2.67	0.50	µg/kg dry	2.53	ND	106	69-132			
Perfluorohexanoic acid (PFHxA)	2.79	0.50	µg/kg dry	2.53	ND	110	70-132			
11Cl-PF3OUdS (F53B Major)	2.92	0.50	µg/kg dry	2.39	ND	122	4.02-158			
9Cl-PF3ONS (F53B Minor)	2.60	0.50	µg/kg dry	2.36	ND	110	52.5-150			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.60	0.50	µg/kg dry	2.39	ND	109	50.7-124			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.75	0.50	µg/kg dry	2.53	ND	109	29.2-146			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	2.67	0.50	µg/kg dry	2.43	ND	110	65-137			
Perfluorodecanoic acid (PFDA)	2.52	0.50	µg/kg dry	2.53	ND	99.5	69-133			
Perfluorododecanoic acid (PFDoA)	2.51	0.50	µg/kg dry	2.53	ND	99.0	69-135			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.64	0.50	µg/kg dry	2.26	ND	117	60.7-135			
Perfluoroheptanesulfonic acid (PFHpS)	2.57	0.50	µg/kg dry	2.42	ND	106	70-132			
N-EtFOSAA (NEtFOSAA)	2.48	0.50	µg/kg dry	2.53	ND	97.9	61-139			
N-MeFOSAA (NMeFOSAA)	3.33	0.50	µg/kg dry	2.53	ND	131	63-144			
Perfluorotetradecanoic acid (PFTA)	2.70	0.50	µg/kg dry	2.53	ND	106	69-133			
Perfluorotridecanoic acid (PFTTrDA)	2.71	0.50	µg/kg dry	2.53	ND	107	66-139			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	2.30	0.50	µg/kg dry	2.37	ND	97.1	62-145			
Perfluorodecanesulfonic acid (PFDS)	2.39	0.50	µg/kg dry	2.44	ND	97.7	59-134			
Perfluorooctanesulfonamide (FOSA)	2.40	0.50	µg/kg dry	2.53	ND	94.7	67-137			
Perfluorononanesulfonic acid (PFNS)	2.48	0.50	µg/kg dry	2.43	ND	102	69-125			
Perfluoro-1-hexanesulfonamide (FHxSA)	2.68	0.50	µg/kg dry	2.53	ND	106	18.9-162			
Perfluoro-1-butanesulfonamide (FBSA)	2.66	0.50	µg/kg dry	2.53	ND	105	49.8-135			
Perfluorohexanesulfonic acid (PFHxS)	2.52	0.50	µg/kg dry	2.32	ND	109	67-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	2.73	0.50	µg/kg dry	2.53	ND	108	62-155			
Perfluoro-5-oxahexanoic acid (PFMBA)	2.96	0.50	µg/kg dry	2.53	ND	117	52.1-148			

**QUALITY CONTROL**
**Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330939 - SOP 465-PFAAS**
**Matrix Spike (B330939-MS1)**
**Source: 23B0764-01**

Prepared: 02/17/23 Analyzed: 02/23/23

6:2 Fluorotelomersulfonic acid (6:2FTS A)	2.31	0.50	µg/kg dry	2.41	ND	96.1	64-140			
Perfluoropentanesulfonic acid (PFPeS)	2.39	0.50	µg/kg dry	2.38	ND	100	73-123			
Perfluoroundecanoic acid (PFUnA)	2.59	0.50	µg/kg dry	2.53	ND	102	64-136			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.13	0.50	µg/kg dry	2.53	ND	123	54.6-133			
Perfluoroheptanoic acid (PFHpA)	2.79	0.50	µg/kg dry	2.53	ND	110	71-131			
Perfluorooctanoic acid (PFOA)	2.56	0.50	µg/kg dry	2.53	ND	101	69-133			
Perfluorooctanesulfonic acid (PFOS)	2.36	0.50	µg/kg dry	2.34	ND	101	68-136			
Perfluorononanoic acid (PFNA)	2.62	0.50	µg/kg dry	2.53	ND	103	72-129			

**Matrix Spike Dup (B330939-MSD1)**
**Source: 23B0764-01**

Prepared: 02/17/23 Analyzed: 02/24/23

Perfluorobutanoic acid (PFBA)	2.90	0.50	µg/kg dry	2.53	ND	115	71-135	2.29	30	
Perfluorobutanesulfonic acid (PFBS)	2.41	0.50	µg/kg dry	2.24	ND	108	72-128	3.34	30	
Perfluoropentanoic acid (PFPeA)	2.80	0.50	µg/kg dry	2.53	ND	111	69-132	4.59	30	
Perfluorohexanoic acid (PFHxA)	2.89	0.50	µg/kg dry	2.53	ND	114	70-132	3.45	30	
11Cl-PF3OUdS (F53B Major)	2.75	0.50	µg/kg dry	2.39	ND	115	4.02-158	5.90	30	
9Cl-PF3ONS (F53B Minor)	2.34	0.50	µg/kg dry	2.36	ND	99.0	52.5-150	10.7	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.61	0.50	µg/kg dry	2.39	ND	109	50.7-124	0.464	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.79	0.50	µg/kg dry	2.53	ND	110	29.2-146	1.57	30	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	2.90	0.50	µg/kg dry	2.43	ND	119	65-137	8.14	30	
Perfluorodecanoic acid (PFDA)	2.55	0.50	µg/kg dry	2.53	ND	101	69-133	1.14	30	
Perfluorododecanoic acid (PFDoA)	2.41	0.50	µg/kg dry	2.53	ND	95.3	69-135	3.86	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	2.70	0.50	µg/kg dry	2.25	ND	120	60.7-135	2.28	30	
Perfluoroheptanesulfonic acid (PFHpS)	2.77	0.50	µg/kg dry	2.42	ND	114	70-132	7.56	30	
N-EtFOSAA (NEtFOSAA)	3.15	0.50	µg/kg dry	2.53	ND	124	61-139	23.8	30	
N-MeFOSAA (NMeFOSAA)	3.00	0.50	µg/kg dry	2.53	ND	119	63-144	10.3	30	
Perfluorotetradecanoic acid (PFTA)	2.59	0.50	µg/kg dry	2.53	ND	102	69-133	4.22	30	
Perfluorotridecanoic acid (PFTrDA)	2.51	0.50	µg/kg dry	2.53	ND	99.1	66-139	7.57	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	2.43	0.50	µg/kg dry	2.37	ND	102	62-145	5.37	30	
Perfluorodecanesulfonic acid (PFDS)	2.55	0.50	µg/kg dry	2.44	ND	105	59-134	6.70	30	
Perfluorooctanesulfonamide (FOSA)	2.30	0.50	µg/kg dry	2.53	ND	90.6	67-137	4.47	30	
Perfluoronanesulfonic acid (PFNS)	2.54	0.50	µg/kg dry	2.43	ND	105	69-125	2.32	30	
Perfluoro-1-hexanesulfonamide (FHxSA)	2.66	0.50	µg/kg dry	2.53	ND	105	18.9-162	0.767	30	
Perfluoro-1-butananesulfonamide (FBSA)	2.71	0.50	µg/kg dry	2.53	ND	107	49.8-135	1.74	30	
Perfluorohexanesulfonic acid (PFHxS)	2.33	0.50	µg/kg dry	2.32	ND	100	67-130	7.92	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	2.79	0.50	µg/kg dry	2.53	ND	110	62-155	2.15	30	
Perfluoro-5-oxahexanoic acid (PFMBA)	3.02	0.50	µg/kg dry	2.53	ND	119	52.1-148	2.14	30	
6:2 Fluorotelomersulfonic acid (6:2FTS A)	2.01	0.50	µg/kg dry	2.41	ND	83.4	64-140	14.1	30	
Perfluoropentanesulfonic acid (PFPeS)	2.45	0.50	µg/kg dry	2.38	ND	103	73-123	2.59	30	
Perfluoroundecanoic acid (PFUnA)	2.93	0.50	µg/kg dry	2.53	ND	116	64-136	12.2	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.17	0.50	µg/kg dry	2.53	ND	125	54.6-133	1.29	30	
Perfluoroheptanoic acid (PFHpA)	2.78	0.50	µg/kg dry	2.53	ND	110	71-131	0.579	30	
Perfluorooctanoic acid (PFOA)	2.67	0.50	µg/kg dry	2.53	ND	106	69-133	4.52	30	
Perfluorooctanesulfonic acid (PFOS)	2.39	0.50	µg/kg dry	2.34	ND	102	68-136	1.13	30	
Perfluorononanoic acid (PFNA)	2.77	0.50	µg/kg dry	2.53	ND	109	72-129	5.51	30	

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
S-29	Extracted Internal Standard is outside of control limits.

**INTERNAL STANDARD AREA AND RT SUMMARY**
**SOP-466 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>TP-2 (2-4) (23B0764-01 )</b>			Lab File ID: 23B0764-01.d			Analyzed: 02/24/23 02:16			
M8FOSA	300947	4.0845	394,923.00	4.0845	76	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	120914.2	2.62	165,484.00	2.62	73	50 - 150	0.0000	+/-0.50	
M2PFTA	601618.6	4.362167	1,024,322.00	4.362167	59	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	153685.7	3.850933	215,848.00	3.850933	71	50 - 150	0.0000	+/-0.50	
MPFBA	456304.5	1.12495	534,345.00	1.12495	85	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	97466.73	2.945967	107,660.00	2.945967	91	50 - 150	0.0000	+/-0.50	
M6PFDA	674844.6	3.851417	766,328.00	3.851417	88	50 - 150	0.0000	+/-0.50	
M3PFBS	126235.3	2.011067	149,852.00	2.011067	84	50 - 150	0.0000	+/-0.50	
M7PFUnA	749346.8	3.994	839,980.00	3.994	89	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	54052.39	3.501317	121,538.00	3.501317	44	50 - 150	0.0000	+/-0.50	*
M5PFPeA	389824.4	1.816233	446,990.00	1.816233	87	50 - 150	0.0000	+/-0.50	
M5PFHxA	630695.6	2.7145	782,300.00	2.706317	81	50 - 150	0.0082	+/-0.50	
M3PFHxS	85135.62	3.28425	128,330.00	3.28425	66	50 - 150	0.0000	+/-0.50	
M4PFHpA	600563	3.251867	884,017.00	3.251867	68	50 - 150	0.0000	+/-0.50	
M8PFOA	561433	3.51815	743,619.00	3.51815	76	50 - 150	0.0000	+/-0.50	
M8PFOS	110406.2	3.700067	128,346.00	3.700067	86	50 - 150	0.0000	+/-0.50	
M9PFNA	489055.2	3.7011	663,153.00	3.7011	74	50 - 150	0.0000	+/-0.50	
MPFDoA	597691.3	4.1288	865,995.00	4.1288	69	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	154245.8	4.001467	210,785.00	4.001467	73	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	179448.9	3.921883	266,645.00	3.9219	67	50 - 150	0.0000	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**
**SOP-466 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>TP-5 (0-2) (23B0764-02 )</b>			Lab File ID: 23B0764-02.d			Analyzed: 02/24/23 02:23			
M8FOSA	302262.9	4.0845	394,923.00	4.0845	77	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	97141.35	2.62	165,484.00	2.62	59	50 - 150	0.0000	+/-0.50	
M2PFTA	634947.5	4.362167	1,024,322.00	4.362167	62	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	150172.7	3.850933	215,848.00	3.850933	70	50 - 150	0.0000	+/-0.50	
MPFBA	417459	1.12495	534,345.00	1.12495	78	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	86172.77	2.945967	107,660.00	2.945967	80	50 - 150	0.0000	+/-0.50	
M6PFDA	580702.9	3.851417	766,328.00	3.851417	76	50 - 150	0.0000	+/-0.50	
M3PFBS	120749.9	2.002783	149,852.00	2.011067	81	50 - 150	-0.0083	+/-0.50	
M7PFUnA	689776.8	3.994	839,980.00	3.994	82	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	47517.57	3.501317	121,538.00	3.501317	39	50 - 150	0.0000	+/-0.50	*
M5PFPeA	357549.3	1.816233	446,990.00	1.816233	80	50 - 150	0.0000	+/-0.50	
M5PFHxA	586050.2	2.706317	782,300.00	2.706317	75	50 - 150	0.0000	+/-0.50	
M3PFHxS	82654.92	3.28425	128,330.00	3.28425	64	50 - 150	0.0000	+/-0.50	
M4PFHpA	589917.9	3.251867	884,017.00	3.251867	67	50 - 150	0.0000	+/-0.50	
M8PFOA	517576.7	3.51815	743,619.00	3.51815	70	50 - 150	0.0000	+/-0.50	
M8PFOS	108693.4	3.700067	128,346.00	3.700067	85	50 - 150	0.0000	+/-0.50	
M9PFNA	474739.5	3.7011	663,153.00	3.7011	72	50 - 150	0.0000	+/-0.50	
MPFD <sub>o</sub> A	602464.6	4.1288	865,995.00	4.1288	70	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	159472.5	4.001467	210,785.00	4.001467	76	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	180544.5	3.921883	266,645.00	3.9219	68	50 - 150	0.0000	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**
**SOP-466 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>TP-6 (0-2) (23B0764-03 )</b>			Lab File ID: 23B0764-03.d			Analyzed: 02/24/23 02:31			
M8FOSA	345409.3	4.0845	394,923.00	4.0845	87	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	90752.05	2.62	165,484.00	2.62	55	50 - 150	0.0000	+/-0.50	
M2PFTA	489346.8	4.362167	1,024,322.00	4.362167	48	50 - 150	0.0000	+/-0.50	*
M2-8:2FTS	151829.9	3.850933	215,848.00	3.850933	70	50 - 150	0.0000	+/-0.50	
MPFBA	454310.1	1.12495	534,345.00	1.12495	85	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	88611.55	2.945967	107,660.00	2.945967	82	50 - 150	0.0000	+/-0.50	
M6PFDA	655594.4	3.851417	766,328.00	3.851417	86	50 - 150	0.0000	+/-0.50	
M3PFBS	120466.8	2.002783	149,852.00	2.011067	80	50 - 150	-0.0083	+/-0.50	
M7PFUnA	695907.3	3.994	839,980.00	3.994	83	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	46419.98	3.501317	121,538.00	3.501317	38	50 - 150	0.0000	+/-0.50	*
M5PFPeA	379111.6	1.816233	446,990.00	1.816233	85	50 - 150	0.0000	+/-0.50	
M5PFHxA	589614.6	2.7145	782,300.00	2.706317	75	50 - 150	0.0082	+/-0.50	
M3PFHxS	79888.6	3.28425	128,330.00	3.28425	62	50 - 150	0.0000	+/-0.50	
M4PFHpA	558762.8	3.251867	884,017.00	3.251867	63	50 - 150	0.0000	+/-0.50	
M8PFOA	479048.1	3.51815	743,619.00	3.51815	64	50 - 150	0.0000	+/-0.50	
M8PFOS	99866.8	3.700067	128,346.00	3.700067	78	50 - 150	0.0000	+/-0.50	
M9PFNA	502964.5	3.7011	663,153.00	3.7011	76	50 - 150	0.0000	+/-0.50	
MPFDoA	524075.5	4.1288	865,995.00	4.1288	61	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	137766.5	4.001467	210,785.00	4.001467	65	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	178008.4	3.921883	266,645.00	3.9219	67	50 - 150	0.0000	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**
**SOP-466 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>TP-9 (0-2) (23B0764-04 )</b>			Lab File ID: 23B0764-04.d			Analyzed: 02/24/23 02:38			
M8FOSA	310232.7	4.0845	394,923.00	4.0845	79	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	114961.9	2.62	165,484.00	2.62	69	50 - 150	0.0000	+/-0.50	
M2PFTA	515894.7	4.362167	1,024,322.00	4.362167	50	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	153474.9	3.850933	215,848.00	3.850933	71	50 - 150	0.0000	+/-0.50	
MPFBA	452856.7	1.12495	534,345.00	1.12495	85	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	99877.44	2.945967	107,660.00	2.945967	93	50 - 150	0.0000	+/-0.50	
M6PFDA	709595.2	3.851417	766,328.00	3.851417	93	50 - 150	0.0000	+/-0.50	
M3PFBS	124727.7	2.011067	149,852.00	2.011067	83	50 - 150	0.0000	+/-0.50	
M7PFUnA	649209.2	3.994	839,980.00	3.994	77	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	62043.43	3.509617	121,538.00	3.501317	51	50 - 150	0.0083	+/-0.50	
M5PFPeA	384309.6	1.816233	446,990.00	1.816233	86	50 - 150	0.0000	+/-0.50	
M5PFHxA	596509.5	2.7145	782,300.00	2.706317	76	50 - 150	0.0082	+/-0.50	
M3PFHxS	79033.83	3.28425	128,330.00	3.28425	62	50 - 150	0.0000	+/-0.50	
M4PFHpA	569208.8	3.251867	884,017.00	3.251867	64	50 - 150	0.0000	+/-0.50	
M8PFOA	478448.1	3.51815	743,619.00	3.51815	64	50 - 150	0.0000	+/-0.50	
M8PFOS	110955.8	3.700067	128,346.00	3.700067	86	50 - 150	0.0000	+/-0.50	
M9PFNA	481326.1	3.7011	663,153.00	3.7011	73	50 - 150	0.0000	+/-0.50	
MPFDoA	546628.7	4.1288	865,995.00	4.1288	63	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	147042.8	4.001467	210,785.00	4.001467	70	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	178367.7	3.921883	266,645.00	3.9219	67	50 - 150	0.0000	+/-0.50	

## INTERNAL STANDARD AREA AND RT SUMMARY

## SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Blank (B330939-BLK1 )</b>			Lab File ID: B330939-BLK1.d			Analyzed: 02/23/23 23:51			
M8FOSA	421470.3	4.0845	394,923.00	4.0845	107	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	158113.9	2.62	165,484.00	2.628217	96	50 - 150	-0.0082	+/-0.50	
M2PFTA	1105172	4.362167	1,024,322.00	4.362184	108	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	211276	3.850933	215,848.00	3.850933	98	50 - 150	0.0000	+/-0.50	
MPFBA	649940.9	1.12495	534,345.00	1.13325	122	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	145393.9	2.93785	107,660.00	2.945967	135	50 - 150	-0.0081	+/-0.50	
M6PFDA	836222.3	3.851417	766,328.00	3.851417	109	50 - 150	0.0000	+/-0.50	
M3PFBS	180118.8	2.011067	149,852.00	2.011067	120	50 - 150	0.0000	+/-0.50	
M7PFUnA	900336.4	3.994	839,980.00	3.994	107	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	103663	3.501317	121,538.00	3.509617	85	50 - 150	-0.0083	+/-0.50	
M5PFPeA	531164.2	1.816233	446,990.00	1.824517	119	50 - 150	-0.0083	+/-0.50	
M5PFHxA	910548	2.7145	782,300.00	2.7145	116	50 - 150	0.0000	+/-0.50	
M3PFHxS	149082.2	3.28425	128,330.00	3.2923	116	50 - 150	-0.0080	+/-0.50	
M4PFHpA	1018590	3.251867	884,017.00	3.25995	115	50 - 150	-0.0081	+/-0.50	
M8PFOA	899575.7	3.51815	743,619.00	3.51815	121	50 - 150	0.0000	+/-0.50	
M8PFOS	147551.1	3.700067	128,346.00	3.700067	115	50 - 150	0.0000	+/-0.50	
M9PFNA	783860.5	3.7011	663,153.00	3.7011	118	50 - 150	0.0000	+/-0.50	
MPFDoA	937845.8	4.1288	865,995.00	4.1288	108	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	233632.3	4.001467	210,785.00	4.001467	111	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	278997.9	3.921883	266,645.00	3.9219	105	50 - 150	0.0000	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**
**SOP-466 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>LCS (B330939-BS1 )</b>			Lab File ID: B330939-BS1.d			Analyzed: 02/23/23 23:44			
M8FOSA	402115.1	4.0845	394,923.00	4.0845	102	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	163821.7	2.628217	165,484.00	2.628217	99	50 - 150	0.0000	+/-0.50	
M2PFTA	1002348	4.362184	1,024,322.00	4.362184	98	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	201221	3.850933	215,848.00	3.850933	93	50 - 150	0.0000	+/-0.50	
MPFBA	574254.8	1.13325	534,345.00	1.13325	107	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	108951.7	2.945967	107,660.00	2.945967	101	50 - 150	0.0000	+/-0.50	
M6PFDA	807082.8	3.851417	766,328.00	3.851417	105	50 - 150	0.0000	+/-0.50	
M3PFBS	163993.6	2.011067	149,852.00	2.011067	109	50 - 150	0.0000	+/-0.50	
M7PFUnA	890316.9	3.994	839,980.00	3.994	106	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	103961.6	3.509617	121,538.00	3.509617	86	50 - 150	0.0000	+/-0.50	
M5PFPeA	471044.4	1.824517	446,990.00	1.824517	105	50 - 150	0.0000	+/-0.50	
M5PFHxA	804793	2.7145	782,300.00	2.7145	103	50 - 150	0.0000	+/-0.50	
M3PFHxS	142839.7	3.2923	128,330.00	3.2923	111	50 - 150	0.0000	+/-0.50	
M4PFHpA	871458.7	3.25995	884,017.00	3.25995	99	50 - 150	0.0000	+/-0.50	
M8PFOA	791614.9	3.51815	743,619.00	3.51815	106	50 - 150	0.0000	+/-0.50	
M8PFOS	124113.2	3.700067	128,346.00	3.700067	97	50 - 150	0.0000	+/-0.50	
M9PFNA	684472.9	3.7011	663,153.00	3.7011	103	50 - 150	0.0000	+/-0.50	
MPFDoA	838641	4.1288	865,995.00	4.1288	97	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	230636.5	4.001467	210,785.00	4.001467	109	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	235779	3.929883	266,645.00	3.9219	88	50 - 150	0.0080	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**
**SOP-466 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Matrix Spike (B330939-MS1 )</b>			Lab File ID: B330939-MS1.d			Analyzed: 02/23/23 23:58			
M8FOSA	429962.2	4.0845	394,923.00	4.0845	109	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	172599.3	2.628217	165,484.00	2.628217	104	50 - 150	0.0000	+/-0.50	
M2PF <sub>TA</sub>	1093578	4.362167	1,024,322.00	4.362184	107	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	207382.7	3.850933	215,848.00	3.850933	96	50 - 150	0.0000	+/-0.50	
MPF <sub>BA</sub>	636566.7	1.13325	534,345.00	1.13325	119	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	120884.8	2.945967	107,660.00	2.945967	112	50 - 150	0.0000	+/-0.50	
M6PF <sub>DA</sub>	833916.4	3.851417	766,328.00	3.851417	109	50 - 150	0.0000	+/-0.50	
M3PF <sub>BS</sub>	179950.6	2.011067	149,852.00	2.011067	120	50 - 150	0.0000	+/-0.50	
M7PF <sub>UnA</sub>	997589.6	3.994	839,980.00	3.994	119	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	109388.3	3.509617	121,538.00	3.509617	90	50 - 150	0.0000	+/-0.50	
M5PF <sub>PeA</sub>	523214	1.824517	446,990.00	1.824517	117	50 - 150	0.0000	+/-0.50	
M5PF <sub>HxA</sub>	894389.8	2.7145	782,300.00	2.7145	114	50 - 150	0.0000	+/-0.50	
M3PF <sub>HxS</sub>	152440.4	3.2923	128,330.00	3.2923	119	50 - 150	0.0000	+/-0.50	
M4PF <sub>HpA</sub>	976819.9	3.25995	884,017.00	3.25995	110	50 - 150	0.0000	+/-0.50	
M8PF <sub>OA</sub>	855600.1	3.51815	743,619.00	3.51815	115	50 - 150	0.0000	+/-0.50	
M8PF <sub>OS</sub>	141020.1	3.700067	128,346.00	3.700067	110	50 - 150	0.0000	+/-0.50	
M9PF <sub>NA</sub>	762739.5	3.7011	663,153.00	3.7011	115	50 - 150	0.0000	+/-0.50	
MPF <sub>DoA</sub>	919400.8	4.1288	865,995.00	4.1288	106	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	223729.1	4.001467	210,785.00	4.001467	106	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	245159.6	3.9219	266,645.00	3.9219	92	50 - 150	0.0000	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**
**SOP-466 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Matrix Spike Dup (B330939-MSD1 )</b>			Lab File ID: B330939-MSD1.d			Analyzed: 02/24/23 00:06			
M8FOSA	518139	4.0845	394,923.00	4.0845	131	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	216811.2	2.628217	165,484.00	2.628217	131	50 - 150	0.0000	+/-0.50	
M2PFTA	1468173	4.362184	1,024,322.00	4.362184	143	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	253457.4	3.850933	215,848.00	3.850933	117	50 - 150	0.0000	+/-0.50	
MPFBA	754265.1	1.13325	534,345.00	1.13325	141	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	159801.9	2.945967	107,660.00	2.945967	148	50 - 150	0.0000	+/-0.50	
M6PFDA	1024114	3.851417	766,328.00	3.851417	134	50 - 150	0.0000	+/-0.50	
M3PFBS	214852.5	2.011067	149,852.00	2.011067	143	50 - 150	0.0000	+/-0.50	
M7PFUnA	1148830	3.994	839,980.00	3.994	137	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	154677.6	3.509617	121,538.00	3.509617	127	50 - 150	0.0000	+/-0.50	
M5PFPeA	624789.1	1.824517	446,990.00	1.824517	140	50 - 150	0.0000	+/-0.50	
M5PFHxA	1076215	2.7145	782,300.00	2.7145	138	50 - 150	0.0000	+/-0.50	
M3PFHxS	187419.9	3.2923	128,330.00	3.2923	146	50 - 150	0.0000	+/-0.50	
M4PFHpA	1177118	3.25995	884,017.00	3.25995	133	50 - 150	0.0000	+/-0.50	
M8PFOA	1113367	3.51815	743,619.00	3.51815	150	50 - 150	0.0000	+/-0.50	
M8PFOS	164529.2	3.700067	128,346.00	3.700067	128	50 - 150	0.0000	+/-0.50	
M9PFNA	905596.2	3.7011	663,153.00	3.7011	137	50 - 150	0.0000	+/-0.50	
MPFDoA	1149803	4.1288	865,995.00	4.1288	133	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	248896.2	4.001467	210,785.00	4.001467	118	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	330357.6	3.929883	266,645.00	3.9219	124	50 - 150	0.0080	+/-0.50	

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b>SOP-454 PFAS in Water</b>	
Perfluorobutanoic acid (PFBA)	NH-P
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluoropentanoic acid (PFPeA)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
11Cl-PF3OUdS (F53B Major)	NH-P
9Cl-PF3ONS (F53B Minor)	NH-P
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
Perfluorododecanoic acid (PFDoA)	NH-P
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	NH-P
Perfluoroheptanesulfonic acid (PFHpS)	NH-P
N-EtFOSAA (NEtFOSAA)	NH-P
N-MeFOSAA (NMeFOSAA)	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH-P
Perfluorodecanesulfonic acid (PFDS)	NH-P
Perfluorooctanesulfonamide (FOSA)	NH-P
Perfluorononanesulfonic acid (PFNS)	NH-P
Perfluoro-1-hexanesulfonamide (FHxSA)	NH-P
Perfluoro-1-butanesulfonamide (FBSA)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluoro-4-oxapentanoic acid (PFMPA)	NH-P
Perfluoro-5-oxahexanoic acid (PFMBA)	NH-P
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH-P
Perfluoropetanesulfonic acid (PFPeS)	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluorooctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
Perfluorononanoic acid (PFNA)	NH-P
<b>SOP-466 PFAS in Soil</b>	
Perfluorobutanoic acid (PFBA)	NH-P
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluoropentanoic acid (PFPeA)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
11Cl-PF3OUdS (F53B Major)	NH-P
9Cl-PF3ONS (F53B Minor)	NH-P
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
Perfluorododecanoic acid (PFDoA)	NH-P

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<i>SOP-466 PFAS in Soil</i>	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P
Perfluoroheptanesulfonic acid (PFHpS)	NH-P
N-EtFOSAA (NEtFOSAA)	NH-P
N-MeFOSAA (NMeFOSAA)	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH-P
Perfluorodecanesulfonic acid (PFDS)	NH-P
Perfluorooctanesulfonamide (FOSA)	NH-P
Perfluorononanesulfonic acid (PFNS)	NH-P
Perfluoro-1-hexanesulfonamide (FHxSA)	NH-P
Perfluoro-1-butanefulfonamide (FBSA)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluoro-4-oxapentanoic acid (PFMPA)	NH-P
Perfluoro-5-oxahexanoic acid (PFMBA)	NH-P
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH-P
Perfluoropentanesulfonic acid (PFPeS)	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluorooctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
Perfluorononanoic acid (PFNA)	NH-P

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023

2330764

**Pace Analytical**  
 Phone: 413-525-2332  
 Fax: 413-525-6405  
 Access COC's and Support Requests

Company Name: **HORSLEY WITHEN GROUP**  
 Address: **90 ROUTE 48, SANDWICH, MA 02563**  
 Phone: **781-243-1527**  
 Project Name: **77 SAND PIT ROAD, TRURO, MA**  
 Project Location: **SAND PIT ROAD, TRURO, MA**  
 Project Number: **22-129**  
 Project Manager: **BOYAN MESSA**  
 Pace Quote Name/Number:  
 Invoice Recipient:  
 Sampled By: **CAROLINE ARMSTRONG**

Requested Turnaround Time: 7-Day  10-Day  15-Day   
 PFAS 10-Day (std)  Due Date:  
 Rush Approval Required: 1-Day  3-Day  4-Day   
 Orthophosphate Samples: 1-Day  3-Day  4-Day   
 Data Delivery:  PDF  EXCEL   
 Other:  SOXHLET  NON SOXHLET   
 CLP Like Data Pig Required:   
 Email To: **bmassa@horsleywithen.com**  
 Fax To #: **508-885-1111**

Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP / GRAB	Matrix Code	Conc Code	ANALYSIS REQUESTED				Preservation Code	
						VIALS	GLASS	PLASTIC	BACTERIA		ENCORE
1 TP-2(2-4)	2/2/23	12:30	grab	S							
2 TP-5(0-2)	2/4/23	10:15	grab	S							
3 TP-6(0-2)	2/2/23	8:30	grab	S							
4 TP-9(0-2)	2/2/23	11:00	grab	S							

PTBS

1 Matrix Codes:  
 GW = Ground Water  
 WW = Waste Water  
 DW = Drinking Water  
 A = Air  
 S = Soil  
 SL = Sludge  
 SOL = Solid  
 O = Other (please define)

2 Preservation Codes:  
 I = Iced  
 H = HCL  
 M = Methanol  
 N = Nitric Acid  
 S = Sulfuric Acid  
 B = Sodium Bisulfate  
 X = Sodium Hydroxide  
 T = Sodium Thiosulfate  
 O = Other (please define)

Relinquished by: (signature) **Caroline Armstrong** Date/Time: **2/6/23 15:20**  
 Received by: (signature) **Chad King** Date/Time: **2/6/23 15:20**  
 Relinquished by: (signature) **Chad King** Date/Time: **2/6/23 17:15**  
 Received by: (signature) **Caroline Armstrong** Date/Time: **2/6/23 17:15**

Client Comments: MCP methods  
 MA RCS-1  
 CT RCS-1  
 MA State DW Required   
 MA MCP Required   
 MCP Certification Form Required   
 CT RCP Required   
 RCP Certification Form Required   
 Other:   
 PWSID #

Project Entity: Government  Federal  City   
 Municipality:  21 J   
 Brownfield   
 AWRA  School  MBTA   
 WRTA   
 Other:  Chromatogram   
 AIHA-LAP, LLC

Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will not be held accountable.

KAF



February 28, 2023

Bryan Massa  
Horsley Witten Group  
90 Route 6A Unit #1  
Sandwich, MA 02563

Project Location: Sand Pit Rd, Truro, MA  
Client Job Number:  
Project Number: 22129  
Laboratory Work Order Number: 23B0766

Enclosed are results of analyses for samples as received by the laboratory on February 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kaitlyn A. Feliciano  
Project Manager

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Horsley Witten Group  
 90 Route 6A Unit #1  
 Sandwich, MA 02563  
 ATTN: Bryan Massa

REPORT DATE: 2/28/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 22129

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 23B0766

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Sand Pit Rd, Truro, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TP-2 (2-4)	23B0766-01	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B	
TP-3 (0-2)	23B0766-02	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B	
TP-5 (0-2)	23B0766-03	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8260D SW-846 8270E	
TP-6 (0-2)	23B0766-05	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8270E	
TP-8 (2-4)	23B0766-06	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B SW-846 8260D	
TP-9 (0-2)	23B0766-07	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B	
TP-10 (6-8)	23B0766-08	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B	
TP-11 (0-2)	23B0766-09	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 6010D

**Qualifications:**

---

**MS-09**

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

**Analyte & Samples(s) Qualified:**

**Antimony**

23B0766-01[TP-2 (2-4)], B330929-MS1, B330929-MSD1

SW-846 7471B

**Qualifications:**

---

**R-05**

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

**Analyte & Samples(s) Qualified:**

**Mercury**

B331047-BSD1

SW-846 8082A

**Qualifications:**

---

**O-32**

A dilution was performed as part of the standard analytical procedure.

**Analyte & Samples(s) Qualified:**

23B0766-03[TP-5 (0-2)], 23B0766-05[TP-6 (0-2)]

SW-846 8260D

**Qualifications:**

---

**L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

**Analyte & Samples(s) Qualified:**

**Chloroethane**

B330910-BS1, B330910-BSD1

**V-16**

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

**Analyte & Samples(s) Qualified:**

**1,4-Dioxane**

S083011-CCV1

**V-20**

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:**

**Bromomethane**

B330910-BS1, B330910-BSD1, S083011-CCV1

**Chloroethane**

B330910-BS1, B330910-BSD1, S083011-CCV1

**Dichlorodifluoromethane (Freon 12)**

B330910-BS1, B330910-BSD1, S083011-CCV1

**V-36**

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:**

**Carbon Disulfide**

B330910-BS1, B330910-BSD1, S083011-CCV1

**Dichlorodifluoromethane (Freon 12)**

B330910-BS1, B330910-BSD1, S083011-CCV1

SW-846 8270E

**Qualifications:**

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

**Analyte & Samples(s) Qualified:**

**Aniline**

23B0766-03[TP-5 (0-2)], 23B0766-05[TP-6 (0-2)], B330933-BLK1, B330933-BS1, B330933-BSD1, S083172-CCV1

**Di-n-octylphthalate**

23B0766-03[TP-5 (0-2)], 23B0766-05[TP-6 (0-2)], B330933-BLK1, B330933-BS1, B330933-BSD1, S083172-CCV1

**Pentachlorophenol**

23B0766-03[TP-5 (0-2)], 23B0766-05[TP-6 (0-2)], B330933-BLK1, B330933-BS1, B330933-BSD1, S083172-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington  
Technical Representative

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-2 (2-4)

Sampled: 2/2/2023 12:30

Sample ID: 23B0766-01

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 15:44	GJB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)		48.2	40-140					2/9/23 15:44	
o-Terphenyl (OTP)		63.5	40-140					2/9/23 15:44	
2-Bromonaphthalene		107	40-140					2/9/23 15:44	
2-Fluorobiphenyl		106	40-140					2/9/23 15:44	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-2 (2-4)

Sampled: 2/2/2023 12:30

Sample ID: 23B0766-01

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1	MS-09	SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Barium	8.2	1.8	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Beryllium	0.19	0.18	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Chromium	6.5	0.72	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Lead	4.5	0.54	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:33	AAJ
Nickel	3.5	0.72	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 21:56	ATP
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Vanadium	6.9	0.72	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN
Zinc	47	0.72	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:40	HNN

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 12:30

Field Sample #: TP-2 (2-4)

Sample ID: 23B0766-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.4		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-3 (0-2)

Sampled: 2/2/2023 12:50

Sample ID: 23B0766-02

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Unadjusted C11-C22 Aromatics	16	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
C11-C22 Aromatics	13	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Acenaphthylene	0.18	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Benzo(a)anthracene	0.21	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Benzo(a)pyrene	0.23	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Benzo(b)fluoranthene	0.39	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Benzo(g,h,i)perylene	0.18	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Benzo(k)fluoranthene	0.14	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Chrysene	0.29	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Fluoranthene	0.46	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Indeno(1,2,3-cd)pyrene	0.20	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Phenanthrene	0.22	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB
Pyrene	0.46	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:03	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	60.4	40-140	
o-Terphenyl (OTP)	75.1	40-140	
2-Bromonaphthalene	102	40-140	
2-Fluorobiphenyl	102	40-140	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-3 (0-2)

Sampled: 2/2/2023 12:50

Sample ID: 23B0766-02

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Barium	2.2	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Chromium	1.4	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Lead	5.0	0.51	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Mercury	0.041	0.027	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:35	AAJ
Nickel	0.74	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 22:04	ATP
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Vanadium	2.0	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN
Zinc	3.8	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 11:58	HNN

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 12:50

Field Sample #: TP-3 (0-2)

Sample ID: 23B0766-02

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.4		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0766-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Bromochloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
2-Butanone (MEK)	ND	0.044	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Carbon Disulfide	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Chloroform	ND	0.0044	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,1-Dichloroethylene	ND	0.0044	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Diethyl Ether	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0766-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0044	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Naphthalene	ND	0.0044	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
n-Propylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
m+p Xylene	ND	0.0044	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 6:37	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	103	70-130	2/8/23 6:37
Toluene-d8	99.9	70-130	2/8/23 6:37
4-Bromofluorobenzene	100	70-130	2/8/23 6:37

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0766-03

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biphenyl	ND	0.073	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Acetophenone	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Aniline	ND	0.37	mg/Kg dry	1	V-05	SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Bis(2-chloroethoxy)methane	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Bis(2-chloroethyl)ether	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Bis(2-chloroisopropyl)ether	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
4-Bromophenylphenylether	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Butylbenzylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
4-Chloroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2-Chloronaphthalene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2-Chlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Dibenzofuran	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Di-n-butylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
1,2-Dichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
1,3-Dichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
1,4-Dichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2,4-Dichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Diethylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2,4-Dimethylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Dimethylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2,4-Dinitrophenol	ND	0.72	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2,4-Dinitrotoluene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2,6-Dinitrotoluene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Di-n-octylphthalate	ND	0.37	mg/Kg dry	1	V-05	SW-846 8270E	2/8/23	2/10/23 15:18	AR2
1,2-Diphenylhydrazine/Azobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Hexachlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Hexachlorobutadiene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Hexachloroethane	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Isophorone	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0766-03

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2-Methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
3/4-Methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Nitrobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2-Nitrophenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
4-Nitrophenol	ND	0.72	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Pentachlorophenol	ND	0.37	mg/Kg dry	1	V-05	SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Phenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
Pyridine	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
1,2,4-Trichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2,4,5-Trichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2
2,4,6-Trichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:18	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	79.7	30-130	
Phenol-d6	83.4	30-130	
Nitrobenzene-d5	75.2	30-130	
2-Fluorobiphenyl	78.2	30-130	
2,4,6-Tribromophenol	91.2	30-130	
p-Terphenyl-d14	87.9	30-130	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0766-03

Sample Matrix: Soil

Sample Flags: O-32

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:19	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		91.9	30-150					2/9/23 17:19	
Decachlorobiphenyl [2]		90.0	30-150					2/9/23 17:19	
Tetrachloro-m-xylene [1]		84.3	30-150					2/9/23 17:19	
Tetrachloro-m-xylene [2]		86.5	30-150					2/9/23 17:19	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0766-03

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Unadjusted C11-C22 Aromatics	15	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
C11-C22 Aromatics	15	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Benzo(g,h,i)perylene	0.14	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:22	GJB
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
Chlorooctadecane (COD)		59.4	40-140					2/9/23 16:22	
o-Terphenyl (OTP)		79.6	40-140					2/9/23 16:22	
2-Bromonaphthalene		105	40-140					2/9/23 16:22	
2-Fluorobiphenyl		107	40-140					2/9/23 16:22	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-5 (0-2)

Sampled: 2/2/2023 10:15

Sample ID: 23B0766-03

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Barium	7.2	1.8	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Beryllium	ND	0.18	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Chromium	3.0	0.71	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Lead	8.3	0.53	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:37	AAJ
Nickel	1.9	0.71	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 22:11	ATP
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Vanadium	4.0	0.71	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN
Zinc	14	0.71	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:12	HNN

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 10:15

Field Sample #: TP-5 (0-2)

Sample ID: 23B0766-03

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.3		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-6 (0-2)

Sampled: 2/2/2023 08:30

Sample ID: 23B0766-05

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biphenyl	ND	0.071	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Acetophenone	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Aniline	ND	0.36	mg/Kg dry	1	V-05	SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Bis(2-chloroethoxy)methane	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Bis(2-chloroethyl)ether	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Bis(2-chloroisopropyl)ether	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
4-Bromophenylphenylether	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Butylbenzylphthalate	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
4-Chloroaniline	ND	0.70	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2-Chloronaphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2-Chlorophenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Dibenzofuran	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Di-n-butylphthalate	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
1,2-Dichlorobenzene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
1,3-Dichlorobenzene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
1,4-Dichlorobenzene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
3,3-Dichlorobenzidine	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2,4-Dichlorophenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Diethylphthalate	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2,4-Dimethylphenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Dimethylphthalate	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2,4-Dinitrophenol	ND	0.70	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2,4-Dinitrotoluene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2,6-Dinitrotoluene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Di-n-octylphthalate	ND	0.36	mg/Kg dry	1	V-05	SW-846 8270E	2/8/23	2/10/23 15:42	AR2
1,2-Diphenylhydrazine/Azobenzene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Hexachlorobenzene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Hexachlorobutadiene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Hexachloroethane	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Isophorone	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-6 (0-2)

Sampled: 2/2/2023 08:30

Sample ID: 23B0766-05

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2-Methylphenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
3/4-Methylphenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Nitrobenzene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2-Nitrophenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
4-Nitrophenol	ND	0.70	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Pentachlorophenol	ND	0.36	mg/Kg dry	1	V-05	SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Phenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
Pyridine	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
1,2,4-Trichlorobenzene	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2,4,5-Trichlorophenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2
2,4,6-Trichlorophenol	ND	0.36	mg/Kg dry	1		SW-846 8270E	2/8/23	2/10/23 15:42	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	74.5	30-130	
Phenol-d6	76.5	30-130	
Nitrobenzene-d5	73.9	30-130	
2-Fluorobiphenyl	71.9	30-130	
2,4,6-Tribromophenol	83.9	30-130	
p-Terphenyl-d14	79.5	30-130	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-6 (0-2)

Sampled: 2/2/2023 08:30

Sample ID: 23B0766-05

Sample Matrix: Soil

Sample Flags: O-32

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	2/8/23	2/9/23 17:37	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		102	30-150					2/9/23 17:37	
Decachlorobiphenyl [2]		100	30-150					2/9/23 17:37	
Tetrachloro-m-xylene [1]		90.7	30-150					2/9/23 17:37	
Tetrachloro-m-xylene [2]		93.6	30-150					2/9/23 17:37	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-6 (0-2)

Sampled: 2/2/2023 08:30

Sample ID: 23B0766-05

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 16:41	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	62.3	40-140	
o-Terphenyl (OTP)	72.7	40-140	
2-Bromonaphthalene	93.6	40-140	
2-Fluorobiphenyl	92.4	40-140	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-6 (0-2)

Sampled: 2/2/2023 08:30

Sample ID: 23B0766-05

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Barium	6.2	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Beryllium	0.17	0.17	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Chromium	5.4	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Lead	3.4	0.51	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:39	AAJ
Nickel	3.0	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 22:19	ATP
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Vanadium	6.7	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN
Zinc	8.9	0.68	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:17	HNN

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 08:30

Field Sample #: TP-6 (0-2)

Sample ID: 23B0766-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.2		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-8 (2-4)

Sampled: 2/2/2023 10:25

Sample ID: 23B0766-06

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Bromochloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
2-Butanone (MEK)	ND	0.043	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Carbon Disulfide	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Chloroform	ND	0.0043	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,1-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Diethyl Ether	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-8 (2-4)

Sampled: 2/2/2023 10:25

Sample ID: 23B0766-06

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Naphthalene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
n-Propylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
m+p Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260D	2/8/23	2/8/23 7:02	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	2/8/23 7:02
Toluene-d8	97.0	70-130	2/8/23 7:02
4-Bromofluorobenzene	100	70-130	2/8/23 7:02

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-8 (2-4)

Sampled: 2/2/2023 10:25

Sample ID: 23B0766-06

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Chrysene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Fluorene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB
Pyrene	ND	0.12	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:29	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	56.8	40-140	2/9/23 13:29
o-Terphenyl (OTP)	74.3	40-140	2/9/23 13:29
2-Bromonaphthalene	103	40-140	2/9/23 13:29
2-Fluorobiphenyl	99.4	40-140	2/9/23 13:29

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-8 (2-4)

Sampled: 2/2/2023 10:25

Sample ID: 23B0766-06

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Arsenic	ND	4.0	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Barium	9.6	2.0	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Beryllium	0.27	0.20	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Cadmium	ND	0.40	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Chromium	6.0	0.80	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Lead	3.0	0.60	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Mercury	ND	0.031	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:41	AAJ
Nickel	4.0	0.80	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Silver	ND	0.40	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 22:27	ATP
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Vanadium	7.4	0.80	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN
Zinc	11	0.80	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:23	HNN

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Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 10:25

Field Sample #: TP-8 (2-4)

Sample ID: 23B0766-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	81.2		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-9 (0-2)

Sampled: 2/2/2023 11:00

Sample ID: 23B0766-07

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
C19-C36 Aliphatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Acenaphthylene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Benzo(a)pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Chrysene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Fluorene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
2-Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Phenanthrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB
Pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:46	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	65.7	40-140	
o-Terphenyl (OTP)	73.9	40-140	
2-Bromonaphthalene	91.6	40-140	
2-Fluorobiphenyl	90.1	40-140	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-9 (0-2)

Sampled: 2/2/2023 11:00

Sample ID: 23B0766-07

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Barium	2.3	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Chromium	1.7	0.69	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Lead	1.2	0.51	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:51	AAJ
Nickel	1.8	0.69	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 22:35	ATP
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Vanadium	2.6	0.69	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN
Zinc	5.8	0.69	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:28	HNN

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Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 11:00

Field Sample #: TP-9 (0-2)

Sample ID: 23B0766-07

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	97.2		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-10 (6-8)

Sampled: 2/2/2023 11:40

Sample ID: 23B0766-08

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 13:48	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	62.3	40-140	
o-Terphenyl (OTP)	83.2	40-140	
2-Bromonaphthalene	107	40-140	
2-Fluorobiphenyl	106	40-140	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-10 (6-8)

Sampled: 2/2/2023 11:40

Sample ID: 23B0766-08

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Barium	3.6	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Chromium	1.7	0.67	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Lead	1.4	0.51	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:52	AAJ
Nickel	2.4	0.67	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 22:42	ATP
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Vanadium	2.5	0.67	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN
Zinc	6.6	0.67	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:34	HNN

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Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 11:40

Field Sample #: TP-10 (6-8)

Sample ID: 23B0766-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	95.1		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-11 (0-2)

Sampled: 2/2/2023 14:00

Sample ID: 23B0766-09

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
C19-C36 Aliphatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Acenaphthylene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Benzo(a)pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Chrysene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Fluoranthene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Fluorene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
2-Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Phenanthrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB
Pyrene	ND	0.10	mg/Kg dry	1		MADEP EPH rev 2.1	2/8/23	2/9/23 14:07	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	60.7	40-140	
o-Terphenyl (OTP)	72.4	40-140	
2-Bromonaphthalene	93.6	40-140	
2-Fluorobiphenyl	92.8	40-140	

Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Field Sample #: TP-11 (0-2)

Sampled: 2/2/2023 14:00

Sample ID: 23B0766-09

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.6	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Arsenic	ND	3.2	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Barium	2.1	1.6	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Beryllium	ND	0.16	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Cadmium	ND	0.32	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Chromium	3.1	0.64	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Lead	1.6	0.48	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	2/9/23	2/9/23 14:54	AAJ
Nickel	3.1	0.64	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Selenium	ND	3.2	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Silver	ND	0.32	mg/Kg dry	1		SW-846 6010D	2/8/23	2/14/23 23:06	ATP
Thallium	ND	1.6	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Vanadium	3.7	0.64	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN
Zinc	6.8	0.64	mg/Kg dry	1		SW-846 6010D	2/8/23	2/10/23 12:39	HNN

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Project Location: Sand Pit Rd, Truro, MA

Sample Description:

Work Order: 23B0766

Date Received: 2/6/2023

Sampled: 2/2/2023 14:00

Field Sample #: TP-11 (0-2)

Sample ID: 23B0766-09

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	97.8		% Wt	1		SM 2540G	2/8/23	2/8/23 12:49	WDC

**Sample Extraction Data**
**Prep Method: SW-846 3546 Analytical Method: MADEP EPH rev 2.1**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23B0766-01 [TP-2 (2-4)]	B330895	20.0	2.00	02/08/23
23B0766-02 [TP-3 (0-2)]	B330895	20.0	2.00	02/08/23
23B0766-03 [TP-5 (0-2)]	B330895	20.0	2.00	02/08/23
23B0766-05 [TP-6 (0-2)]	B330895	20.0	2.00	02/08/23
23B0766-06 [TP-8 (2-4)]	B330895	20.0	2.00	02/08/23
23B0766-07 [TP-9 (0-2)]	B330895	20.0	2.00	02/08/23
23B0766-08 [TP-10 (6-8)]	B330895	20.0	2.00	02/08/23
23B0766-09 [TP-11 (0-2)]	B330895	20.0	2.00	02/08/23

**Prep Method: % Solids Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
23B0766-01 [TP-2 (2-4)]	B330944	02/08/23
23B0766-02 [TP-3 (0-2)]	B330944	02/08/23
23B0766-03 [TP-5 (0-2)]	B330944	02/08/23
23B0766-05 [TP-6 (0-2)]	B330944	02/08/23
23B0766-06 [TP-8 (2-4)]	B330944	02/08/23
23B0766-07 [TP-9 (0-2)]	B330944	02/08/23
23B0766-08 [TP-10 (6-8)]	B330944	02/08/23
23B0766-09 [TP-11 (0-2)]	B330944	02/08/23

**Prep Method: SW-846 3050B Analytical Method: SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23B0766-01 [TP-2 (2-4)]	B330929	1.55	50.0	02/08/23
23B0766-02 [TP-3 (0-2)]	B330929	1.58	50.0	02/08/23
23B0766-03 [TP-5 (0-2)]	B330929	1.54	50.0	02/08/23
23B0766-05 [TP-6 (0-2)]	B330929	1.56	50.0	02/08/23
23B0766-06 [TP-8 (2-4)]	B330929	1.54	50.0	02/08/23
23B0766-07 [TP-9 (0-2)]	B330929	1.50	50.0	02/08/23
23B0766-08 [TP-10 (6-8)]	B330929	1.56	50.0	02/08/23
23B0766-09 [TP-11 (0-2)]	B330929	1.59	50.0	02/08/23

**Prep Method: SW-846 7470A/7471A Analytical Method: SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23B0766-01 [TP-2 (2-4)]	B331047	0.599	50.0	02/09/23
23B0766-02 [TP-3 (0-2)]	B331047	0.585	50.0	02/09/23
23B0766-03 [TP-5 (0-2)]	B331047	0.592	50.0	02/09/23
23B0766-05 [TP-6 (0-2)]	B331047	0.605	50.0	02/09/23
23B0766-06 [TP-8 (2-4)]	B331047	0.589	50.0	02/09/23
23B0766-07 [TP-9 (0-2)]	B331047	0.602	50.0	02/09/23
23B0766-08 [TP-10 (6-8)]	B331047	0.587	50.0	02/09/23
23B0766-09 [TP-11 (0-2)]	B331047	0.599	50.0	02/09/23

**Prep Method: SW-846 3546 Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23B0766-03 [TP-5 (0-2)]	B330896	10.0	10.0	02/08/23
23B0766-05 [TP-6 (0-2)]	B330896	10.0	10.0	02/08/23

**Sample Extraction Data****Prep Method: SW-846 5035    Analytical Method: SW-846 8260D**

<b>Lab Number [Field ID]</b>	<b>Batch</b>	<b>Initial [g]</b>	<b>Final [mL]</b>	<b>Date</b>
23B0766-03 [TP-5 (0-2)]	B330910	4.95	10.0	02/08/23
23B0766-06 [TP-8 (2-4)]	B330910	5.66	10.0	02/08/23

**Prep Method: SW-846 3546    Analytical Method: SW-846 8270E**

<b>Lab Number [Field ID]</b>	<b>Batch</b>	<b>Initial [g]</b>	<b>Final [mL]</b>	<b>Date</b>
23B0766-03 [TP-5 (0-2)]	B330933	30.0	1.00	02/08/23
23B0766-05 [TP-6 (0-2)]	B330933	30.0	1.00	02/08/23

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330910 - SW-846 5035**
**Blank (B330910-BLK1)**

Prepared &amp; Analyzed: 02/08/23

Acetone	ND	0.10	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.010	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B330910 - SW-846 5035</b>										
<b>Blank (B330910-BLK1)</b>										
Prepared & Analyzed: 02/08/23										
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0501		mg/Kg wet	0.0500		100	70-130			
Surrogate: Toluene-d8	0.0500		mg/Kg wet	0.0500		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.0492		mg/Kg wet	0.0500		98.5	70-130			
<b>LCS (B330910-BS1)</b>										
Prepared & Analyzed: 02/08/23										
Acetone	0.198	0.10	mg/Kg wet	0.200		99.1	40-160			†
tert-Amyl Methyl Ether (TAME)	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130			
Benzene	0.0195	0.0020	mg/Kg wet	0.0200		97.4	70-130			
Bromobenzene	0.0231	0.0020	mg/Kg wet	0.0200		116	70-130			
Bromochloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
Bromodichloromethane	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130			
Bromoform	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-130			
Bromomethane	0.0258	0.010	mg/Kg wet	0.0200		129	40-160		V-20	†
2-Butanone (MEK)	0.226	0.040	mg/Kg wet	0.200		113	40-160			†
n-Butylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130			
sec-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.6	70-130			
tert-Butylbenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130			
tert-Butyl Ethyl Ether (TBEE)	0.0199	0.0010	mg/Kg wet	0.0200		99.6	70-130			
Carbon Disulfide	0.209	0.010	mg/Kg wet	0.200		105	70-130		V-36	
Carbon Tetrachloride	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130			
Chlorobenzene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130			
Chlorodibromomethane	0.0194	0.0010	mg/Kg wet	0.0200		96.9	70-130			
<b>Chloroethane</b>	0.0263	0.020	mg/Kg wet	0.0200		<b>132</b> *	70-130		L-02, V-20	
Chloroform	0.0196	0.0040	mg/Kg wet	0.0200		98.1	70-130			
Chloromethane	0.0197	0.010	mg/Kg wet	0.0200		98.7	40-160			†
2-Chlorotoluene	0.0199	0.0020	mg/Kg wet	0.0200		99.5	70-130			
4-Chlorotoluene	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0171	0.0020	mg/Kg wet	0.0200		85.3	70-130			
1,2-Dibromoethane (EDB)	0.0200	0.0010	mg/Kg wet	0.0200		100	70-130			
Dibromomethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,2-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130			
1,3-Dichlorobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130			
1,4-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B330910 - SW-846 5035</b>										
<b>LCS (B330910-BS1)</b>										
Prepared & Analyzed: 02/08/23										
Dichlorodifluoromethane (Freon 12)	0.0247	0.020	mg/Kg wet	0.0200		123	40-160			V-20, V-36 †
1,1-Dichloroethane	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130			
1,2-Dichloroethane	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130			
1,1-Dichloroethylene	0.0203	0.0040	mg/Kg wet	0.0200		102	70-130			
cis-1,2-Dichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130			
trans-1,2-Dichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130			
1,2-Dichloropropane	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
1,3-Dichloropropane	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130			
2,2-Dichloropropane	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130			
1,1-Dichloropropene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130			
cis-1,3-Dichloropropene	0.0187	0.0010	mg/Kg wet	0.0200		93.5	70-130			
trans-1,3-Dichloropropene	0.0190	0.0010	mg/Kg wet	0.0200		95.1	70-130			
Diethyl Ether	0.0204	0.020	mg/Kg wet	0.0200		102	70-130			
Diisopropyl Ether (DIPE)	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130			
1,4-Dioxane	0.196	0.10	mg/Kg wet	0.200		98.1	40-160			†
Ethylbenzene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130			
Hexachlorobutadiene	0.0181	0.0020	mg/Kg wet	0.0200		90.7	70-130			
2-Hexanone (MBK)	0.219	0.020	mg/Kg wet	0.200		109	40-160			†
Isopropylbenzene (Cumene)	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
p-Isopropyltoluene (p-Cymene)	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0199	0.0040	mg/Kg wet	0.0200		99.7	70-130			
Methylene Chloride	0.0199	0.020	mg/Kg wet	0.0200		99.4	70-130			
4-Methyl-2-pentanone (MIBK)	0.220	0.020	mg/Kg wet	0.200		110	40-160			†
Naphthalene	0.0201	0.0040	mg/Kg wet	0.0200		100	70-130			
n-Propylbenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
Styrene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
1,1,1,2-Tetrachloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,1,2,2-Tetrachloroethane	0.0220	0.0010	mg/Kg wet	0.0200		110	70-130			
Tetrachloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-130			
Tetrahydrofuran	0.0210	0.010	mg/Kg wet	0.0200		105	70-130			
Toluene	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130			
1,2,3-Trichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130			
1,2,4-Trichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.2	70-130			
1,1,1-Trichloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130			
1,1,2-Trichloroethane	0.0197	0.0020	mg/Kg wet	0.0200		98.5	70-130			
Trichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130			
Trichlorofluoromethane (Freon 11)	0.0227	0.010	mg/Kg wet	0.0200		114	70-130			
1,2,3-Trichloropropane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130			
1,2,4-Trimethylbenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130			
1,3,5-Trimethylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
Vinyl Chloride	0.0209	0.010	mg/Kg wet	0.0200		105	70-130			
m+p Xylene	0.0418	0.0040	mg/Kg wet	0.0400		104	70-130			
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0493		mg/Kg wet	0.0500		98.6	70-130			
Surrogate: Toluene-d8	0.0494		mg/Kg wet	0.0500		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.0508		mg/Kg wet	0.0500		102	70-130			

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B330910 - SW-846 5035</b>										
<b>LCS Dup (B330910-BSD1)</b>										
Prepared & Analyzed: 02/08/23										
Acetone	0.211	0.10	mg/Kg wet	0.200		106	40-160	6.34	20	†
tert-Amyl Methyl Ether (TAME)	0.0201	0.0010	mg/Kg wet	0.0200		101	70-130	0.0993	20	
Benzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	3.63	20	
Bromobenzene	0.0229	0.0020	mg/Kg wet	0.0200		115	70-130	0.955	20	
Bromochloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	0.381	20	
Bromodichloromethane	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	0.707	20	
Bromoform	0.0200	0.0020	mg/Kg wet	0.0200		99.8	70-130	0.201	20	
Bromomethane	0.0250	0.010	mg/Kg wet	0.0200		125	40-160	3.15	20	V-20 †
2-Butanone (MEK)	0.240	0.040	mg/Kg wet	0.200		120	40-160	6.20	20	†
n-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.6	70-130	0.957	20	
sec-Butylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	0.957	20	
tert-Butylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130	0.847	20	
tert-Butyl Ethyl Ether (TBEE)	0.0200	0.0010	mg/Kg wet	0.0200		100	70-130	0.401	20	
Carbon Disulfide	0.212	0.010	mg/Kg wet	0.200		106	70-130	1.33	20	V-36
Carbon Tetrachloride	0.0194	0.0020	mg/Kg wet	0.0200		97.0	70-130	2.61	20	
Chlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	0.0978	20	
Chlorodibromomethane	0.0196	0.0010	mg/Kg wet	0.0200		98.1	70-130	1.23	20	
<b>Chloroethane</b>	0.0273	0.020	mg/Kg wet	0.0200		<b>137</b>	* 70-130	3.73	20	L-02, V-20
Chloroform	0.0200	0.0040	mg/Kg wet	0.0200		100	70-130	2.12	20	
Chloromethane	0.0203	0.010	mg/Kg wet	0.0200		102	40-160	2.90	20	†
2-Chlorotoluene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	1.20	20	
4-Chlorotoluene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	0.393	20	
1,2-Dibromo-3-chloropropane (DBCP)	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130	3.68	20	
1,2-Dibromoethane (EDB)	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	1.98	20	
Dibromomethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	0.0979	20	
1,2-Dichlorobenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130	0.201	20	
1,3-Dichlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.1	70-130	1.58	20	
1,4-Dichlorobenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130	0.415	20	
Dichlorodifluoromethane (Freon 12)	0.0257	0.020	mg/Kg wet	0.0200		128	40-160	3.89	20	V-20, V-36 †
1,1-Dichloroethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	2.78	20	
1,2-Dichloroethane	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130	2.22	20	
1,1-Dichloroethylene	0.0210	0.0040	mg/Kg wet	0.0200		105	70-130	3.10	20	
cis-1,2-Dichloroethylene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	1.91	20	
trans-1,2-Dichloroethylene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	2.11	20	
1,2-Dichloropropane	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130	0.00	20	
1,3-Dichloropropane	0.0209	0.0010	mg/Kg wet	0.0200		105	70-130	0.0955	20	
2,2-Dichloropropane	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130	1.58	20	
1,1-Dichloropropene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	3.89	20	
cis-1,3-Dichloropropene	0.0190	0.0010	mg/Kg wet	0.0200		95.2	70-130	1.80	20	
trans-1,3-Dichloropropene	0.0194	0.0010	mg/Kg wet	0.0200		97.0	70-130	1.98	20	
Diethyl Ether	0.0204	0.020	mg/Kg wet	0.0200		102	70-130	0.294	20	
Diisopropyl Ether (DIPE)	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130	2.87	20	
1,4-Dioxane	0.223	0.10	mg/Kg wet	0.200		112	40-160	12.9	20	†
Ethylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	0.195	20	
Hexachlorobutadiene	0.0185	0.0020	mg/Kg wet	0.0200		92.6	70-130	2.07	20	
2-Hexanone (MBK)	0.228	0.020	mg/Kg wet	0.200		114	40-160	3.96	20	†
Isopropylbenzene (Cumene)	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	1.48	20	
p-Isopropyltoluene (p-Cymene)	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130	0.733	20	
Methyl tert-Butyl Ether (MTBE)	0.0201	0.0040	mg/Kg wet	0.0200		101	70-130	0.998	20	
Methylene Chloride	0.0202	0.020	mg/Kg wet	0.0200		101	70-130	1.50	20	
4-Methyl-2-pentanone (MIBK)	0.227	0.020	mg/Kg wet	0.200		113	40-160	3.30	20	†
Naphthalene	0.0201	0.0040	mg/Kg wet	0.0200		100	70-130	0.199	20	

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B330910 - SW-846 5035</b>										
<b>LCS Dup (B330910-BSD1)</b>										
Prepared & Analyzed: 02/08/23										
n-Propylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	1.28	20	
Styrene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	0.289	20	
1,1,1,2-Tetrachloroethane	0.0199	0.0020	mg/Kg wet	0.0200		99.7	70-130	3.26	20	
1,1,2,2-Tetrachloroethane	0.0222	0.0010	mg/Kg wet	0.0200		111	70-130	0.813	20	
Tetrachloroethylene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	2.97	20	
Tetrahydrofuran	0.0228	0.010	mg/Kg wet	0.0200		114	70-130	7.94	20	
Toluene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130	2.01	20	
1,2,3-Trichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.6	70-130	1.26	20	
1,2,4-Trichlorobenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.4	70-130	4.21	20	
1,1,1-Trichloroethane	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130	1.73	20	
1,1,2-Trichloroethane	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	1.81	20	
Trichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130	1.01	20	
Trichlorofluoromethane (Freon 11)	0.0234	0.010	mg/Kg wet	0.0200		117	70-130	2.95	20	
1,2,3-Trichloropropane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130	0.0920	20	
1,2,4-Trimethylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.9	70-130	2.35	20	
1,3,5-Trimethylbenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	0.878	20	
Vinyl Chloride	0.0217	0.010	mg/Kg wet	0.0200		108	70-130	3.66	20	
m+p Xylene	0.0416	0.0040	mg/Kg wet	0.0400		104	70-130	0.432	20	
o-Xylene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	0.391	20	
Surrogate: 1,2-Dichloroethane-d4	0.0500		mg/Kg wet	0.0500		99.9	70-130			
Surrogate: Toluene-d8	0.0491		mg/Kg wet	0.0500		98.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.0498		mg/Kg wet	0.0500		99.6	70-130			

**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330933 - SW-846 3546**
**Blank (B330933-BLK1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Biphenyl	ND	0.067	mg/Kg wet							
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							V-05
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							V-05
1,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							V-05

**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330933 - SW-846 3546**
**Blank (B330933-BLK1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Pyridine	ND	0.34	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.67		mg/Kg wet	6.67		85.0	30-130			
Surrogate: Phenol-d6	5.73		mg/Kg wet	6.67		85.9	30-130			
Surrogate: Nitrobenzene-d5	2.60		mg/Kg wet	3.33		78.0	30-130			
Surrogate: 2-Fluorobiphenyl	2.65		mg/Kg wet	3.33		79.5	30-130			
Surrogate: 2,4,6-Tribromophenol	5.52		mg/Kg wet	6.67		82.7	30-130			
Surrogate: p-Terphenyl-d14	2.78		mg/Kg wet	3.33		83.3	30-130			

**LCS (B330933-BS1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Biphenyl	1.53	0.067	mg/Kg wet	1.67		91.9	40-140			
Acenaphthene	1.36	0.17	mg/Kg wet	1.67		81.7	40-140			
Acenaphthylene	1.45	0.17	mg/Kg wet	1.67		87.1	40-140			
Acetophenone	1.44	0.34	mg/Kg wet	1.67		86.7	40-140			
Aniline	1.13	0.34	mg/Kg wet	1.67		67.7	40-140			V-05
Anthracene	1.52	0.17	mg/Kg wet	1.67		91.3	40-140			
Benzo(a)anthracene	1.47	0.17	mg/Kg wet	1.67		88.1	40-140			
Benzo(a)pyrene	1.39	0.17	mg/Kg wet	1.67		83.1	40-140			
Benzo(b)fluoranthene	1.51	0.17	mg/Kg wet	1.67		90.5	40-140			
Benzo(g,h,i)perylene	1.07	0.17	mg/Kg wet	1.67		64.2	40-140			
Benzo(k)fluoranthene	1.59	0.17	mg/Kg wet	1.67		95.7	40-140			
Bis(2-chloroethoxy)methane	1.39	0.34	mg/Kg wet	1.67		83.6	40-140			
Bis(2-chloroethyl)ether	1.53	0.34	mg/Kg wet	1.67		91.9	40-140			
Bis(2-chloroisopropyl)ether	1.44	0.34	mg/Kg wet	1.67		86.6	40-140			
Bis(2-Ethylhexyl)phthalate	1.33	0.34	mg/Kg wet	1.67		79.8	40-140			
4-Bromophenylphenylether	1.44	0.34	mg/Kg wet	1.67		86.5	40-140			
Butylbenzylphthalate	1.34	0.34	mg/Kg wet	1.67		80.7	40-140			
4-Chloroaniline	1.20	0.66	mg/Kg wet	1.67		72.1	15-140			†
2-Chloronaphthalene	1.45	0.34	mg/Kg wet	1.67		86.9	40-140			
2-Chlorophenol	1.44	0.34	mg/Kg wet	1.67		86.3	30-130			
Chrysene	1.49	0.17	mg/Kg wet	1.67		89.2	40-140			
Dibenz(a,h)anthracene	1.13	0.17	mg/Kg wet	1.67		67.8	40-140			
Dibenzofuran	1.47	0.34	mg/Kg wet	1.67		88.4	40-140			
Di-n-butylphthalate	1.43	0.34	mg/Kg wet	1.67		85.6	40-140			
1,2-Dichlorobenzene	1.33	0.34	mg/Kg wet	1.67		79.8	40-140			
1,3-Dichlorobenzene	1.28	0.34	mg/Kg wet	1.67		76.7	40-140			
1,4-Dichlorobenzene	1.25	0.34	mg/Kg wet	1.67		75.0	40-140			
3,3-Dichlorobenzidine	1.69	0.17	mg/Kg wet	1.67		101	40-140			
2,4-Dichlorophenol	1.39	0.34	mg/Kg wet	1.67		83.3	30-130			
Diethylphthalate	1.36	0.34	mg/Kg wet	1.67		81.8	40-140			
2,4-Dimethylphenol	1.42	0.34	mg/Kg wet	1.67		85.0	30-130			
Dimethylphthalate	1.48	0.34	mg/Kg wet	1.67		89.0	40-140			
2,4-Dinitrophenol	1.05	0.66	mg/Kg wet	1.67		62.7	15-140			†
2,4-Dinitrotoluene	1.59	0.34	mg/Kg wet	1.67		95.4	40-140			
2,6-Dinitrotoluene	1.56	0.34	mg/Kg wet	1.67		93.4	40-140			
Di-n-octylphthalate	1.29	0.34	mg/Kg wet	1.67		77.6	40-140			V-05
1,2-Diphenylhydrazine/Azobenzene	1.44	0.34	mg/Kg wet	1.67		86.1	40-140			

**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330933 - SW-846 3546**
**LCS (B330933-BS1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Fluoranthene	1.66	0.17	mg/Kg wet	1.67		99.8	40-140			
Fluorene	1.47	0.17	mg/Kg wet	1.67		88.1	40-140			
Hexachlorobenzene	1.48	0.34	mg/Kg wet	1.67		88.6	40-140			
Hexachlorobutadiene	1.28	0.34	mg/Kg wet	1.67		76.9	40-140			
Hexachloroethane	1.29	0.34	mg/Kg wet	1.67		77.6	40-140			
Indeno(1,2,3-cd)pyrene	1.35	0.17	mg/Kg wet	1.67		81.0	40-140			
Isophorone	1.48	0.34	mg/Kg wet	1.67		89.0	40-140			
2-Methylnaphthalene	1.32	0.17	mg/Kg wet	1.67		78.9	40-140			
2-Methylphenol	1.53	0.34	mg/Kg wet	1.67		92.0	30-130			
3/4-Methylphenol	1.61	0.34	mg/Kg wet	1.67		96.6	30-130			
Naphthalene	1.39	0.17	mg/Kg wet	1.67		83.3	40-140			
Nitrobenzene	1.40	0.34	mg/Kg wet	1.67		83.9	40-140			
2-Nitrophenol	1.35	0.34	mg/Kg wet	1.67		80.9	30-130			
4-Nitrophenol	1.73	0.66	mg/Kg wet	1.67		104	15-140			†
Pentachlorophenol	1.12	0.34	mg/Kg wet	1.67		67.0	30-130			V-05
Phenanthrene	1.52	0.17	mg/Kg wet	1.67		91.4	40-140			
Phenol	1.60	0.34	mg/Kg wet	1.67		96.0	15-140			†
Pyrene	1.32	0.17	mg/Kg wet	1.67		79.5	40-140			
Pyridine	0.914	0.34	mg/Kg wet	1.67		54.9	30-140			†
1,2,4-Trichlorobenzene	1.30	0.34	mg/Kg wet	1.67		78.1	40-140			
2,4,5-Trichlorophenol	1.52	0.34	mg/Kg wet	1.67		91.3	30-130			
2,4,6-Trichlorophenol	1.49	0.34	mg/Kg wet	1.67		89.3	30-130			
Surrogate: 2-Fluorophenol	6.28		mg/Kg wet	6.67		94.3	30-130			
Surrogate: Phenol-d6	6.48		mg/Kg wet	6.67		97.2	30-130			
Surrogate: Nitrobenzene-d5	2.95		mg/Kg wet	3.33		88.6	30-130			
Surrogate: 2-Fluorobiphenyl	3.01		mg/Kg wet	3.33		90.3	30-130			
Surrogate: 2,4,6-Tribromophenol	6.65		mg/Kg wet	6.67		99.8	30-130			
Surrogate: p-Terphenyl-d14	2.95		mg/Kg wet	3.33		88.6	30-130			

**LCS Dup (B330933-BS1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Biphenyl	1.36	0.067	mg/Kg wet	1.67		81.8	40-140	11.6	20	
Acenaphthene	1.24	0.17	mg/Kg wet	1.67		74.5	40-140	9.32	30	
Acenaphthylene	1.31	0.17	mg/Kg wet	1.67		78.3	40-140	10.6	30	
Acetophenone	1.29	0.34	mg/Kg wet	1.67		77.4	40-140	11.3	30	
Aniline	0.868	0.34	mg/Kg wet	1.67		52.1	40-140	26.1	30	V-05
Anthracene	1.36	0.17	mg/Kg wet	1.67		81.7	40-140	11.1	30	
Benzo(a)anthracene	1.29	0.17	mg/Kg wet	1.67		77.4	40-140	12.9	30	
Benzo(a)pyrene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	14.9	30	
Benzo(b)fluoranthene	1.30	0.17	mg/Kg wet	1.67		78.1	40-140	14.7	30	
Benzo(g,h,i)perylene	0.989	0.17	mg/Kg wet	1.67		59.3	40-140	7.90	30	
Benzo(k)fluoranthene	1.36	0.17	mg/Kg wet	1.67		81.6	40-140	15.9	30	
Bis(2-chloroethoxy)methane	1.25	0.34	mg/Kg wet	1.67		75.2	40-140	10.6	30	
Bis(2-chloroethyl)ether	1.35	0.34	mg/Kg wet	1.67		81.0	40-140	12.7	30	
Bis(2-chloroisopropyl)ether	1.30	0.34	mg/Kg wet	1.67		77.9	40-140	10.6	30	
Bis(2-Ethylhexyl)phthalate	1.16	0.34	mg/Kg wet	1.67		69.4	40-140	14.0	30	
4-Bromophenylphenylether	1.30	0.34	mg/Kg wet	1.67		78.0	40-140	10.4	30	
Butylbenzylphthalate	1.20	0.34	mg/Kg wet	1.67		72.2	40-140	11.1	30	
4-Chloroaniline	0.911	0.66	mg/Kg wet	1.67		54.7	15-140	27.5	30	†
2-Chloronaphthalene	1.18	0.34	mg/Kg wet	1.67		71.0	40-140	20.2	30	
2-Chlorophenol	1.29	0.34	mg/Kg wet	1.67		77.7	30-130	10.5	30	
Chrysene	1.30	0.17	mg/Kg wet	1.67		78.0	40-140	13.4	30	
Dibenz(a,h)anthracene	1.06	0.17	mg/Kg wet	1.67		63.7	40-140	6.23	30	

**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B330933 - SW-846 3546</b>										
<b>LCS Dup (B330933-BSD1)</b>										
					Prepared: 02/08/23 Analyzed: 02/10/23					
Dibenzofuran	1.32	0.34	mg/Kg wet	1.67		79.0	40-140	11.3	30	
Di-n-butylphthalate	1.31	0.34	mg/Kg wet	1.67		78.5	40-140	8.73	30	
1,2-Dichlorobenzene	1.22	0.34	mg/Kg wet	1.67		73.3	40-140	8.44	30	
1,3-Dichlorobenzene	1.16	0.34	mg/Kg wet	1.67		69.5	40-140	9.85	30	
1,4-Dichlorobenzene	1.19	0.34	mg/Kg wet	1.67		71.2	40-140	5.25	30	
3,3-Dichlorobenzidine	1.27	0.17	mg/Kg wet	1.67		76.0	40-140	28.7	30	
2,4-Dichlorophenol	1.26	0.34	mg/Kg wet	1.67		75.6	30-130	9.74	30	
Diethylphthalate	1.26	0.34	mg/Kg wet	1.67		75.3	40-140	8.27	30	
2,4-Dimethylphenol	1.29	0.34	mg/Kg wet	1.67		77.6	30-130	9.17	30	
Dimethylphthalate	1.35	0.34	mg/Kg wet	1.67		81.3	40-140	9.11	30	
2,4-Dinitrophenol	0.961	0.66	mg/Kg wet	1.67		57.6	15-140	8.44	30	†
2,4-Dinitrotoluene	1.43	0.34	mg/Kg wet	1.67		85.7	40-140	10.8	30	
2,6-Dinitrotoluene	1.49	0.34	mg/Kg wet	1.67		89.4	40-140	4.42	30	
Di-n-octylphthalate	1.12	0.34	mg/Kg wet	1.67		67.2	40-140	14.4	30	V-05
1,2-Diphenylhydrazine/Azobenzene	1.27	0.34	mg/Kg wet	1.67		76.0	40-140	12.5	30	
Fluoranthene	1.48	0.17	mg/Kg wet	1.67		89.1	40-140	11.4	30	
Fluorene	1.33	0.17	mg/Kg wet	1.67		79.7	40-140	10.0	30	
Hexachlorobenzene	1.39	0.34	mg/Kg wet	1.67		83.5	40-140	5.93	30	
Hexachlorobutadiene	1.19	0.34	mg/Kg wet	1.67		71.5	40-140	7.22	30	
Hexachloroethane	1.21	0.34	mg/Kg wet	1.67		72.5	40-140	6.79	30	
Indeno(1,2,3-cd)pyrene	1.22	0.17	mg/Kg wet	1.67		73.3	40-140	10.0	30	
Isophorone	1.34	0.34	mg/Kg wet	1.67		80.7	40-140	9.83	30	
2-Methylnaphthalene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140	8.23	30	
2-Methylphenol	1.35	0.34	mg/Kg wet	1.67		80.9	30-130	12.9	30	
3/4-Methylphenol	1.42	0.34	mg/Kg wet	1.67		85.1	30-130	12.7	30	
Naphthalene	1.26	0.17	mg/Kg wet	1.67		75.6	40-140	9.72	30	
Nitrobenzene	1.26	0.34	mg/Kg wet	1.67		75.4	40-140	10.7	30	
2-Nitrophenol	1.24	0.34	mg/Kg wet	1.67		74.5	30-130	8.26	30	
4-Nitrophenol	1.53	0.66	mg/Kg wet	1.67		92.1	15-140	12.0	30	†
Pentachlorophenol	1.05	0.34	mg/Kg wet	1.67		62.8	30-130	6.56	30	V-05
Phenanthrene	1.36	0.17	mg/Kg wet	1.67		81.3	40-140	11.7	30	
Phenol	1.35	0.34	mg/Kg wet	1.67		81.1	15-140	16.8	30	†
Pyrene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	10.4	30	
Pyridine	0.828	0.34	mg/Kg wet	1.67		49.7	30-140	9.91	30	†
1,2,4-Trichlorobenzene	1.20	0.34	mg/Kg wet	1.67		72.1	40-140	7.99	30	
2,4,5-Trichlorophenol	1.39	0.34	mg/Kg wet	1.67		83.5	30-130	8.97	30	
2,4,6-Trichlorophenol	1.34	0.34	mg/Kg wet	1.67		80.4	30-130	10.5	30	
Surrogate: 2-Fluorophenol	5.63		mg/Kg wet	6.67		84.5	30-130			
Surrogate: Phenol-d6	5.72		mg/Kg wet	6.67		85.7	30-130			
Surrogate: Nitrobenzene-d5	2.64		mg/Kg wet	3.33		79.1	30-130			
Surrogate: 2-Fluorobiphenyl	2.72		mg/Kg wet	3.33		81.5	30-130			
Surrogate: 2,4,6-Tribromophenol	6.02		mg/Kg wet	6.67		90.3	30-130			
Surrogate: p-Terphenyl-d14	2.62		mg/Kg wet	3.33		78.6	30-130			

**QUALITY CONTROL**
**Polychlorinated Biphenyls By GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330896 - SW-846 3546**
**Blank (B330896-BLK1)**

Prepared: 02/08/23 Analyzed: 02/09/23

Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.188		mg/Kg wet	0.200		94.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.200		mg/Kg wet	0.200		100	30-150			
Surrogate: Tetrachloro-m-xylene	0.161		mg/Kg wet	0.200		80.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.183		mg/Kg wet	0.200		91.6	30-150			

**LCS (B330896-BS1)**

Prepared: 02/08/23 Analyzed: 02/09/23

Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		84.8	40-140			
Aroclor-1016 [2C]	0.16	0.020	mg/Kg wet	0.200		77.9	40-140			
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		84.8	40-140			
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		79.1	40-140			
Surrogate: Decachlorobiphenyl	0.187		mg/Kg wet	0.200		93.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.198		mg/Kg wet	0.200		99.2	30-150			
Surrogate: Tetrachloro-m-xylene	0.159		mg/Kg wet	0.200		79.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.181		mg/Kg wet	0.200		90.5	30-150			

**LCS Dup (B330896-BSD1)**

Prepared: 02/08/23 Analyzed: 02/09/23

Aroclor-1016	0.16	0.020	mg/Kg wet	0.200		80.2	40-140	5.54	30	
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		74.9	40-140	3.85	30	
Aroclor-1260	0.16	0.020	mg/Kg wet	0.200		80.7	40-140	4.91	30	
Aroclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		76.1	40-140	3.92	30	
Surrogate: Decachlorobiphenyl	0.184		mg/Kg wet	0.200		92.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.196		mg/Kg wet	0.200		98.2	30-150			
Surrogate: Tetrachloro-m-xylene	0.158		mg/Kg wet	0.200		78.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.181		mg/Kg wet	0.200		90.5	30-150			

**QUALITY CONTROL**
**Petroleum Hydrocarbons Analyses - EPH - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330895 - SW-846 3546**
**Blank (B330895-BLK1)**

Prepared: 02/08/23 Analyzed: 02/09/23

C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	3.70		mg/Kg wet	5.00		74.0	40-140			
Surrogate: o-Terphenyl (OTP)	3.94		mg/Kg wet	5.00		78.8	40-140			
Surrogate: 2-Bromonaphthalene	4.87		mg/Kg wet	5.00		97.4	40-140			
Surrogate: 2-Fluorobiphenyl	4.83		mg/Kg wet	5.00		96.7	40-140			

**LCS (B330895-BS1)**

Prepared: 02/08/23 Analyzed: 02/09/23

C9-C18 Aliphatics	25.1	10	mg/Kg wet	30.0		83.7	40-140			
C19-C36 Aliphatics	35.2	10	mg/Kg wet	40.0		88.0	40-140			
Unadjusted C11-C22 Aromatics	72.0	10	mg/Kg wet	85.0		84.7	40-140			
Acenaphthene	4.02	0.10	mg/Kg wet	5.00		80.4	40-140			
Acenaphthylene	3.72	0.10	mg/Kg wet	5.00		74.4	40-140			
Anthracene	3.99	0.10	mg/Kg wet	5.00		79.8	40-140			
Benzo(a)anthracene	4.11	0.10	mg/Kg wet	5.00		82.2	40-140			
Benzo(a)pyrene	4.20	0.10	mg/Kg wet	5.00		84.1	40-140			
Benzo(b)fluoranthene	4.04	0.10	mg/Kg wet	5.00		80.8	40-140			
Benzo(g,h,i)perylene	3.98	0.10	mg/Kg wet	5.00		79.7	40-140			
Benzo(k)fluoranthene	3.89	0.10	mg/Kg wet	5.00		77.8	40-140			
Chrysene	4.31	0.10	mg/Kg wet	5.00		86.1	40-140			
Dibenz(a,h)anthracene	4.10	0.10	mg/Kg wet	5.00		82.1	40-140			
Fluoranthene	4.01	0.10	mg/Kg wet	5.00		80.3	40-140			
Fluorene	3.99	0.10	mg/Kg wet	5.00		79.8	40-140			
Indeno(1,2,3-cd)pyrene	4.03	0.10	mg/Kg wet	5.00		80.5	40-140			
2-Methylnaphthalene	3.86	0.10	mg/Kg wet	5.00		77.2	40-140			
Naphthalene	3.75	0.10	mg/Kg wet	5.00		75.0	40-140			
Phenanthrene	4.06	0.10	mg/Kg wet	5.00		81.2	40-140			
Pyrene	4.10	0.10	mg/Kg wet	5.00		82.0	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	3.72		mg/Kg wet	5.00		74.4	40-140			

**QUALITY CONTROL**
**Petroleum Hydrocarbons Analyses - EPH - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330895 - SW-846 3546**
**LCS (B330895-BS1)**

Prepared: 02/08/23 Analyzed: 02/09/23

Surrogate: o-Terphenyl (OTP)	3.92		mg/Kg wet	5.00		78.4	40-140			
Surrogate: 2-Bromonaphthalene	4.86		mg/Kg wet	5.00		97.2	40-140			
Surrogate: 2-Fluorobiphenyl	4.96		mg/Kg wet	5.00		99.2	40-140			

**LCS Dup (B330895-BSD1)**

Prepared: 02/08/23 Analyzed: 02/09/23

C9-C18 Aliphatics	21.8	10	mg/Kg wet	30.0		72.7	40-140	14.1	25	
C19-C36 Aliphatics	33.1	10	mg/Kg wet	40.0		82.9	40-140	6.03	25	
Unadjusted C11-C22 Aromatics	66.1	10	mg/Kg wet	85.0		77.7	40-140	8.57	25	
Acenaphthene	3.59	0.10	mg/Kg wet	5.00		71.7	40-140	11.4	25	
Acenaphthylene	3.32	0.10	mg/Kg wet	5.00		66.3	40-140	11.5	25	
Anthracene	3.68	0.10	mg/Kg wet	5.00		73.5	40-140	8.16	25	
Benzo(a)anthracene	3.80	0.10	mg/Kg wet	5.00		76.0	40-140	7.77	25	
Benzo(a)pyrene	3.88	0.10	mg/Kg wet	5.00		77.7	40-140	7.92	25	
Benzo(b)fluoranthene	3.73	0.10	mg/Kg wet	5.00		74.7	40-140	7.90	25	
Benzo(g,h,i)perylene	3.68	0.10	mg/Kg wet	5.00		73.6	40-140	7.88	25	
Benzo(k)fluoranthene	3.60	0.10	mg/Kg wet	5.00		72.0	40-140	7.72	25	
Chrysene	3.98	0.10	mg/Kg wet	5.00		79.5	40-140	7.97	25	
Dibenz(a,h)anthracene	3.78	0.10	mg/Kg wet	5.00		75.6	40-140	8.22	25	
Fluoranthene	3.72	0.10	mg/Kg wet	5.00		74.4	40-140	7.61	25	
Fluorene	3.67	0.10	mg/Kg wet	5.00		73.4	40-140	8.38	25	
Indeno(1,2,3-cd)pyrene	3.72	0.10	mg/Kg wet	5.00		74.4	40-140	7.94	25	
2-Methylnaphthalene	3.36	0.10	mg/Kg wet	5.00		67.3	40-140	13.8	25	
Naphthalene	3.19	0.10	mg/Kg wet	5.00		63.8	40-140	16.1	25	
Phenanthrene	3.74	0.10	mg/Kg wet	5.00		74.7	40-140	8.34	25	
Pyrene	3.80	0.10	mg/Kg wet	5.00		76.0	40-140	7.63	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	3.51		mg/Kg wet	5.00		70.2	40-140			
Surrogate: o-Terphenyl (OTP)	3.59		mg/Kg wet	5.00		71.7	40-140			
Surrogate: 2-Bromonaphthalene	5.17		mg/Kg wet	5.00		103	40-140			
Surrogate: 2-Fluorobiphenyl	5.25		mg/Kg wet	5.00		105	40-140			

**Matrix Spike (B330895-MS1)**
**Source: 23B0766-01**

Prepared: 02/08/23 Analyzed: 02/09/23

C9-C18 Aliphatics	26.7	11	mg/Kg dry	33.5	ND	79.5	40-140			
C19-C36 Aliphatics	40.9	11	mg/Kg dry	44.7	ND	91.4	40-140			
Unadjusted C11-C22 Aromatics	95.9	11	mg/Kg dry	95.0	ND	101	40-140			
Acenaphthene	4.79	0.11	mg/Kg dry	5.59	ND	85.7	40-140			
Acenaphthylene	4.38	0.11	mg/Kg dry	5.59	ND	78.3	40-140			
Anthracene	4.94	0.11	mg/Kg dry	5.59	ND	88.3	40-140			
Benzo(a)anthracene	5.74	0.11	mg/Kg dry	5.59	ND	103	40-140			
Benzo(a)pyrene	5.98	0.11	mg/Kg dry	5.59	ND	107	40-140			
Benzo(b)fluoranthene	5.89	0.11	mg/Kg dry	5.59	ND	105	40-140			
Benzo(g,h,i)perylene	5.84	0.11	mg/Kg dry	5.59	ND	105	40-140			
Benzo(k)fluoranthene	5.11	0.11	mg/Kg dry	5.59	ND	91.3	40-140			
Chrysene	5.52	0.11	mg/Kg dry	5.59	ND	98.7	40-140			
Dibenz(a,h)anthracene	5.84	0.11	mg/Kg dry	5.59	ND	104	40-140			
Fluoranthene	5.27	0.11	mg/Kg dry	5.59	ND	94.3	40-140			
Fluorene	4.91	0.11	mg/Kg dry	5.59	ND	87.9	40-140			
Indeno(1,2,3-cd)pyrene	6.08	0.11	mg/Kg dry	5.59	ND	109	40-140			
2-Methylnaphthalene	4.58	0.11	mg/Kg dry	5.59	ND	81.9	40-140			
Naphthalene	4.15	0.11	mg/Kg dry	5.59	0.0358	73.7	40-140			
Phenanthrene	5.22	0.11	mg/Kg dry	5.59	ND	93.4	40-140			

**QUALITY CONTROL**
**Petroleum Hydrocarbons Analyses - EPH - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B330895 - SW-846 3546</b>										
<b>Matrix Spike (B330895-MS1)</b>										
		<b>Source: 23B0766-01</b>			Prepared: 02/08/23 Analyzed: 02/09/23					
Pyrene	5.41	0.11	mg/Kg dry	5.59	ND	96.7	40-140			
Surrogate: Chlorooctadecane (COD)	3.83		mg/Kg dry	5.59		68.5	40-140			
Surrogate: o-Terphenyl (OTP)	4.84		mg/Kg dry	5.59		86.5	40-140			
Surrogate: 2-Bromonaphthalene	5.77		mg/Kg dry	5.59		103	40-140			
Surrogate: 2-Fluorobiphenyl	5.72		mg/Kg dry	5.59		102	40-140			
<b>Matrix Spike Dup (B330895-MSD1)</b>										
		<b>Source: 23B0766-01</b>			Prepared: 02/08/23 Analyzed: 02/09/23					
C9-C18 Aliphatics	23.9	11	mg/Kg dry	33.5	ND	71.3	40-140	10.9	50	
C19-C36 Aliphatics	37.0	11	mg/Kg dry	44.7	ND	82.7	40-140	9.99	50	
Unadjusted C11-C22 Aromatics	92.5	11	mg/Kg dry	95.0	ND	97.3	40-140	3.63	50	
Acenaphthene	4.65	0.11	mg/Kg dry	5.59	ND	83.1	40-140	2.98	50	
Acenaphthylene	4.27	0.11	mg/Kg dry	5.59	ND	76.3	40-140	2.62	50	
Anthracene	4.77	0.11	mg/Kg dry	5.59	ND	85.4	40-140	3.40	50	
Benzo(a)anthracene	5.50	0.11	mg/Kg dry	5.59	ND	98.4	40-140	4.15	50	
Benzo(a)pyrene	5.74	0.11	mg/Kg dry	5.59	ND	103	40-140	4.14	50	
Benzo(b)fluoranthene	5.67	0.11	mg/Kg dry	5.59	ND	101	40-140	3.79	50	
Benzo(g,h,i)perylene	5.57	0.11	mg/Kg dry	5.59	ND	99.6	40-140	4.78	50	
Benzo(k)fluoranthene	4.89	0.11	mg/Kg dry	5.59	ND	87.5	40-140	4.31	50	
Chrysene	5.29	0.11	mg/Kg dry	5.59	ND	94.6	40-140	4.27	50	
Dibenz(a,h)anthracene	5.61	0.11	mg/Kg dry	5.59	ND	100	40-140	3.94	50	
Fluoranthene	5.07	0.11	mg/Kg dry	5.59	ND	90.6	40-140	3.99	50	
Fluorene	4.78	0.11	mg/Kg dry	5.59	ND	85.6	40-140	2.62	50	
Indeno(1,2,3-cd)pyrene	5.85	0.11	mg/Kg dry	5.59	ND	105	40-140	3.84	50	
2-Methylnaphthalene	4.49	0.11	mg/Kg dry	5.59	ND	80.2	40-140	2.09	50	
Naphthalene	4.09	0.11	mg/Kg dry	5.59	0.0358	72.6	40-140	1.50	50	
Phenanthrene	5.05	0.11	mg/Kg dry	5.59	ND	90.3	40-140	3.35	50	
Pyrene	5.20	0.11	mg/Kg dry	5.59	ND	93.1	40-140	3.79	50	
Surrogate: Chlorooctadecane (COD)	3.55		mg/Kg dry	5.59		63.5	40-140			
Surrogate: o-Terphenyl (OTP)	4.69		mg/Kg dry	5.59		83.8	40-140			
Surrogate: 2-Bromonaphthalene	6.23		mg/Kg dry	5.59		111	40-140			
Surrogate: 2-Fluorobiphenyl	6.12		mg/Kg dry	5.59		109	40-140			

**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330929 - SW-846 3050B**
**Blank (B330929-BLK1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Antimony	ND	1.6	mg/Kg wet							
Arsenic	ND	3.2	mg/Kg wet							
Barium	ND	1.6	mg/Kg wet							
Beryllium	ND	0.16	mg/Kg wet							
Cadmium	ND	0.32	mg/Kg wet							
Chromium	ND	0.64	mg/Kg wet							
Lead	ND	0.48	mg/Kg wet							
Nickel	ND	0.64	mg/Kg wet							
Selenium	ND	3.2	mg/Kg wet							
Thallium	ND	1.6	mg/Kg wet							
Vanadium	ND	0.64	mg/Kg wet							
Zinc	ND	0.64	mg/Kg wet							

**Blank (B330929-BLK2)**

Prepared: 02/08/23 Analyzed: 02/14/23

Silver	ND	0.32	mg/Kg wet							
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**LCS (B330929-BS1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Antimony	88.0	4.9	mg/Kg wet	111		79.3	0-205.4			
Arsenic	106	9.9	mg/Kg wet	112		94.9	82-118.8			
Barium	153	4.9	mg/Kg wet	154		99.5	81.8-118.2			
Beryllium	118	0.49	mg/Kg wet	121		97.8	82.2-118.2			
Cadmium	183	0.99	mg/Kg wet	196		93.5	82.1-118.4			
Chromium	97.4	2.0	mg/Kg wet	103		94.5	80.8-118.4			
Lead	71.4	1.5	mg/Kg wet	73.2		97.5	82.8-117.3			
Nickel	242	2.0	mg/Kg wet	249		97.0	81.9-118.1			
Selenium	213	9.9	mg/Kg wet	215		99.2	78.1-121.9			
Thallium	80.5	4.9	mg/Kg wet	67.7		119	80.1-120.1			
Vanadium	173	2.0	mg/Kg wet	177		97.6	78-122			
Zinc	347	2.0	mg/Kg wet	360		96.4	79.7-120.3			

**LCS (B330929-BS2)**

Prepared: 02/08/23 Analyzed: 02/14/23

Silver	87.7	0.99	mg/Kg wet	78.5		112	78.9-121.1			
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**LCS Dup (B330929-BSD1)**

Prepared: 02/08/23 Analyzed: 02/10/23

Antimony	81.5	4.7	mg/Kg wet	111		73.4	0-205.4	7.72	30	
Arsenic	101	9.3	mg/Kg wet	112		90.2	82-118.8	5.02	30	
Barium	142	4.7	mg/Kg wet	154		92.1	81.8-118.2	7.72	20	
Beryllium	113	0.47	mg/Kg wet	121		93.7	82.2-118.2	4.33	30	
Cadmium	173	0.93	mg/Kg wet	196		88.3	82.1-118.4	5.71	20	
Chromium	92.3	1.9	mg/Kg wet	103		89.6	80.8-118.4	5.35	30	
Lead	68.3	1.4	mg/Kg wet	73.2		93.3	82.8-117.3	4.47	30	
Nickel	228	1.9	mg/Kg wet	249		91.4	81.9-118.1	5.92	30	
Selenium	201	9.3	mg/Kg wet	215		93.7	78.1-121.9	5.67	30	
Thallium	77.5	4.7	mg/Kg wet	67.7		115	80.1-120.1	3.81	30	
Vanadium	165	1.9	mg/Kg wet	177		93.0	78-122	4.86	30	
Zinc	328	1.9	mg/Kg wet	360		91.1	79.7-120.3	5.66	30	

**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B330929 - SW-846 3050B**
**LCS Dup (B330929-BSD2)**

Prepared: 02/08/23 Analyzed: 02/14/23

Silver	83.8	0.93	mg/Kg wet	78.5		107	78.9-121.1	4.55	30	
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**Matrix Spike (B330929-MS1)**
**Source: 23B0766-01**

Prepared: 02/08/23 Analyzed: 02/10/23

<b>Antimony</b>	10.1	1.9	mg/Kg dry	18.6	ND	<b>54.3</b> *	75-125			MS-09
Arsenic	18.1	3.7	mg/Kg dry	18.6	1.79	87.4	75-125			
Barium	25.3	1.9	mg/Kg dry	18.6	8.22	91.5	75-125			
Beryllium	17.9	0.19	mg/Kg dry	18.6	0.188	95.3	75-125			
Cadmium	16.7	0.37	mg/Kg dry	18.6	0.157	89.0	75-125			
Chromium	23.8	0.75	mg/Kg dry	18.6	6.49	93.0	75-125			
Lead	21.9	0.56	mg/Kg dry	18.6	4.54	93.3	75-125			
Nickel	20.2	0.75	mg/Kg dry	18.6	3.50	89.6	75-125			
Selenium	16.6	3.7	mg/Kg dry	18.6	ND	89.3	75-125			
Thallium	21.7	1.9	mg/Kg dry	18.6	ND	116	75-125			
Vanadium	24.0	0.75	mg/Kg dry	18.6	6.91	91.8	75-125			
Zinc	85.7	0.75	mg/Kg dry	37.3	46.9	104	75-125			

**Matrix Spike (B330929-MS2)**
**Source: 23B0766-01**

Prepared: 02/08/23 Analyzed: 02/14/23

Silver	19.6	0.37	mg/Kg dry	18.6	ND	105	75-125			
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**Matrix Spike Dup (B330929-MSD1)**
**Source: 23B0766-01**

Prepared: 02/08/23 Analyzed: 02/10/23

<b>Antimony</b>	10.2	1.8	mg/Kg dry	18.2	ND	<b>55.9</b> *	75-125	0.540	35	MS-09
Arsenic	18.8	3.6	mg/Kg dry	18.2	1.79	93.7	75-125	4.11	35	
Barium	26.1	1.8	mg/Kg dry	18.2	8.22	98.2	75-125	3.19	35	
Beryllium	18.2	0.18	mg/Kg dry	18.2	0.188	99.0	75-125	1.45	35	
Cadmium	16.7	0.36	mg/Kg dry	18.2	0.157	90.9	75-125	0.246	35	
Chromium	24.1	0.73	mg/Kg dry	18.2	6.49	96.5	75-125	0.950	35	
Lead	23.0	0.55	mg/Kg dry	18.2	4.54	101	75-125	4.66	35	
Nickel	20.4	0.73	mg/Kg dry	18.2	3.50	93.0	75-125	1.05	35	
Selenium	16.1	3.6	mg/Kg dry	18.2	ND	88.3	75-125	3.52	35	
Thallium	22.8	1.8	mg/Kg dry	18.2	ND	125	75-125	5.04	35	
Vanadium	25.0	0.73	mg/Kg dry	18.2	6.91	99.3	75-125	3.91	35	
Zinc	80.5	0.73	mg/Kg dry	36.4	46.9	92.4	75-125	6.22	35	

**Matrix Spike Dup (B330929-MSD2)**
**Source: 23B0766-01**

Prepared: 02/08/23 Analyzed: 02/14/23

Silver	18.8	0.36	mg/Kg dry	18.2	ND	103	75-125	3.81	35	
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**Reference (B330929-SRM1) MRL CHECK**

Prepared: 02/08/23 Analyzed: 02/14/23

Lead	0.484	0.50	mg/Kg wet	0.499		97.0	80-120			
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**Batch B331047 - SW-846 7470A/7471A**
**Blank (B331047-BLK1)**

Prepared &amp; Analyzed: 02/09/23

Mercury	ND	0.025	mg/Kg wet							
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**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B331047 - SW-846 7470A/7471A**
**LCS (B331047-BS1)**

Prepared &amp; Analyzed: 02/09/23

Mercury	21.8	3.7	mg/Kg wet	25.6		85.0	67.2-132.8			
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**LCS Dup (B331047-BSD1)**

Prepared &amp; Analyzed: 02/09/23

Mercury	31.7	3.7	mg/Kg wet	25.6		124	67.2-132.8	37.1	*	20	R-05
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**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
O-32	A dilution was performed as part of the standard analytical procedure.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b>MADEP EPH rev 2.1 in Soil</b>	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
<b>MADEP EPH rev 2.1 in Water</b>	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
<b>SW-846 6010D in Soil</b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b><i>SW-846 6010D in Soil</i></b>	
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b><i>SW-846 6010D in Water</i></b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b><i>SW-846 7471B in Soil</i></b>	
Mercury	CT,NH,NY,NC,ME,VA
<b><i>SW-846 8082A in Soil</i></b>	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 8082A in Water</b>	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
<b>SW-846 8260D in Soil</b>	
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b><i>SW-846 8260D in Soil</i></b>	
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
1,4-Dioxane	NY
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NH,NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	NY
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<b><i>SW-846 8270E in Soil</i></b>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8270E in Soil</i>	
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine/Azobenzene	NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8270E in Soil</i>	
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH
<i>SW-846 8270E in Water</i>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY
Aniline	CT,NY
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	CT,NY,NH
1,3-Dichlorobenzene	CT,NY,NH
1,4-Dichlorobenzene	CT,NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine/Azobenzene	NY
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8270E in Water</i>	
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023

2330766



Company Name: Horsley Witten Group  
Address: 90 Route 6A, Sandwich, MA 02563  
Phone: 781-243-1527  
Project Name: Sand Pit Road Truro  
Project Location: Sand Pit Road, Truro  
Project Number: 2229  
Project Manager: Bryan Massa  
Pace Quote Name/Number:  
Invoice Recipient:

Requested Turnaround Time:  
7-Day  10-Day   
PFAS 10-Day (std)  Due Date:  
Push-Approval Required  
1-Day  3-Day   
2-Day  4-Day   
Format: PDF  EXCEL   
Other:  
CLP Like Data Pkg Required:   
Email To: massa@hws.com  
Fax To #: withen.com

ANALYSIS REQUESTED

Pace Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP / GRAB	Matrix Code	DIGESTION / METALS SAMPLES				Preservation Code
						VIALS	GLASS	PLASTIC	BACTERIA	
1	TP-2(2-4)	2/2/23	1230	grab	S	1				
2	TP-3(0-2)	2/2/23	1250	grab	S	1				
3	TP-5(0-2)	2/2/23	10:15	grab	S	3				
4	TP-5(0-8)	2/2/23	10:15	grab	S	1				
5	TP-6(0-2)	2/2/23	8:30	grab	S	1				
6	TP-8(2-4)	2/2/23	10:25	grab	S	3				
7	TP-9(0-2)	2/2/23	11:00	grab	S	1				
8	TP-10(6-8)	2/2/23	11:40	grab	S	1				
9	TP-11(0-2)	2/2/23	14:00	grab	S	1				

Special Requirements	MA MCP Required	MCP Certification Form Required	CT RCP Required	RCP Certification Form Required	MA State DW Required
PCBS					
VOCs					
SVOCs					
MCP 14 metals	X				
EPH w/ PAHs	X				

1 Preservation Codes:  
I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium Bisulfate  
X = Sodium Hydroxide  
T = Sodium Thiosulfate  
O = Other (please define)

2 Matrix Codes:  
GW = Ground Water  
WM = Waste Water  
DW = Drinking Water  
A = Air  
S = Soil  
SL = Sludge  
SOL = Solid  
O = Other (please define)

\*Face Analytical is not responsible for missing samples from prepacked coolers

Glassware in the fridge? Y/N  
Glassware in freezer? Y/N  
Prepackaged Cooler? Y/N

Client Comments:  
MCP methods  
RCS-1

Relinquished by: (signature) Caroline Armstrong Date/Time: 2/6/23 1520  
Received by: (signature) Chad King Date/Time: 2/6/23 1520  
Relinquished by: (signature) Chad King Date/Time: 2/6/23 1715  
Received by: (signature) Chad King Date/Time: 2/6/23 1715

Project Entity:  Government  Municipality  WRTA  Other  
 Federal  School  MBTA  Chromatogram  
 City  Brownfield  AIRA-LAP, LLC

PSWD #

Lab Comments:

Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will not be held accountable.

39 Spruce St.  
 East Longmeadow, MA. 01028  
 P: 413-525-2332  
 F: 413-525-6405  
 www.pacelabs.com

# Log In Back-Sheet

Login Sample Receipt Checklist - (Rejection Criteria Listing  
 - Using Acceptance Policy) Any False statement will be  
 brought to the attention of the Client - True or False



Client Horsley Winton Group  
 Project Sand Pit Rd, Truro  
 MCP/RCP Required MA MCP  
 Deliverable Package Requirement RCS-1  
 Location Sand Pit Rd, Truro  
 PWSID# (When Applicable) NA  
 Arrival Method Courier  
 Received By / Date / Time GR 2/6/23 1715  
 Back-Sheet By / Date / Time GR 2/7/23 1830  
 Temperature Method gun # 5  
 Temp < 6°C  Actual Temperature 2.9  
 Rush Samples: Yes /  No Notify  
 Short Hold: Yes /  No Notify

	True	False
Received on Ice	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Received in Cooler	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custody Seal: DATE TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Relinquished	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC/Samples Labels Agree	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Samples in Good Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples Received within Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is there enough Volume	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper Media/Container Used	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Splitting Samples Required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MS/MSD	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Trip Blanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lab to Filters	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Legible	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC Included: (Check all included)		
Client <input checked="" type="checkbox"/>	Analysis <input checked="" type="checkbox"/>	Sampler Name <input checked="" type="checkbox"/>
Project <input checked="" type="checkbox"/>	IDs <input checked="" type="checkbox"/>	Collection Date/Time <input checked="" type="checkbox"/>
All Samples Proper PH <u>NA</u>	<input type="checkbox"/>	<input type="checkbox"/>

**Notes regarding Samples/COC outside of SOP:**

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Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	Na2S2O3	Other Preservative	
1L Amber Plastic									
500 mL Amber Plastic									
250 mL Amber Plastic									
Other Amber Clear Plastic									
16oz Amber Clear									
8oz <u>Amber</u> Clear		4							
4oz Amber Clear									
2oz Amber Clear									
Col/Bacteria									
Flashpoint									
Plastic Bag									
SOC Kit									
Perchlorate									
Encore									
Frozen									
	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials				2	4				



February 22, 2023

Bryan Massa  
Horsley Witten Group  
90 Route 6A Unit #1  
Sandwich, MA 02563

Project Location: Sand Pit Rd., Truro, MA.  
Client Job Number:  
Project Number: 22129  
Laboratory Work Order Number: 23B1132

Enclosed are results of analyses for samples as received by the laboratory on February 9, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kaitlyn A. Feliciano  
Project Manager

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Horsley Witten Group  
90 Route 6A Unit #1  
Sandwich, MA 02563  
ATTN: Bryan Massa

REPORT DATE: 2/22/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 22129

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 23B1132

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Sand Pit Rd., Truro, MA.

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TP-5 (6-8)	23B1132-01	Soil		MADEP EPH rev 2.1 SM 2540G SW-846 6010D SW-846 7471B	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

**SM 2540G**

**Qualifications:**

---

**H-03**

Sample received after recommended holding time was exceeded.

**Analyte & Samples(s) Qualified:**

**% Solids**

23B1132-01[TP-5 (6-8)]

**SW-846 6010D**

**Qualifications:**

---

**L-07**

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

**Analyte & Samples(s) Qualified:**

**Arsenic**

B331335-BS1

**Lead**

B331335-BS4

**Silver**

B331335-BS1

**M-10**

The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.

**Analyte & Samples(s) Qualified:**

**Lead**

23B1132-01[TP-5 (6-8)], B331335-SRM1

**SW-846 7471B**

**Qualifications:**

---

**MS-22**

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

**Analyte & Samples(s) Qualified:**

**Mercury**

B331454-MS1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley  
Reporting Specialist

Project Location: Sand Pit Rd., Truro, MA.

Sample Description:

Work Order: 23B1132

Date Received: 2/9/2023

Field Sample #: TP-5 (6-8)

Sampled: 2/2/2023 10:15

Sample ID: 23B1132-01

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses - EPH**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Benzo(g,h,i)perylene	0.17	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP EPH rev 2.1	2/10/23	2/15/23 10:49	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	66.9	40-140	
o-Terphenyl (OTP)	73.8	40-140	
2-Bromonaphthalene	74.8	40-140	
2-Fluorobiphenyl	79.2	40-140	

Project Location: Sand Pit Rd., Truro, MA.

Sample Description:

Work Order: 23B1132

Date Received: 2/9/2023

Field Sample #: TP-5 (6-8)

Sampled: 2/2/2023 10:15

Sample ID: 23B1132-01

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Barium	9.8	1.8	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Beryllium	0.22	0.18	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Chromium	6.1	0.72	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Lead	6.4	0.54	mg/Kg dry	1	M-10	SW-846 6010D	2/13/23	2/16/23 18:31	HNN
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	2/14/23	2/15/23 15:19	AAJ
Nickel	2.8	0.72	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Vanadium	8.9	0.72	mg/Kg dry	1		SW-846 6010D	2/13/23	2/15/23 16:24	ATP
Zinc	9.7	0.72	mg/Kg dry	1		SW-846 6010D	2/13/23	2/16/23 18:31	HNN

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Sand Pit Rd., Truro, MA.

Sample Description:

Work Order: 23B1132

Date Received: 2/9/2023

Sampled: 2/2/2023 10:15

Field Sample #: TP-5 (6-8)

Sample ID: 23B1132-01

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.0		% Wt	1	H-03	SM 2540G	2/11/23	2/11/23 7:44	WDC

**Sample Extraction Data****Prep Method: SW-846 3546    Analytical Method: MADEP EPH rev 2.1**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23B1132-01 [TP-5 (6-8)]	B331184	20.0	2.00	02/10/23

**Prep Method: % Solids    Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
23B1132-01 [TP-5 (6-8)]	B331289	02/11/23

**Prep Method: SW-846 3050B    Analytical Method: SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23B1132-01 [TP-5 (6-8)]	B331335	1.52	50.0	02/13/23

**Prep Method: SW-846 7470A/7471A    Analytical Method: SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23B1132-01 [TP-5 (6-8)]	B331454	0.604	50.0	02/14/23

**QUALITY CONTROL**
**Petroleum Hydrocarbons Analyses - EPH - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B331184 - SW-846 3546**
**Blank (B331184-BLK1)**

Prepared: 02/10/23 Analyzed: 02/14/23

C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	3.40		mg/Kg wet	5.00		68.1	40-140			
Surrogate: o-Terphenyl (OTP)	4.30		mg/Kg wet	5.00		86.0	40-140			
Surrogate: 2-Bromonaphthalene	4.77		mg/Kg wet	5.00		95.4	40-140			
Surrogate: 2-Fluorobiphenyl	4.76		mg/Kg wet	5.00		95.2	40-140			

**LCS (B331184-BS1)**

Prepared: 02/10/23 Analyzed: 02/14/23

C9-C18 Aliphatics	20.6	10	mg/Kg wet	30.0		68.7	40-140			
C19-C36 Aliphatics	34.2	10	mg/Kg wet	40.0		85.5	40-140			
Unadjusted C11-C22 Aromatics	88.4	10	mg/Kg wet	85.0		104	40-140			
Acenaphthene	4.28	0.10	mg/Kg wet	5.00		85.6	40-140			
Acenaphthylene	3.86	0.10	mg/Kg wet	5.00		77.3	40-140			
Anthracene	4.68	0.10	mg/Kg wet	5.00		93.6	40-140			
Benzo(a)anthracene	5.42	0.10	mg/Kg wet	5.00		108	40-140			
Benzo(a)pyrene	5.59	0.10	mg/Kg wet	5.00		112	40-140			
Benzo(b)fluoranthene	5.56	0.10	mg/Kg wet	5.00		111	40-140			
Benzo(g,h,i)perylene	5.51	0.10	mg/Kg wet	5.00		110	40-140			
Benzo(k)fluoranthene	4.85	0.10	mg/Kg wet	5.00		97.0	40-140			
Chrysene	5.23	0.10	mg/Kg wet	5.00		105	40-140			
Dibenz(a,h)anthracene	5.51	0.10	mg/Kg wet	5.00		110	40-140			
Fluoranthene	4.99	0.10	mg/Kg wet	5.00		99.8	40-140			
Fluorene	4.53	0.10	mg/Kg wet	5.00		90.7	40-140			
Indeno(1,2,3-cd)pyrene	5.76	0.10	mg/Kg wet	5.00		115	40-140			
2-Methylnaphthalene	3.80	0.10	mg/Kg wet	5.00		76.1	40-140			
Naphthalene	3.13	0.10	mg/Kg wet	5.00		62.5	40-140			
Phenanthrene	4.92	0.10	mg/Kg wet	5.00		98.4	40-140			
Pyrene	5.14	0.10	mg/Kg wet	5.00		103	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	3.29		mg/Kg wet	5.00		65.8	40-140			

**QUALITY CONTROL**
**Petroleum Hydrocarbons Analyses - EPH - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B331184 - SW-846 3546**
**LCS (B331184-BS1)**

Prepared: 02/10/23 Analyzed: 02/14/23

Surrogate: o-Terphenyl (OTP)	4.59		mg/Kg wet	5.00		91.9	40-140			
Surrogate: 2-Bromonaphthalene	4.79		mg/Kg wet	5.00		95.7	40-140			
Surrogate: 2-Fluorobiphenyl	4.78		mg/Kg wet	5.00		95.6	40-140			

**LCS Dup (B331184-BSD1)**

Prepared: 02/10/23 Analyzed: 02/14/23

C9-C18 Aliphatics	21.8	10	mg/Kg wet	30.0		72.5	40-140	5.40	25	
C19-C36 Aliphatics	35.2	10	mg/Kg wet	40.0		87.9	40-140	2.84	25	
Unadjusted C11-C22 Aromatics	75.0	10	mg/Kg wet	85.0		88.3	40-140	16.4	25	
Acenaphthene	3.55	0.10	mg/Kg wet	5.00		70.9	40-140	18.8	25	
Acenaphthylene	3.21	0.10	mg/Kg wet	5.00		64.3	40-140	18.4	25	
Anthracene	3.90	0.10	mg/Kg wet	5.00		78.0	40-140	18.2	25	
Benzo(a)anthracene	4.55	0.10	mg/Kg wet	5.00		91.0	40-140	17.5	25	
Benzo(a)pyrene	4.68	0.10	mg/Kg wet	5.00		93.6	40-140	17.7	25	
Benzo(b)fluoranthene	4.66	0.10	mg/Kg wet	5.00		93.2	40-140	17.6	25	
Benzo(g,h,i)perylene	4.66	0.10	mg/Kg wet	5.00		93.2	40-140	16.8	25	
Benzo(k)fluoranthene	4.07	0.10	mg/Kg wet	5.00		81.3	40-140	17.5	25	
Chrysene	4.40	0.10	mg/Kg wet	5.00		88.0	40-140	17.3	25	
Dibenz(a,h)anthracene	4.63	0.10	mg/Kg wet	5.00		92.6	40-140	17.4	25	
Fluoranthene	4.18	0.10	mg/Kg wet	5.00		83.7	40-140	17.6	25	
Fluorene	3.74	0.10	mg/Kg wet	5.00		74.8	40-140	19.2	25	
Indeno(1,2,3-cd)pyrene	4.83	0.10	mg/Kg wet	5.00		96.6	40-140	17.7	25	
2-Methylnaphthalene	3.33	0.10	mg/Kg wet	5.00		66.6	40-140	13.2	25	
Naphthalene	3.05	0.10	mg/Kg wet	5.00		61.0	40-140	2.44	25	
Phenanthrene	4.08	0.10	mg/Kg wet	5.00		81.6	40-140	18.6	25	
Pyrene	4.29	0.10	mg/Kg wet	5.00		85.9	40-140	17.9	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	3.33		mg/Kg wet	5.00		66.5	40-140			
Surrogate: o-Terphenyl (OTP)	3.75		mg/Kg wet	5.00		75.0	40-140			
Surrogate: 2-Bromonaphthalene	4.22		mg/Kg wet	5.00		84.4	40-140			
Surrogate: 2-Fluorobiphenyl	4.20		mg/Kg wet	5.00		84.1	40-140			

**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B331335 - SW-846 3050B</b>										
<b>Blank (B331335-BLK1)</b>										
Prepared: 02/13/23 Analyzed: 02/15/23										
Antimony	ND	1.6	mg/Kg wet							
Arsenic	ND	3.2	mg/Kg wet							
Barium	ND	1.6	mg/Kg wet							
Beryllium	ND	0.16	mg/Kg wet							
Cadmium	ND	0.32	mg/Kg wet							
Chromium	ND	0.64	mg/Kg wet							
Nickel	ND	0.64	mg/Kg wet							
Selenium	ND	3.2	mg/Kg wet							
Silver	ND	0.32	mg/Kg wet							
Thallium	ND	1.6	mg/Kg wet							
Vanadium	ND	0.64	mg/Kg wet							
<b>Blank (B331335-BLK2)</b>										
Prepared: 02/13/23 Analyzed: 02/16/23										
Lead	ND	0.48	mg/Kg wet							
Zinc	ND	0.64	mg/Kg wet							
<b>LCS (B331335-BS1)</b>										
Prepared: 02/13/23 Analyzed: 02/15/23										
Antimony	89.4	5.0	mg/Kg wet	111		80.5	0-205.4			
<b>Arsenic</b>	86.7	9.9	mg/Kg wet	112		<b>77.4</b>	* 82-118.8			L-07
Barium	140	5.0	mg/Kg wet	154		90.7	81.8-118.2			
Beryllium	124	0.50	mg/Kg wet	121		103	82.2-118.2			
Cadmium	189	0.99	mg/Kg wet	196		96.3	82.1-118.4			
Chromium	92.6	2.0	mg/Kg wet	103		89.9	80.8-118.4			
Nickel	235	2.0	mg/Kg wet	249		94.2	81.9-118.1			
Selenium	188	9.9	mg/Kg wet	215		87.4	78.1-121.9			
<b>Silver</b>	60.8	0.99	mg/Kg wet	78.5		<b>77.4</b>	* 78.9-121.1			L-07
Thallium	66.6	5.0	mg/Kg wet	67.7		98.3	80.1-120.1			
Vanadium	156	2.0	mg/Kg wet	177		88.2	78-122			
<b>LCS (B331335-BS2)</b>										
Prepared: 02/13/23 Analyzed: 02/16/23										
Zinc	304	2.0	mg/Kg wet	360		84.6	79.7-120.3			
<b>LCS (B331335-BS4)</b>										
Prepared: 02/13/23 Analyzed: 02/19/23										
<b>Lead</b>	55.5	1.5	mg/Kg wet	73.2		<b>75.8</b>	* 82.8-117.3			L-07
<b>LCS Dup (B331335-BSD1)</b>										
Prepared: 02/13/23 Analyzed: 02/15/23										
Antimony	102	5.0	mg/Kg wet	111		92.2	0-205.4	13.5	30	
Arsenic	97.9	9.9	mg/Kg wet	112		87.4	82-118.8	12.2	30	
Barium	156	5.0	mg/Kg wet	154		101	81.8-118.2	10.8	20	
Beryllium	141	0.50	mg/Kg wet	121		117	82.2-118.2	12.8	30	
Cadmium	206	0.99	mg/Kg wet	196		105	82.1-118.4	8.69	20	
Chromium	108	2.0	mg/Kg wet	103		105	80.8-118.4	15.1	30	
Nickel	266	2.0	mg/Kg wet	249		107	81.9-118.1	12.7	30	
Selenium	208	9.9	mg/Kg wet	215		96.7	78.1-121.9	10.1	30	
Silver	71.3	0.99	mg/Kg wet	78.5		90.8	78.9-121.1	15.9	30	
Thallium	72.6	5.0	mg/Kg wet	67.7		107	80.1-120.1	8.67	30	
Vanadium	177	2.0	mg/Kg wet	177		100	78-122	12.8	30	

**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B331335 - SW-846 3050B</b>										
<b>LCS Dup (B331335-BSD2)</b>					Prepared: 02/13/23 Analyzed: 02/16/23					
Zinc	339	2.0	mg/Kg wet	360		94.3	79.7-120.3	10.8	30	
<b>LCS Dup (B331335-BSD4)</b>					Prepared: 02/13/23 Analyzed: 02/16/23					
Lead	65.6	1.5	mg/Kg wet	73.2		89.7	82.8-117.3	16.7	30	
<b>Reference (B331335-SRM1) MRL CHECK</b>					Prepared: 02/13/23 Analyzed: 02/19/23					
Lead	0.645	0.50	mg/Kg wet	0.497		<b>130</b>	* 80-120			M-10
<b>Batch B331454 - SW-846 7470A/7471A</b>										
<b>Blank (B331454-BLK1)</b>					Prepared: 02/14/23 Analyzed: 02/15/23					
Mercury	ND	0.024	mg/Kg wet							
<b>LCS (B331454-BS1)</b>					Prepared: 02/14/23 Analyzed: 02/15/23					
Mercury	24.9	3.7	mg/Kg wet	25.6		97.3	67.2-132.8			
<b>LCS Dup (B331454-BSD1)</b>					Prepared: 02/14/23 Analyzed: 02/15/23					
Mercury	27.3	3.7	mg/Kg wet	25.6		107	67.2-132.8	9.15	20	
<b>Matrix Spike (B331454-MS1)</b>					Source: <b>23B1132-01</b> Prepared: 02/14/23 Analyzed: 02/15/23					
Mercury	0.274	0.027	mg/Kg dry	0.366	ND	<b>74.9</b>	* 80-120			MS-22
<b>Matrix Spike Dup (B331454-MSD1)</b>					Source: <b>23B1132-01</b> Prepared: 02/14/23 Analyzed: 02/15/23					
Mercury	0.299	0.027	mg/Kg dry	0.363	ND	82.4	80-120	8.72	20	

**QUALITY CONTROL**

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B331289 - % Solids**

**Duplicate (B331289-DUP3)**

**Source: 23B1132-01**

Prepared & Analyzed: 02/11/23

% Solids	92.1		% Wt		91.0			1.15	10	
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**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-03	Sample received after recommended holding time was exceeded.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
M-10	The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b>MADEP EPH rev 2.1 in Soil</b>	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
<b>MADEP EPH rev 2.1 in Water</b>	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
<b>SW-846 6010D in Soil</b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 6010D in Soil</b>	
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b>SW-846 6010D in Water</b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b>SW-846 7471B in Soil</b>	
Mercury	CT,NH,NY,NC,ME,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023

23B1132

KAF

39 Spruce Street  
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

Phone: 413-525-2332  
Fax: 413-525-6405

Access, COC's and Support Requests

Company Name: **Horsley Witten Group**

Address: **90 Route 10A, Sandwich, MA 01956**

Phone: **781-243-1527**

Project Name: **Sandpit Road, Truro**

Project Location: **Sand Pit Road, Truro**

Project Number: **22129**

Project Manager: **Brian Massa**

Pace Quote Name/Number: **22129**

Invoice Recipient: **Caroline Armstrong**

Sampled By: **Caroline Armstrong**

Client Sample ID / Description: **TP-5(6-8)**

Beginning Date/Time: **2/23 10:15**

Ending Date/Time: **10:15**

Matrix Code: **S**

Conc Code: **1**

VIALS: **1**

GLASS: **1**

BACTERIA: **1**

Format: **PDF**

Other: **EXCEL**

Requested in 10-15 min:

Field Filtered:

Lab to Filter:

Orthophosphate Samples:

Field Filtered:

Lab to Filter:

PCB ONLY:

SOXHLET:

NON SOXHLET:

Requesting Party Signature: **Caroline Armstrong**

Date/Time: **2/9 11:00**

Received by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Relinquished by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Requesting Party Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Received by Signature: **Caroline Armstrong**

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Date/Time: **2/9/23 12:55**

Received by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Relinquished by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Requesting Party Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Received by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Relinquished by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Requesting Party Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Received by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Relinquished by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Requesting Party Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Received by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Relinquished by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Requesting Party Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Received by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

Relinquished by Signature: **Caroline Armstrong**

Date/Time: **2/9/23 12:55**

ANALYSIS REQUESTED

MA MCP Required	<input checked="" type="checkbox"/>
MCP Certification Form Required	<input type="checkbox"/>
CT RCP Required	<input type="checkbox"/>
RCP Certification Form Required	<input type="checkbox"/>
MA State DW Required	<input type="checkbox"/>

MA	PCB-1	<input checked="" type="checkbox"/>
CT		<input type="checkbox"/>
Other		<input type="checkbox"/>

Project Entity	Government	<input type="checkbox"/>	Municipality	<input type="checkbox"/>	AWRA	<input type="checkbox"/>	WRTA	<input type="checkbox"/>	Other	<input type="checkbox"/>
	Federal	<input type="checkbox"/>	21 J	School					Chromatogram	<input type="checkbox"/>
	City	<input type="checkbox"/>	Brownfield	MBTA					AHHA-LAP, LLC	<input type="checkbox"/>

Client Comments:	sample included on chain project, picked up 2/6/23 (sample was misplaced during pickup)
Detection Limit Requirements	MA PCB-1
Special Requirements	MCP methods, PCB-1

Relinquished by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9 11:00</b>
Received by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9/23 12:55</b>
Relinquished by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9/23 12:55</b>
Received by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9/23 12:55</b>

Relinquished by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9/23 12:55</b>
Received by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9/23 12:55</b>
Relinquished by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9/23 12:55</b>
Received by: (signature)	<b>Caroline Armstrong</b>	Date/Time:	<b>2/9/2</b>



**MADEP MCP Analytical Method Report Certification Form**

Laboratory Name: Pace New England	Project #: 23B1132
Project Location: Sand Pit Rd., Truro, MA.	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]  
 23B1132-01

Matrices: Soil

**CAM Protocol (check all that below)**

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB (X)	MassDEP VPH (GC/PID/FID) CAM IV A ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP VPH (GC/MS) CAM IV C ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
6010 Metals CAM III A (X)	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B (X)	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )

**Affirmative response to Questions A through F is required for "Presumptive Certainty" status**

<b>A</b>	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>B</b>	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>C</b>	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>D</b>	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>E a</b>	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>E b</b>	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>F</b>	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>

**A response to questions G, H and I below is required for "Presumptive Certainty" status**

<b>G</b>	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
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**Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

<b>H</b>	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>
<b>I</b>	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>

<sup>1</sup>All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

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

Signature: <u>Meghan E. Kelley</u>	Position: <u>Reporting Specialist</u>
Printed Name: <u>Meghan E. Kelley</u>	Date: <u>02/22/23</u>



## ANALYTICAL REPORT

Lab Number:	L2308720
Client:	Horseley & Witten, Inc. Sextant Hill Office Park 90 Route 6A Sandwich, MA 02563
ATTN:	Brian Massa
Phone:	(508) 833-6600
Project Name:	SAND PIT ROAD, TRURO
Project Number:	22129
Report Date:	02/24/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2308720-01	MW-1	WATER	TRURO, MA	02/15/23 15:00	02/17/23
L2308720-02	MW-2	WATER	TRURO, MA	02/15/23 12:15	02/17/23
L2308720-03	MW-3	WATER	TRURO, MA	02/15/23 13:30	02/17/23

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

**MADEP MCP Response Action Analytical Report Certification**

**This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.**

<b>An affirmative response to questions A through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
<b>For any questions answered "No", please refer to the case narrative section on the following page(s).</b>		

**Please note that sample matrix information is located in the Sample Results section of this report.**



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### MCP Related Narratives

##### Sample Receipt

L2308720-01, -02, and -03: Sample containers for PCB 8082A and SVOC 8270D were received but were not listed on the chain of custody. At the client's request, the analyses were not performed.

#### Volatile Organics

L2308720-01 through -03: Initial calibration utilized a quadratic fit for: bromomethane

In reference to question H:

L2308720-01 through -03: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: 1,4-dioxane (0.0013), 1,1,2-trichloroethane (0.1527), 1,2-dibromoethane (0.1749)

Average Response Factor: 1,4-dioxane, 1,1,2-trichloroethane

Verification: bromomethane (138%)

L2308720-01 through -03: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

#### Dissolved Metals

In reference to question G:

L2308720-01 through -03: One or more of the target analytes did not achieve the requested CAM reporting limits.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 02/24/23

## QC OUTLIER SUMMARY REPORT

**Project Name:** SAND PIT ROAD, TRURO

**Lab Number:** L2308720

**Project Number:** 22129

**Report Date:** 02/24/23

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics - Westborough Lab								
8260D	Batch QC	WG1746852-4	Chloromethane	LCSD	68	70-130	01-03	potential low bias
8260D	Batch QC	WG1746852-4	Acetone	LCSD	140	70-130	01-03	potential high bias

# ORGANICS

# VOLATILES

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-01

Date Collected: 02/15/23 15:00

Client ID: MW-1

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 02/21/23 12:38

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.0	0.68	1
1,1-Dichloroethane	ND		ug/l	1.0	0.21	1
Chloroform	ND		ug/l	1.0	0.22	1
Carbon tetrachloride	ND		ug/l	1.0	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.0	0.14	1
Tetrachloroethene	ND		ug/l	1.0	0.18	1
Chlorobenzene	ND		ug/l	1.0	0.18	1
Trichlorofluoromethane	ND		ug/l	2.0	0.16	1
1,2-Dichloroethane	ND		ug/l	1.0	0.13	1
1,1,1-Trichloroethane	ND		ug/l	1.0	0.16	1
Bromodichloromethane	ND		ug/l	1.0	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	0.14	1
1,1-Dichloropropene	ND		ug/l	2.0	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	1.0	0.20	1
Ethylbenzene	ND		ug/l	1.0	0.17	1
Chloromethane	ND		ug/l	2.0	0.20	1
Bromomethane	ND		ug/l	2.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.0	0.13	1
1,1-Dichloroethene	ND		ug/l	1.0	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	0.16	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-01

Date Collected: 02/15/23 15:00

Client ID: MW-1

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Trichloroethene	ND		ug/l	1.0	0.18	1
1,2-Dichlorobenzene	ND		ug/l	1.0	0.18	1
1,3-Dichlorobenzene	ND		ug/l	1.0	0.19	1
1,4-Dichlorobenzene	ND		ug/l	1.0	0.19	1
Methyl tert butyl ether	ND		ug/l	2.0	0.17	1
p/m-Xylene	ND		ug/l	2.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.19	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	0.16	1
Dibromomethane	ND		ug/l	2.0	0.36	1
1,2,3-Trichloropropane	ND		ug/l	2.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	2.0	0.24	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	2.0	0.30	1
Methyl ethyl ketone	ND		ug/l	5.0	1.9	1
Methyl isobutyl ketone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Bromochloromethane	ND		ug/l	2.0	0.15	1
Tetrahydrofuran	ND		ug/l	2.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.0	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.0	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	0.16	1
Bromobenzene	ND		ug/l	2.0	0.15	1
n-Butylbenzene	ND		ug/l	2.0	0.19	1
sec-Butylbenzene	ND		ug/l	2.0	0.18	1
tert-Butylbenzene	ND		ug/l	2.0	0.20	1
o-Chlorotoluene	ND		ug/l	2.0	0.22	1
p-Chlorotoluene	ND		ug/l	2.0	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	0.35	1
Hexachlorobutadiene	ND		ug/l	0.60	0.22	1
Isopropylbenzene	ND		ug/l	2.0	0.19	1
p-Isopropyltoluene	ND		ug/l	2.0	0.19	1
Naphthalene	ND		ug/l	2.0	0.22	1
n-Propylbenzene	ND		ug/l	2.0	0.17	1

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

**SAMPLE RESULTS**

**Lab ID:** L2308720-01  
**Client ID:** MW-1  
**Sample Location:** TRURO, MA

**Date Collected:** 02/15/23 15:00  
**Date Received:** 02/17/23  
**Field Prep:** Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	0.19	1
Diethyl ether	ND		ug/l	2.0	0.16	1
Diisopropyl Ether	ND		ug/l	2.0	0.42	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	0.18	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.28	1
1,4-Dioxane	ND		ug/l	250	61.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	117		70-130

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 02/21/23 13:01

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.0	0.68	1
1,1-Dichloroethane	ND		ug/l	1.0	0.21	1
Chloroform	0.27	J	ug/l	1.0	0.22	1
Carbon tetrachloride	ND		ug/l	1.0	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.0	0.14	1
Tetrachloroethene	ND		ug/l	1.0	0.18	1
Chlorobenzene	ND		ug/l	1.0	0.18	1
Trichlorofluoromethane	ND		ug/l	2.0	0.16	1
1,2-Dichloroethane	ND		ug/l	1.0	0.13	1
1,1,1-Trichloroethane	ND		ug/l	1.0	0.16	1
Bromodichloromethane	ND		ug/l	1.0	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	0.14	1
1,1-Dichloropropene	ND		ug/l	2.0	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	1.0	0.20	1
Ethylbenzene	ND		ug/l	1.0	0.17	1
Chloromethane	ND		ug/l	2.0	0.20	1
Bromomethane	ND		ug/l	2.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.0	0.13	1
1,1-Dichloroethene	ND		ug/l	1.0	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	0.16	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Trichloroethene	ND		ug/l	1.0	0.18	1
1,2-Dichlorobenzene	ND		ug/l	1.0	0.18	1
1,3-Dichlorobenzene	ND		ug/l	1.0	0.19	1
1,4-Dichlorobenzene	ND		ug/l	1.0	0.19	1
Methyl tert butyl ether	ND		ug/l	2.0	0.17	1
p/m-Xylene	ND		ug/l	2.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.19	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	0.16	1
Dibromomethane	ND		ug/l	2.0	0.36	1
1,2,3-Trichloropropane	ND		ug/l	2.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	2.0	0.24	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	2.0	0.30	1
Methyl ethyl ketone	ND		ug/l	5.0	1.9	1
Methyl isobutyl ketone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Bromochloromethane	ND		ug/l	2.0	0.15	1
Tetrahydrofuran	8.6		ug/l	2.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.0	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.0	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	0.16	1
Bromobenzene	ND		ug/l	2.0	0.15	1
n-Butylbenzene	ND		ug/l	2.0	0.19	1
sec-Butylbenzene	ND		ug/l	2.0	0.18	1
tert-Butylbenzene	ND		ug/l	2.0	0.20	1
o-Chlorotoluene	ND		ug/l	2.0	0.22	1
p-Chlorotoluene	ND		ug/l	2.0	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	0.35	1
Hexachlorobutadiene	ND		ug/l	0.60	0.22	1
Isopropylbenzene	ND		ug/l	2.0	0.19	1
p-Isopropyltoluene	ND		ug/l	2.0	0.19	1
Naphthalene	ND		ug/l	2.0	0.22	1
n-Propylbenzene	ND		ug/l	2.0	0.17	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	0.19	1
Diethyl ether	ND		ug/l	2.0	0.16	1
Diisopropyl Ether	ND		ug/l	2.0	0.42	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	0.18	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.28	1
1,4-Dioxane	ND		ug/l	250	61.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	115		70-130

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 02/21/23 13:23

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.0	0.68	1
1,1-Dichloroethane	ND		ug/l	1.0	0.21	1
Chloroform	ND		ug/l	1.0	0.22	1
Carbon tetrachloride	ND		ug/l	1.0	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.0	0.14	1
Tetrachloroethene	ND		ug/l	1.0	0.18	1
Chlorobenzene	ND		ug/l	1.0	0.18	1
Trichlorofluoromethane	ND		ug/l	2.0	0.16	1
1,2-Dichloroethane	ND		ug/l	1.0	0.13	1
1,1,1-Trichloroethane	ND		ug/l	1.0	0.16	1
Bromodichloromethane	ND		ug/l	1.0	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	0.14	1
1,1-Dichloropropene	ND		ug/l	2.0	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	1.0	0.20	1
Ethylbenzene	ND		ug/l	1.0	0.17	1
Chloromethane	ND		ug/l	2.0	0.20	1
Bromomethane	ND		ug/l	2.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.0	0.13	1
1,1-Dichloroethene	ND		ug/l	1.0	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	0.16	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Trichloroethene	ND		ug/l	1.0	0.18	1
1,2-Dichlorobenzene	ND		ug/l	1.0	0.18	1
1,3-Dichlorobenzene	ND		ug/l	1.0	0.19	1
1,4-Dichlorobenzene	ND		ug/l	1.0	0.19	1
Methyl tert butyl ether	ND		ug/l	2.0	0.17	1
p/m-Xylene	ND		ug/l	2.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.19	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	0.16	1
Dibromomethane	ND		ug/l	2.0	0.36	1
1,2,3-Trichloropropane	ND		ug/l	2.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	2.0	0.24	1
Acetone	3.0	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	2.0	0.30	1
Methyl ethyl ketone	ND		ug/l	5.0	1.9	1
Methyl isobutyl ketone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Bromochloromethane	ND		ug/l	2.0	0.15	1
Tetrahydrofuran	2.5		ug/l	2.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.0	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.0	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	0.16	1
Bromobenzene	ND		ug/l	2.0	0.15	1
n-Butylbenzene	ND		ug/l	2.0	0.19	1
sec-Butylbenzene	ND		ug/l	2.0	0.18	1
tert-Butylbenzene	ND		ug/l	2.0	0.20	1
o-Chlorotoluene	ND		ug/l	2.0	0.22	1
p-Chlorotoluene	ND		ug/l	2.0	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	0.35	1
Hexachlorobutadiene	ND		ug/l	0.60	0.22	1
Isopropylbenzene	ND		ug/l	2.0	0.19	1
p-Isopropyltoluene	ND		ug/l	2.0	0.19	1
Naphthalene	ND		ug/l	2.0	0.22	1
n-Propylbenzene	ND		ug/l	2.0	0.17	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	0.19	1
Diethyl ether	ND		ug/l	2.0	0.16	1
Diisopropyl Ether	ND		ug/l	2.0	0.42	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	0.18	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.28	1
1,4-Dioxane	ND		ug/l	250	61.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	116		70-130

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 141,8260D  
Analytical Date: 02/21/23 06:35  
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG1746852-5					
Methylene chloride	ND		ug/l	2.0	0.68
1,1-Dichloroethane	ND		ug/l	1.0	0.21
Chloroform	ND		ug/l	1.0	0.22
Carbon tetrachloride	ND		ug/l	1.0	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	1.0	0.15
1,1,2-Trichloroethane	ND		ug/l	1.0	0.14
Tetrachloroethene	ND		ug/l	1.0	0.18
Chlorobenzene	ND		ug/l	1.0	0.18
Trichlorofluoromethane	ND		ug/l	2.0	0.16
1,2-Dichloroethane	ND		ug/l	1.0	0.13
1,1,1-Trichloroethane	ND		ug/l	1.0	0.16
Bromodichloromethane	ND		ug/l	1.0	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.40	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.40	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.40	0.14
1,1-Dichloropropene	ND		ug/l	2.0	0.24
Bromoform	ND		ug/l	2.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	1.0	0.20
Ethylbenzene	ND		ug/l	1.0	0.17
Chloromethane	ND		ug/l	2.0	0.20
Bromomethane	ND		ug/l	2.0	0.26
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.0	0.13
1,1-Dichloroethene	ND		ug/l	1.0	0.17
trans-1,2-Dichloroethene	ND		ug/l	1.0	0.16
Trichloroethene	ND		ug/l	1.0	0.18

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 141,8260D  
Analytical Date: 02/21/23 06:35  
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG1746852-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	0.18
1,3-Dichlorobenzene	ND		ug/l	1.0	0.19
1,4-Dichlorobenzene	ND		ug/l	1.0	0.19
Methyl tert butyl ether	ND		ug/l	2.0	0.17
p/m-Xylene	ND		ug/l	2.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.19
1,2-Dichloroethene, Total	ND		ug/l	1.0	0.16
Dibromomethane	ND		ug/l	2.0	0.36
1,2,3-Trichloropropane	ND		ug/l	2.0	0.18
Styrene	ND		ug/l	1.0	0.36
Dichlorodifluoromethane	ND		ug/l	2.0	0.24
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	2.0	0.30
Methyl ethyl ketone	ND		ug/l	5.0	1.9
Methyl isobutyl ketone	ND		ug/l	5.0	0.42
2-Hexanone	ND		ug/l	5.0	0.52
Bromochloromethane	ND		ug/l	2.0	0.15
Tetrahydrofuran	ND		ug/l	2.0	0.52
2,2-Dichloropropane	ND		ug/l	2.0	0.20
1,2-Dibromoethane	ND		ug/l	2.0	0.19
1,3-Dichloropropane	ND		ug/l	2.0	0.21
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	0.16
Bromobenzene	ND		ug/l	2.0	0.15
n-Butylbenzene	ND		ug/l	2.0	0.19
sec-Butylbenzene	ND		ug/l	2.0	0.18
tert-Butylbenzene	ND		ug/l	2.0	0.20
o-Chlorotoluene	ND		ug/l	2.0	0.22

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 141,8260D  
Analytical Date: 02/21/23 06:35  
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG1746852-5					
p-Chlorotoluene	ND		ug/l	2.0	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	0.35
Hexachlorobutadiene	ND		ug/l	0.60	0.22
Isopropylbenzene	ND		ug/l	2.0	0.19
p-Isopropyltoluene	ND		ug/l	2.0	0.19
Naphthalene	ND		ug/l	2.0	0.22
n-Propylbenzene	ND		ug/l	2.0	0.17
1,2,3-Trichlorobenzene	ND		ug/l	2.0	0.23
1,2,4-Trichlorobenzene	ND		ug/l	2.0	0.22
1,3,5-Trimethylbenzene	ND		ug/l	2.0	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.0	0.19
Diethyl ether	ND		ug/l	2.0	0.16
Diisopropyl Ether	ND		ug/l	2.0	0.42
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	0.18
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.28
1,4-Dioxane	ND		ug/l	250	61.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	114		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG1746852-3 WG1746852-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		100		70-130	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	95		95		70-130	0		20
1,1,2-Trichloroethane	99		98		70-130	1		20
Tetrachloroethene	100		98		70-130	2		20
Chlorobenzene	100		100		70-130	0		20
Trichlorofluoromethane	100		100		70-130	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		100		70-130	10		20
Bromodichloromethane	100		100		70-130	0		20
trans-1,3-Dichloropropene	99		96		70-130	3		20
cis-1,3-Dichloropropene	98		99		70-130	1		20
1,1-Dichloropropene	110		100		70-130	10		20
Bromoform	100		99		70-130	1		20
1,1,1,2-Tetrachloroethane	100		100		70-130	0		20
Benzene	100		100		70-130	0		20
Toluene	100		99		70-130	1		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	72		68	Q	70-130	6		20
Bromomethane	97		98		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG1746852-3 WG1746852-4								
Vinyl chloride	97		94		70-130	3		20
Chloroethane	97		94		70-130	3		20
1,1-Dichloroethene	100		99		70-130	1		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		97		70-130	3		20
1,2-Dichlorobenzene	110		100		70-130	10		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	110		100		70-130	10		20
Methyl tert butyl ether	96		99		70-130	3		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	98		100		70-130	2		20
1,2,3-Trichloropropane	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	85		84		70-130	1		20
Acetone	120		140	Q	70-130	15		20
Carbon disulfide	100		98		70-130	2		20
Methyl ethyl ketone	91		96		70-130	5		20
Methyl isobutyl ketone	94		95		70-130	1		20
2-Hexanone	110		110		70-130	0		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	98		100		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

Parameter	LCS		LCSD		%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual	Limits	RPD			
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG1746852-3 WG1746852-4									
2,2-Dichloropropane	100		100		70-130	0			20
1,2-Dibromoethane	99		97		70-130	2			20
1,3-Dichloropropane	100		99		70-130	1			20
1,1,1,2-Tetrachloroethane	96		93		70-130	3			20
Bromobenzene	110		110		70-130	0			20
n-Butylbenzene	100		100		70-130	0			20
sec-Butylbenzene	110		110		70-130	0			20
tert-Butylbenzene	110		110		70-130	0			20
o-Chlorotoluene	110		110		70-130	0			20
p-Chlorotoluene	110		110		70-130	0			20
1,2-Dibromo-3-chloropropane	97		100		70-130	3			20
Hexachlorobutadiene	100		100		70-130	0			20
Isopropylbenzene	110		110		70-130	0			20
p-Isopropyltoluene	100		100		70-130	0			20
Naphthalene	100		100		70-130	0			20
n-Propylbenzene	110		110		70-130	0			20
1,2,3-Trichlorobenzene	100		100		70-130	0			20
1,2,4-Trichlorobenzene	100		100		70-130	0			20
1,3,5-Trimethylbenzene	99		96		70-130	3			20
1,2,4-Trimethylbenzene	100		97		70-130	3			20
Diethyl ether	100		100		70-130	0			20
Diisopropyl Ether	98		96		70-130	2			20
Ethyl-Tert-Butyl-Ether	95		95		70-130	0			20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Project Number: 22129

Lab Number: L2308720

Report Date: 02/24/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG1746852-3 WG1746852-4								
Tertiary-Amyl Methyl Ether	93		93		70-130	0		20
1,4-Dioxane	96		94		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		111		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	111		109		70-130
Dibromofluoromethane	101		104		70-130

# PETROLEUM HYDROCARBONS

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-01

Date Collected: 02/15/23 15:00

Client ID: MW-1

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 131, VPH-18-2.1

Analytical Date: 02/24/23 01:31

Analyst: BAD

Trap: EST, Carbo-pack B/Carboxen 1000&amp;1001

Analytical Column: Restek, RTX-502.2,  
105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved  
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		ug/l	100	100.	1
C9-C12 Aliphatics	ND		ug/l	100	100.	1
C9-C10 Aromatics	ND		ug/l	100	100.	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	100	100.	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	100	100.	1
Benzene	ND		ug/l	2.00	2.00	1
Toluene	ND		ug/l	2.00	2.00	1
Ethylbenzene	ND		ug/l	2.00	2.00	1
p/m-Xylene	ND		ug/l	2.00	2.00	1
o-Xylene	ND		ug/l	2.00	2.00	1
Methyl tert butyl ether	ND		ug/l	3.00	3.00	1
Naphthalene	ND		ug/l	4.00	4.00	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	102		70-130
2,5-Dibromotoluene-FID	102		70-130

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-01

Date Collected: 02/15/23 15:00

Client ID: MW-1

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 135,EPH-19-2.1

Extraction Date: 02/19/23 21:25

Analytical Date: 02/23/23 14:35

M.S. Analytical Date: 02/23/23 09:21

Cleanup Method1: EPH-19-2.1

Analyst: SC

M.S. Analyst: AH

Cleanup Date1: 02/22/23

**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved  
Container

Sample Temperature upon receipt:

Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>EPH w/Targets via GCMS-SIM - Westborough Lab</b>						
C9-C18 Aliphatics	ND		ug/l	100	100.	1
C19-C36 Aliphatics	ND		ug/l	100	100.	1
C11-C22 Aromatics	ND		ug/l	100	100.	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	100.	1
Naphthalene	ND		ug/l	0.400	0.136	1
2-Methylnaphthalene	ND		ug/l	0.400	0.077	1
Acenaphthylene	ND		ug/l	0.400	0.054	1
Acenaphthene	ND		ug/l	0.400	0.091	1
Fluorene	ND		ug/l	0.400	0.097	1
Phenanthrene	ND		ug/l	0.400	0.084	1
Anthracene	ND		ug/l	0.400	0.079	1
Fluoranthene	ND		ug/l	0.400	0.121	1
Pyrene	ND		ug/l	0.400	0.114	1
Benzo(a)anthracene	ND		ug/l	0.400	0.088	1
Chrysene	ND		ug/l	0.400	0.102	1
Benzo(b)fluoranthene	ND		ug/l	0.400	0.102	1
Benzo(k)fluoranthene	ND		ug/l	0.400	0.126	1
Benzo(a)pyrene	ND		ug/l	0.200	0.072	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	0.095	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	0.091	1
Benzo(ghi)perylene	ND		ug/l	0.400	0.102	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-01

Date Collected: 02/15/23 15:00

Client ID: MW-1

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**EPH w/Targets via GCMS-SIM - Westborough Lab**

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	59		40-140
o-Terphenyl	83		40-140
2-Fluorobiphenyl	75		40-140
2-Bromonaphthalene	75		40-140
O-Terphenyl-MS	97		40-140

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

**SAMPLE RESULTS**

Lab ID: L2308720-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 131, VPH-18-2.1

Analytical Date: 02/24/23 02:01

Analyst: BAD

Trap: EST, Carbo-pack B/Carboxen 1000&amp;1001

Analytical Column: Restek, RTX-502.2,  
105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved  
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		ug/l	100	100.	1
C9-C12 Aliphatics	ND		ug/l	100	100.	1
C9-C10 Aromatics	ND		ug/l	100	100.	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	100	100.	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	100	100.	1
Benzene	ND		ug/l	2.00	2.00	1
Toluene	ND		ug/l	2.00	2.00	1
Ethylbenzene	ND		ug/l	2.00	2.00	1
p/m-Xylene	ND		ug/l	2.00	2.00	1
o-Xylene	ND		ug/l	2.00	2.00	1
Methyl tert butyl ether	ND		ug/l	3.00	3.00	1
Naphthalene	ND		ug/l	4.00	4.00	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	102		70-130
2,5-Dibromotoluene-FID	102		70-130

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 135,EPH-19-2.1

Extraction Date: 02/19/23 21:25

Analytical Date: 02/23/23 15:00

M.S. Analytical Date: 02/23/23 09:38

Cleanup Method1: EPH-19-2.1

Analyst: SC

M.S. Analyst: AH

Cleanup Date1: 02/22/23

**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved  
Container

Sample Temperature upon receipt:

Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>EPH w/Targets via GCMS-SIM - Westborough Lab</b>						
C9-C18 Aliphatics	ND		ug/l	100	100.	1
C19-C36 Aliphatics	ND		ug/l	100	100.	1
C11-C22 Aromatics	ND		ug/l	100	100.	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	100.	1
Naphthalene	ND		ug/l	0.400	0.136	1
2-Methylnaphthalene	ND		ug/l	0.400	0.077	1
Acenaphthylene	ND		ug/l	0.400	0.054	1
Acenaphthene	ND		ug/l	0.400	0.091	1
Fluorene	ND		ug/l	0.400	0.097	1
Phenanthrene	ND		ug/l	0.400	0.084	1
Anthracene	ND		ug/l	0.400	0.079	1
Fluoranthene	ND		ug/l	0.400	0.121	1
Pyrene	ND		ug/l	0.400	0.114	1
Benzo(a)anthracene	ND		ug/l	0.400	0.088	1
Chrysene	ND		ug/l	0.400	0.102	1
Benzo(b)fluoranthene	ND		ug/l	0.400	0.102	1
Benzo(k)fluoranthene	ND		ug/l	0.400	0.126	1
Benzo(a)pyrene	ND		ug/l	0.200	0.072	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	0.095	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	0.091	1
Benzo(ghi)perylene	ND		ug/l	0.400	0.102	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**EPH w/Targets via GCMS-SIM - Westborough Lab**

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	64		40-140
o-Terphenyl	74		40-140
2-Fluorobiphenyl	74		40-140
2-Bromonaphthalene	73		40-140
O-Terphenyl-MS	79		40-140

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 131, VPH-18-2.1

Analytical Date: 02/24/23 02:31

Analyst: BAD

Trap: EST, Carboxen B/Carboxen 1000&amp;1001

Analytical Column: Restek, RTX-502.2,  
105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved  
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		ug/l	100	100.	1
C9-C12 Aliphatics	ND		ug/l	100	100.	1
C9-C10 Aromatics	ND		ug/l	100	100.	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	100	100.	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	100	100.	1
Benzene	ND		ug/l	2.00	2.00	1
Toluene	ND		ug/l	2.00	2.00	1
Ethylbenzene	ND		ug/l	2.00	2.00	1
p/m-Xylene	ND		ug/l	2.00	2.00	1
o-Xylene	ND		ug/l	2.00	2.00	1
Methyl tert butyl ether	ND		ug/l	3.00	3.00	1
Naphthalene	ND		ug/l	4.00	4.00	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	104		70-130
2,5-Dibromotoluene-FID	104		70-130

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 135,EPH-19-2.1

Extraction Date: 02/19/23 21:25

Analytical Date: 02/23/23 15:25

M.S. Analytical Date: 02/23/23 09:54

Cleanup Method1: EPH-19-2.1

Analyst: SC

M.S. Analyst: AH

Cleanup Date1: 02/22/23

**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved  
Container

Sample Temperature upon receipt:

Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>EPH w/Targets via GCMS-SIM - Westborough Lab</b>						
C9-C18 Aliphatics	ND		ug/l	100	100.	1
C19-C36 Aliphatics	ND		ug/l	100	100.	1
C11-C22 Aromatics	ND		ug/l	100	100.	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	100.	1
Naphthalene	ND		ug/l	0.400	0.136	1
2-Methylnaphthalene	ND		ug/l	0.400	0.077	1
Acenaphthylene	ND		ug/l	0.400	0.054	1
Acenaphthene	ND		ug/l	0.400	0.091	1
Fluorene	ND		ug/l	0.400	0.097	1
Phenanthrene	ND		ug/l	0.400	0.084	1
Anthracene	ND		ug/l	0.400	0.079	1
Fluoranthene	ND		ug/l	0.400	0.121	1
Pyrene	ND		ug/l	0.400	0.114	1
Benzo(a)anthracene	ND		ug/l	0.400	0.088	1
Chrysene	ND		ug/l	0.400	0.102	1
Benzo(b)fluoranthene	ND		ug/l	0.400	0.102	1
Benzo(k)fluoranthene	ND		ug/l	0.400	0.126	1
Benzo(a)pyrene	ND		ug/l	0.200	0.072	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	0.095	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	0.091	1
Benzo(ghi)perylene	ND		ug/l	0.400	0.102	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308720**Project Number:** 22129**Report Date:** 02/24/23**SAMPLE RESULTS**

Lab ID: L2308720-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**EPH w/Targets via GCMS-SIM - Westborough Lab**

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	74		40-140
o-Terphenyl	69		40-140
2-Fluorobiphenyl	71		40-140
2-Bromonaphthalene	72		40-140
O-Terphenyl-MS	81		40-140

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 135,EPH-19-2.1  
Analytical Date: 02/21/23 11:52  
Analyst: ALL

M.S. Analytical Date: 02/21/23 10:58  
M.S. Analyst: JJW

Extraction Method: EPA 3510C  
Extraction Date: 02/19/23 21:25  
Cleanup Method: EPH-19-2.1  
Cleanup Date: 02/20/23

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1746264-1					
C9-C18 Aliphatics	ND		ug/l	100	100.
C19-C36 Aliphatics	ND		ug/l	100	100.
C11-C22 Aromatics	ND		ug/l	100	100.
C11-C22 Aromatics, Adjusted	ND		ug/l	100	100.
Naphthalene	ND		ug/l	0.400	0.136
2-Methylnaphthalene	ND		ug/l	0.400	0.077
Acenaphthylene	ND		ug/l	0.400	0.054
Acenaphthene	ND		ug/l	0.400	0.091
Fluorene	ND		ug/l	0.400	0.097
Phenanthrene	ND		ug/l	0.400	0.084
Anthracene	ND		ug/l	0.400	0.079
Fluoranthene	ND		ug/l	0.400	0.121
Pyrene	ND		ug/l	0.400	0.114
Benzo(a)anthracene	ND		ug/l	0.400	0.088
Chrysene	ND		ug/l	0.400	0.102
Benzo(b)fluoranthene	ND		ug/l	0.400	0.102
Benzo(k)fluoranthene	ND		ug/l	0.400	0.126
Benzo(a)pyrene	ND		ug/l	0.200	0.072
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	0.095
Dibenzo(a,h)anthracene	ND		ug/l	0.400	0.091
Benzo(ghi)perylene	ND		ug/l	0.400	0.102

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 135,EPH-19-2.1  
Analytical Date: 02/21/23 11:52  
Analyst: ALL

M.S. Analytical Date: 02/21/23 10:58  
M.S. Analyst: JJW

Extraction Method: EPA 3510C  
Extraction Date: 02/19/23 21:25  
Cleanup Method: EPH-19-2.1  
Cleanup Date: 02/20/23

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1746264-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	69		40-140
o-Terphenyl	74		40-140
2-Fluorobiphenyl	68		40-140
2-Bromonaphthalene	70		40-140
O-Terphenyl-MS	105		40-140

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 131, VPH-18-2.1  
Analytical Date: 02/23/23 20:31  
Analyst: BAD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-03 Batch: WG1748214-4					
C5-C8 Aliphatics	ND		ug/l	100	100.
C9-C12 Aliphatics	ND		ug/l	100	100.
C9-C10 Aromatics	ND		ug/l	100	100.
C5-C8 Aliphatics, Adjusted	ND		ug/l	100	100.
C9-C12 Aliphatics, Adjusted	ND		ug/l	100	100.
Benzene	ND		ug/l	2.00	2.00
Toluene	ND		ug/l	2.00	2.00
Ethylbenzene	ND		ug/l	2.00	2.00
p/m-Xylene	ND		ug/l	2.00	2.00
o-Xylene	ND		ug/l	2.00	2.00
Methyl tert butyl ether	ND		ug/l	3.00	3.00
Naphthalene	ND		ug/l	4.00	4.00

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	92		70-130
2,5-Dibromotoluene-FID	92		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1746264-2 WG1746264-3								
C9-C18 Aliphatics	46		48		40-140	4		25
C19-C36 Aliphatics	79		79		40-140	0		25
C11-C22 Aromatics	86		73		40-140	16		25
Naphthalene	94		80		40-140	16		25
2-Methylnaphthalene	106		90		40-140	16		25
Acenaphthylene	105		88		40-140	18		25
Acenaphthene	99		85		40-140	15		25
Fluorene	106		90		40-140	16		25
Phenanthrene	103		87		40-140	17		25
Anthracene	107		91		40-140	16		25
Fluoranthene	116		99		40-140	16		25
Pyrene	118		101		40-140	16		25
Benzo(a)anthracene	104		86		40-140	19		25
Chrysene	108		97		40-140	11		25
Benzo(b)fluoranthene	106		92		40-140	14		25
Benzo(k)fluoranthene	103		85		40-140	19		25
Benzo(a)pyrene	115		96		40-140	18		25
Indeno(1,2,3-cd)Pyrene	116		94		40-140	21		25
Dibenzo(a,h)anthracene	113		94		40-140	18		25
Benzo(ghi)perylene	92		76		40-140	19		25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1746264-2 WG1746264-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	68		73		40-140
o-Terphenyl	86		75		40-140
2-Fluorobiphenyl	76		68		40-140
2-Bromonaphthalene	78		71		40-140
O-Terphenyl-MS	131		105		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-03 Batch: WG1748214-2 WG1748214-3								
C5-C8 Aliphatics	91		97		70-130	6		25
C9-C12 Aliphatics	97		105		70-130	8		25
C9-C10 Aromatics	101		110		70-130	9		25
Benzene	104		111		70-130	7		25
Toluene	102		109		70-130	7		25
Ethylbenzene	105		113		70-130	7		25
p/m-Xylene	105		112		70-130	6		25
o-Xylene	104		113		70-130	8		25
Methyl tert butyl ether	104		113		70-130	8		25
Naphthalene	103		114		70-130	10		25
1,2,4-Trimethylbenzene	101		110		70-130	9		25
Pentane	79		82		70-130	4		25
2-Methylpentane	96		101		70-130	5		25
2,2,4-Trimethylpentane	100		107		70-130	7		25
n-Nonane	97		104		30-130	7		25
n-Decane	97		106		70-130	8		25
n-Butylcyclohexane	99		107		70-130	8		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	98		108		70-130
2,5-Dibromotoluene-FID	95		105		70-130

## METALS

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

## SAMPLE RESULTS

Lab ID: L2308720-01

Date Collected: 02/15/23 15:00

Client ID: MW-1

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Mansfield Lab</b>											
Antimony, Dissolved	ND		mg/l	0.0040	0.0020	1	02/21/23 15:00	02/21/23 22:39	EPA 3005A	97,6020B	NTB
Arsenic, Dissolved	ND		mg/l	0.0050	0.0019	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Barium, Dissolved	0.0445		mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Beryllium, Dissolved	ND		mg/l	0.0005	0.0005	1	02/21/23 15:00	02/21/23 22:39	EPA 3005A	97,6020B	NTB
Cadmium, Dissolved	ND		mg/l	0.0040	0.0010	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Chromium, Dissolved	ND		mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Lead, Dissolved	ND		mg/l	0.0100	0.0027	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Mercury, Dissolved	ND		mg/l	0.0002	0.0002	1	02/21/23 15:38	02/22/23 00:44	EPA 7470A	97,7470A	DMB
Nickel, Dissolved	0.0037	J	mg/l	0.0250	0.0024	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Selenium, Dissolved	ND		mg/l	0.0100	0.0035	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Silver, Dissolved	ND		mg/l	0.0070	0.0028	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Thallium, Dissolved	ND		mg/l	0.0010	0.0010	1	02/21/23 15:00	02/21/23 22:39	EPA 3005A	97,6020B	NTB
Vanadium, Dissolved	ND		mg/l	0.0100	0.0020	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL
Zinc, Dissolved	0.0198	J	mg/l	0.0500	0.0021	1	02/21/23 15:00	02/21/23 21:37	EPA 3005A	97,6010D	DHL



Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

## SAMPLE RESULTS

Lab ID: L2308720-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Mansfield Lab</b>											
Antimony, Dissolved	ND		mg/l	0.0040	0.0020	1	02/21/23 15:00	02/21/23 22:44	EPA 3005A	97,6020B	NTB
Arsenic, Dissolved	ND		mg/l	0.0050	0.0019	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Barium, Dissolved	0.0130		mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Beryllium, Dissolved	ND		mg/l	0.0005	0.0005	1	02/21/23 15:00	02/21/23 22:44	EPA 3005A	97,6020B	NTB
Cadmium, Dissolved	ND		mg/l	0.0040	0.0010	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Chromium, Dissolved	ND		mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Lead, Dissolved	ND		mg/l	0.0100	0.0027	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Mercury, Dissolved	ND		mg/l	0.0002	0.0002	1	02/21/23 15:38	02/22/23 00:48	EPA 7470A	97,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.0250	0.0024	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Selenium, Dissolved	ND		mg/l	0.0100	0.0035	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Silver, Dissolved	ND		mg/l	0.0070	0.0028	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Thallium, Dissolved	ND		mg/l	0.0010	0.0010	1	02/21/23 15:00	02/21/23 22:44	EPA 3005A	97,6020B	NTB
Vanadium, Dissolved	ND		mg/l	0.0100	0.0020	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL
Zinc, Dissolved	0.0116	J	mg/l	0.0500	0.0021	1	02/21/23 15:00	02/21/23 21:40	EPA 3005A	97,6010D	DHL



Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308720

Project Number: 22129

Report Date: 02/24/23

## SAMPLE RESULTS

Lab ID: L2308720-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRURO, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	0.0020	1	02/21/23 15:00	02/21/23 22:50	EPA 3005A	97,6020B	NTB
Arsenic, Dissolved	ND		mg/l	0.0050	0.0019	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Barium, Dissolved	0.0049	J	mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Beryllium, Dissolved	ND		mg/l	0.0005	0.0005	1	02/21/23 15:00	02/21/23 22:50	EPA 3005A	97,6020B	NTB
Cadmium, Dissolved	ND		mg/l	0.0040	0.0010	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Chromium, Dissolved	ND		mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Lead, Dissolved	ND		mg/l	0.0100	0.0027	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Mercury, Dissolved	ND		mg/l	0.0002	0.0002	1	02/21/23 15:38	02/22/23 00:51	EPA 7470A	97,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.0250	0.0024	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Selenium, Dissolved	ND		mg/l	0.0100	0.0035	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Silver, Dissolved	ND		mg/l	0.0070	0.0028	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Thallium, Dissolved	ND		mg/l	0.0010	0.0010	1	02/21/23 15:00	02/21/23 22:50	EPA 3005A	97,6020B	NTB
Vanadium, Dissolved	ND		mg/l	0.0100	0.0020	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL
Zinc, Dissolved	0.0104	J	mg/l	0.0500	0.0021	1	02/21/23 15:00	02/21/23 21:43	EPA 3005A	97,6010D	DHL

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1746855-1									
Arsenic, Dissolved	ND	mg/l	0.0050	0.0019	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Barium, Dissolved	ND	mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Cadmium, Dissolved	ND	mg/l	0.0040	0.0010	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Chromium, Dissolved	ND	mg/l	0.0100	0.0021	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Lead, Dissolved	ND	mg/l	0.0100	0.0027	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Nickel, Dissolved	ND	mg/l	0.0250	0.0024	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Selenium, Dissolved	ND	mg/l	0.0100	0.0035	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Silver, Dissolved	ND	mg/l	0.0070	0.0028	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Vanadium, Dissolved	ND	mg/l	0.0100	0.0020	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL
Zinc, Dissolved	ND	mg/l	0.0500	0.0021	1	02/21/23 15:00	02/21/23 21:27	97,6010D	DHL

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1746858-1									
Mercury, Dissolved	ND	mg/l	0.0002	0.0002	1	02/21/23 15:38	02/22/23 00:35	97,7470A	DMB

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1746859-1									
Antimony, Dissolved	ND	mg/l	0.0040	0.0020	1	02/21/23 15:00	02/21/23 22:00	97,6020B	NTB
Beryllium, Dissolved	ND	mg/l	0.0005	0.0005	1	02/21/23 15:00	02/21/23 22:00	97,6020B	NTB
Thallium, Dissolved	ND	mg/l	0.0010	0.0010	1	02/21/23 15:00	02/21/23 22:00	97,6020B	NTB

**Project Name:** SAND PIT ROAD, TRURO

**Lab Number:** L2308720

**Project Number:** 22129

**Report Date:** 02/24/23

## Method Blank Analysis Batch Quality Control

### Prep Information

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Digestion Method: EPA 3005A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** SAND PIT ROAD, TRURO

**Project Number:** 22129

**Lab Number:** L2308720

**Report Date:** 02/24/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1746855-2 WG1746855-3								
Arsenic, Dissolved	104		104		80-120	0		20
Barium, Dissolved	100		102		80-120	2		20
Cadmium, Dissolved	105		105		80-120	0		20
Chromium, Dissolved	100		101		80-120	1		20
Lead, Dissolved	100		100		80-120	0		20
Nickel, Dissolved	100		100		80-120	0		20
Selenium, Dissolved	102		104		80-120	2		20
Silver, Dissolved	104		104		80-120	0		20
Vanadium, Dissolved	104		105		80-120	1		20
Zinc, Dissolved	102		103		80-120	1		20
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1746858-2 WG1746858-3								
Mercury, Dissolved	96		102		80-120	6		20
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1746859-2 WG1746859-3								
Antimony, Dissolved	92		93		80-120	1		20
Beryllium, Dissolved	104		105		80-120	1		20
Thallium, Dissolved	87		86		80-120	1		20

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Serial\_No:**02242317:00  
**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

**Cooler**                      **Custody Seal**  
A                                      Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2308720-01A	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-01B	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-01C	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-01D	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-01E	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-01F	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-01G	Plastic 250ml HNO3 preserved	A	<2	<2	5.9	Y	Absent		MCP-CD-6010S-10(180),MCP-BE-6020S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-CR-6010S-10(180),MCP-AS-6010S-10(180),MCP-TL-6020S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180),MCP-V-6010S-10(180),MCP-NI-6010S-10(180)
L2308720-01H	Amber 120ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8082(7)
L2308720-01I	Amber 120ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8082(7)
L2308720-01J	Amber 250ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8270(7)
L2308720-01K	Amber 250ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8270(7)
L2308720-01L	Amber 1000ml HCl preserved	A	<2	<2	5.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2308720-01M	Amber 1000ml HCl preserved	A	<2	<2	5.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2308720-02A	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-02B	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-02C	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-02D	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-02E	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-02F	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)

\*Values in parentheses indicate holding time in days



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Serial\_No:**02242317:00  
**Lab Number:** L2308720  
**Report Date:** 02/24/23

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2308720-02G	Plastic 250ml HNO3 preserved	A	<2	<2	5.9	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-SB-6020S-10(180),MCP-AG-6010S-10(180),MCP-ZN-6010S-10(180),MCP-TL-6020S-10(180),MCP-CR-6010S-10(180),MCP-AS-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180),MCP-V-6010S-10(180),MCP-NI-6010S-10(180)
L2308720-02H	Amber 120ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8082(7)
L2308720-02I	Amber 120ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8082(7)
L2308720-02J	Amber 250ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8270(7)
L2308720-02K	Amber 250ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8270(7)
L2308720-02L	Amber 1000ml HCl preserved	A	<2	<2	5.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2308720-02M	Amber 1000ml HCl preserved	A	<2	<2	5.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2308720-03A	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-03B	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-03C	Vial HCl preserved	A	NA		5.9	Y	Absent		MCP-8260-21(14)
L2308720-03D	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-03E	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-03F	Vial HCl preserved	A	NA		5.9	Y	Absent		VPH-DELUX-18(14)
L2308720-03G	Plastic 250ml HNO3 preserved	A	<2	<2	5.9	Y	Absent		MCP-CD-6010S-10(180),MCP-BE-6020S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-V-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L2308720-03H	Amber 120ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8082(7)
L2308720-03I	Amber 120ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8082(7)
L2308720-03J	Amber 250ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8270(7)
L2308720-03K	Amber 250ml unpreserved	A	7	7	5.9	Y	Absent		HOLD-8270(7)
L2308720-03L	Amber 1000ml HCl preserved	A	<2	<2	5.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2308720-03M	Amber 1000ml HCl preserved	A	<2	<2	5.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

#### **Data Qualifiers**

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308720  
**Report Date:** 02/24/23

## REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 131 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, February 2018, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, June 1, 2018.
- 135 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, December 2019, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, March 1, 2020.
- 141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625/625.1:** alpha-Terpineol

**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



# Method Blank Summary

## Form 4

### Volatiles

Client : Horseley & Witten, Inc.                      Lab Number : L2308720  
Project Name : SAND PIT ROAD, TRURO              Project Number : 22129  
Lab Sample ID : WG1746852-5                      Lab File ID : VQ230221A05  
Instrument ID : QUIMBY  
Matrix : WATER                                      Analysis Date : 02/21/23 06:35

Client Sample No.	Lab Sample ID	Analysis Date
WG1746852-3LCS	WG1746852-3	02/21/23 05:04
WG1746852-4LCSD	WG1746852-4	02/21/23 05:27
MW-1	L2308720-01	02/21/23 12:38
MW-2	L2308720-02	02/21/23 13:01
MW-3	L2308720-03	02/21/23 13:23

# Calibration Verification Summary

## Form 7

### Volatiles

Client : Horseley & Witten, Inc.  
 Project Name : SAND PIT ROAD, TRURO  
 Instrument ID : QUIMBY  
 Lab File ID : VQ230221A01  
 Sample No : WG1746852-2  
 Channel :

Lab Number : L2308720  
 Project Number : 22129  
 Calibration Date : 02/21/23 05:04  
 Init. Calib. Date(s) : 02/09/23 02/09/23  
 Init. Calib. Times : 04:21 07:00

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	89	0
Dichlorodifluoromethane	0.25	0.213	-	14.8	20	74	0
Chloromethane	10	7.241	-	27.6*	20	60	0
Vinyl chloride	0.263	0.255	-	3	20	84	0
Bromomethane	10	9.716	-	2.8	20	78	0
Chloroethane	0.158	0.154	-	2.5	20	81	0
Trichlorofluoromethane	0.351	0.361	-	-2.8	20	87	0
Ethyl ether	0.089	0.091	-	-2.2	20	84	0
1,1-Dichloroethene	0.191	0.192	-	-0.5	20	86	0
Carbon disulfide	0.55	0.558	-	-1.5	20	87	0
Freon-113	0.208	0.221	-	-6.3	20	89	0
Acrolein	10	10.799	-	-8	20	99	0
Methylene chloride	10	10.507	-	-5.1	20	86	0
Acetone	10	12.302	-	-23*	20	104	0
trans-1,2-Dichloroethene	0.198	0.206	-	-4	20	88	0
Methyl acetate	0.108	0.11	-	-1.9	20	90	0
Methyl tert-butyl ether	0.418	0.403	-	3.6	20	88	0
tert-Butyl alcohol	0.01	0.011	-	-10	20	94	0
Diisopropyl ether	0.775	0.761	-	1.8	20	89	0
1,1-Dichloroethane	0.471	0.486	-	-3.2	20	88	0
Halothane	0.182	0.192	-	-5.5	20	90	0
Acrylonitrile	0.051	0.053	-	-3.9	20	90	0
Ethyl tert-butyl ether	0.61	0.581	-	4.8	20	88	0
Vinyl acetate	0.456	0.449	-	1.5	20	91	0
cis-1,2-Dichloroethene	0.263	0.271	-	-3	20	90	0
2,2-Dichloropropane	0.425	0.441	-	-3.8	20	88	0
Bromochloromethane	0.116	0.119	-	-2.6	20	88	0
Cyclohexane	0.463	0.488	-	-5.4	20	91	0
Chloroform	0.427	0.446	-	-4.4	20	89	0
Ethyl acetate	0.141	0.136	-	3.5	20	92	0
Carbon tetrachloride	0.341	0.356	-	-4.4	20	87	0
Tetrahydrofuran	0.054	0.053	-	1.9	20	88	0
Dibromofluoromethane	0.28	0.284	-	-1.4	20	88	0
1,1,1-Trichloroethane	0.375	0.399	-	-6.4	20	91	0
2-Butanone	0.068	0.062	-	8.8	20	86	0
1,1-Dichloropropene	0.304	0.325	-	-6.9	20	93	0
Benzene	0.907	0.936	-	-3.2	20	92	0
tert-Amyl methyl ether	0.507	0.47	-	7.3	20	86	0
1,2-Dichloroethane-d4	0.311	0.329	-	-5.8	20	89	0
1,2-Dichloroethane	0.314	0.323	-	-2.9	20	88	0
Methyl cyclohexane	0.414	0.404	-	2.4	20	88	0
Trichloroethene	0.24	0.241	-	-0.4	20	94	0
Dibromomethane	0.128	0.126	-	1.6	20	85	0

\* Value outside of QC limits.



# Calibration Verification Summary

## Form 7

### Volatiles

Client : Horseley & Witten, Inc.  
 Project Name : SAND PIT ROAD, TRURO  
 Instrument ID : QUIMBY  
 Lab File ID : VQ230221A01  
 Sample No : WG1746852-2  
 Channel :

Lab Number : L2308720  
 Project Number : 22129  
 Calibration Date : 02/21/23 05:04  
 Init. Calib. Date(s) : 02/09/23 02/09/23  
 Init. Calib. Times : 04:21 07:00

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.24	0.248	-	-3.3	20	91	0
2-Chloroethyl vinyl ether	0.109	0.101	-	7.3	20	83	0
Bromodichloromethane	0.318	0.327	-	-2.8	20	89	0
1,4-Dioxane	0.00128	0.00123*	-	3.9	20	78	0
cis-1,3-Dichloropropene	0.366	0.361	-	1.4	20	88	0
Chlorobenzene-d5	1	1	-	0	20	86	0
Toluene-d8	1.331	1.354	-	-1.7	20	87	0
Toluene	0.742	0.773	-	-4.2	20	89	0
4-Methyl-2-pentanone	0.059	0.056	-	5.1	20	85	0
Tetrachloroethene	0.295	0.307	-	-4.1	20	90	0
trans-1,3-Dichloropropene	0.413	0.408	-	1.2	20	88	0
Ethyl methacrylate	0.245	0.251	-	-2.4	20	85	0
1,1,2-Trichloroethane	0.174	0.172*	-	1.1	20	89	0
Chlorodibromomethane	0.272	0.258	-	5.1	20	84	0
1,3-Dichloropropane	0.378	0.379	-	-0.3	20	88	0
1,2-Dibromoethane	0.202	0.2	-	1	20	87	0
2-Hexanone	0.113	0.124	-	-9.7	20	96	0
Chlorobenzene	0.838	0.874	-	-4.3	20	88	0
Ethylbenzene	1.436	1.535	-	-6.9	20	89	0
1,1,1,2-Tetrachloroethane	0.287	0.275	-	4.2	20	86	0
p/m Xylene	0.571	0.594	-	-4	20	86	0
o Xylene	0.549	0.57	-	-3.8	20	86	0
Styrene	0.913	0.97	-	-6.2	20	86	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	79	0
Bromoform	0.276	0.282	-	-2.2	20	82	0
Isopropylbenzene	2.784	3.161	-	-13.5	20	87	0
4-Bromofluorobenzene	0.937	1.04	-	-11	20	87	0
Bromobenzene	0.638	0.712	-	-11.6	20	86	0
n-Propylbenzene	3.306	3.772	-	-14.1	20	86	0
1,4-Dichlorobutane	0.708	0.746	-	-5.4	20	85	0
1,1,2,2-Tetrachloroethane	0.436	0.453	-	-3.9	20	83	0
4-Ethyltoluene	2.852	3.06	-	-7.3	20	81	0
2-Chlorotoluene	2.318	2.594	-	-11.9	20	86	0
1,3,5-Trimethylbenzene	2.416	2.383	-	1.4	20	76	0
1,2,3-Trichloropropane	0.367	0.383	-	-4.4	20	83	0
trans-1,4-Dichloro-2-buten	0.151	0.152	-	-0.7	20	79	0
4-Chlorotoluene	2.086	2.341	-	-12.2	20	86	0
tert-Butylbenzene	2.092	2.31	-	-10.4	20	84	0
1,2,4-Trimethylbenzene	2.347	2.343	-	0.2	20	77	0
sec-Butylbenzene	3.071	3.426	-	-11.6	20	84	0
p-Isopropyltoluene	2.698	2.813	-	-4.3	20	78	0
1,3-Dichlorobenzene	1.308	1.411	-	-7.9	20	83	0
1,4-Dichlorobenzene	1.311	1.396	-	-6.5	20	82	0

\* Value outside of QC limits.



## Calibration Verification Summary Form 7 Volatiles

Client : Horseley & Witten, Inc.  
 Project Name : SAND PIT ROAD, TRURO  
 Instrument ID : QUIMBY  
 Lab File ID : VQ230221A01  
 Sample No : WG1746852-2  
 Channel :

Lab Number : L2308720  
 Project Number : 22129  
 Calibration Date : 02/21/23 05:04  
 Init. Calib. Date(s) : 02/09/23 02/09/23  
 Init. Calib. Times : 04:21 07:00

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.626	1.604	-	1.4	20	76	0
n-Butylbenzene	2.309	2.407	-	-4.2	20	78	0
1,2-Dichlorobenzene	1.201	1.291	-	-7.5	20	83	0
1,2,4,5-Tetramethylbenzene	2.349	2.315	-	1.4	20	82	0
1,2-Dibromo-3-chloropropan	0.073	0.071	-	2.7	20	76	0
1,3,5-Trichlorobenzene	0.96	0.951	-	0.9	20	82	.01
Hexachlorobutadiene	0.388	0.389	-	-0.3	20	80	0
1,2,4-Trichlorobenzene	0.844	0.845	-	-0.1	20	80	0
Naphthalene	1.649	1.703	-	-3.3	20	80	0
1,2,3-Trichlorobenzene	0.747	0.751	-	-0.5	20	78	0

\* Value outside of QC limits.





## ANALYTICAL REPORT

Lab Number:	L2308730
Client:	Horseley & Witten, Inc. Sextant Hill Office Park 90 Route 6A Sandwich, MA 02563
ATTN:	Brian Massa
Phone:	(508) 833-6600
Project Name:	SAND PIT ROAD, TRURO
Project Number:	22129
Report Date:	03/06/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2308730-01	MW-1	WATER	TRUR, MA	02/15/23 15:00	02/17/23
L2308730-02	MW-2	WATER	TRUR, MA	02/15/23 12:15	02/17/23
L2308730-03	MW-3	WATER	TRUR, MA	02/15/23 13:30	02/17/23

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2308730-01: The sample was centrifuged and decanted prior to extraction due to sample matrix.

L2308730-01: The MeOH fraction of the extraction is reported for perfluorooctanesulfonamide (fosa) due to better extraction efficiency of the perfluoro[13c8]octanesulfonamide (m8fosa) Extracted Internal Standard.

L2308730-02: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Alycia Mogayzel

Title: Technical Director/Representative

Date: 03/06/23

# ORGANICS

# SEMIVOLATILES

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

**SAMPLE RESULTS**

**Lab ID:** L2308730-01  
**Client ID:** MW-1  
**Sample Location:** TRUR, MA

**Date Collected:** 02/15/23 15:00  
**Date Received:** 02/17/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 02/21/23 13:53  
**Analyst:** AC

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 02/20/23 10:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	5.90		ng/l	1.95	0.398	1
Perfluoropentanoic Acid (PFPeA)	5.46		ng/l	1.95	0.386	1
Perfluorobutanesulfonic Acid (PFBS)	10.9		ng/l	1.95	0.232	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.95	0.441	1
Perfluorohexanoic Acid (PFHxA)	15.8		ng/l	1.95	0.320	1
Perfluoropentanesulfonic Acid (PFPeS)	10.6		ng/l	1.95	0.239	1
Perfluoroheptanoic Acid (PFHpA)	32.6		ng/l	1.95	0.220	1
Perfluorohexanesulfonic Acid (PFHxS)	48.8		ng/l	1.95	0.367	1
Perfluorooctanoic Acid (PFOA)	9.18		ng/l	1.95	0.230	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.95	1.30	1
Perfluoroheptanesulfonic Acid (PFHpS)	5.11		ng/l	1.95	0.671	1
Perfluorononanoic Acid (PFNA)	0.620	J	ng/l	1.95	0.304	1
Perfluorooctanesulfonic Acid (PFOS)	248		ng/l	1.95	0.491	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.95	0.296	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.95	1.18	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.95	1.09	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.95	0.632	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.95	0.254	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.95	0.956	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.95	0.784	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.95	0.363	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.95	0.319	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.95	0.242	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308730**Project Number:** 22129**Report Date:** 03/06/23**SAMPLE RESULTS**

Lab ID: L2308730-01

Date Collected: 02/15/23 15:00

Client ID: MW-1

Date Received: 02/17/23

Sample Location: TRUR, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	76		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	90		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	93		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	69		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	75		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	81		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	73		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	87		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	79		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	84		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	82		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	84		55-137
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	89		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79		22-136

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

**SAMPLE RESULTS**

Lab ID: L2308730-01  
 Client ID: MW-1  
 Sample Location: TRUR, MA

Date Collected: 02/15/23 15:00  
 Date Received: 02/17/23  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 02/21/23 20:18  
 Analyst: JW

Extraction Method: ALPHA 23528  
 Extraction Date: 02/20/23 10:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.95	0.566	1
<b>Surrogate (Extracted Internal Standard)</b>			<b>% Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			58		5-112	

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308730**Project Number:** 22129**Report Date:** 03/06/23**SAMPLE RESULTS**

Lab ID: L2308730-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRUR, MA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Extraction Method: ALPHA 23528

Analytical Method: 134,LCMSMS-ID

Extraction Date: 02/20/23 10:40

Analytical Date: 02/21/23 14:09

Analyst: AC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	2.34		ng/l	1.83	0.373	1
Perfluoropentanoic Acid (PFPeA)	1.05	J	ng/l	1.83	0.362	1
Perfluorobutanesulfonic Acid (PFBS)	0.336	J	ng/l	1.83	0.217	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.83	0.413	1
Perfluorohexanoic Acid (PFHxA)	1.28	J	ng/l	1.83	0.300	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.83	0.224	1
Perfluoroheptanoic Acid (PFHpA)	1.13	J	ng/l	1.83	0.206	1
Perfluorohexanesulfonic Acid (PFHxS)	0.800	J	ng/l	1.83	0.344	1
Perfluorooctanoic Acid (PFOA)	1.51	J	ng/l	1.83	0.216	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.83	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.628	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.83	0.285	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.83	0.460	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.83	0.278	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.83	1.11	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.83	1.02	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.83	0.592	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.83	0.238	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.83	0.895	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.83	0.530	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.83	0.734	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.340	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.83	0.299	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.83	0.226	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308730**Project Number:** 22129**Report Date:** 03/06/23**SAMPLE RESULTS**

Lab ID: L2308730-02

Date Collected: 02/15/23 12:15

Client ID: MW-2

Date Received: 02/17/23

Sample Location: TRUR, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	52	Q	58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	57	Q	62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	73		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	42	Q	57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	41	Q	60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	42	Q	62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	37	Q	59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	41	Q	62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	75		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	50		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	51	Q	55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	50		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	57		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		22-136

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

**SAMPLE RESULTS**

**Lab ID:** L2308730-03  
**Client ID:** MW-3  
**Sample Location:** TRUR, MA

**Date Collected:** 02/15/23 13:30  
**Date Received:** 02/17/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 02/21/23 14:26  
**Analyst:** AC

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 02/20/23 10:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	5.76		ng/l	1.88	0.383	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.88	0.372	1
Perfluorobutanesulfonic Acid (PFBS)	1.12	J	ng/l	1.88	0.224	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.88	0.424	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.88	0.308	1
Perfluoropentanesulfonic Acid (PFPeS)	0.237	J	ng/l	1.88	0.230	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.88	0.212	1
Perfluorohexanesulfonic Acid (PFHxS)	1.29	J	ng/l	1.88	0.353	1
Perfluorooctanoic Acid (PFOA)	0.639	J	ng/l	1.88	0.222	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.88	1.25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.88	0.646	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.88	0.293	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.88	0.473	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.88	0.286	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.88	1.14	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.88	1.05	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.88	0.608	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.88	0.244	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.88	0.920	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.88	0.545	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.88	0.755	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.88	0.349	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.88	0.307	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.88	0.233	1

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308730**Project Number:** 22129**Report Date:** 03/06/23**SAMPLE RESULTS**

Lab ID: L2308730-03

Date Collected: 02/15/23 13:30

Client ID: MW-3

Date Received: 02/17/23

Sample Location: TRUR, MA

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	64		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	75		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	88		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	61		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	63		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	66		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	87		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	60		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	62		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	75		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	65		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	75		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	15		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	88		22-136

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 02/21/23 08:38  
Analyst: AC

Extraction Method: ALPHA 23528  
Extraction Date: 02/20/23 10:40

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-03 Batch: WG1746338-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	0.452
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	0.245
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	2.00	1.12
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 02/21/23 08:38  
Analyst: AC

Extraction Method: ALPHA 23528  
Extraction Date: 02/20/23 10:40

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-03 Batch: WG1746338-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	99		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	107		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	108		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	96		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	91		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	94		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	110		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	97		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	101		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	106		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	75		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	18		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	73		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	106		22-136

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 02/21/23 20:05  
Analyst: JW

Extraction Method: ALPHA 23528  
Extraction Date: 02/20/23 10:40

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-03 Batch: WG1746338-1					
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	59		5-112

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308730

Project Number: 22129

Report Date: 03/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 Batch: WG1746338-2								
Perfluorobutanoic Acid (PFBA)	94		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	93		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	94		-		65-157	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	105		-		37-219	-		30
Perfluorohexanoic Acid (PFHxA)	96		-		69-168	-		30
Perfluoropentanesulfonic Acid (PFPeS)	104		-		52-156	-		30
Perfluoroheptanoic Acid (PFHpA)	95		-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	116		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	96		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	113		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	106		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	102		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	114		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	93		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	101		-		56-173	-		30
Perfluorononanesulfonic Acid (PFNS)	109		-		48-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	105		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	91		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	106		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	92		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	108		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	87		-		67-153	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Lab Number: L2308730

Project Number: 22129

Report Date: 03/06/23

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 Batch: WG1746338-2								
Perfluorotridecanoic Acid (PFTrDA)	113		-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	104		-		59-182	-		30

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	100				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	110				62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107				70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	100				12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	91				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	96				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	110				71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98				62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	106				14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97				59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100				69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96				62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110				10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	81				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97				55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	21				5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77				27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	109				22-136

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Project Number: 22129

Lab Number: L2308730

Report Date: 03/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 Batch: WG1746338-2								
Perfluorooctanesulfonamide (FOSA)	90		-		46-170	-		30

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	64				5-112

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** SAND PIT ROAD, TRURO

**Lab Number:** L2308730

**Project Number:** 22129

**Report Date:** 03/06/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1746338-3 QC Sample: L2308443-02 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	3.60	38.1	39.4	94		-	-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	2.88	38.1	38.4	93		-	-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	33.8	32.4	96		-	-		65-157	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	35.7	39.1	110		-	-		37-219	-		30
Perfluorohexanoic Acid (PFHxA)	1.08J	38.1	36.3	92		-	-		69-168	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	35.8	36.9	103		-	-		52-156	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	38.1	36.4	96		-	-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	34.8	41.4	119		-	-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	ND	38.1	35.1	92		-	-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	36.2	40.6	112		-	-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	36.3	38.7	107		-	-		61-179	-		30
Perfluorononanoic Acid (PFNA)	ND	38.1	40.6	107		-	-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	ND	35.3	37.6	106		-	-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	ND	38.1	36.8	97		-	-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	36.5	38.0	104		-	-		56-173	-		30
Perfluorononanesulfonic Acid (PFNS)	ND	36.6	37.3	102		-	-		48-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	38.1	38.3	101		-	-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	38.1	36.8	97		-	-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	ND	36.8	40.4	110		-	-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	ND	38.1	34.5F	91		-	-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	38.1	38.7F	102		-	-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	ND	38.1	34.2	90		-	-		67-153	-		30

**Matrix Spike Analysis***Batch Quality Control***Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308730**Project Number:** 22129**Report Date:** 03/06/23

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1746338-3 QC Sample: L2308443-02 Client ID: MS Sample												
Perfluorotridecanoic Acid (PFTTrDA)	ND	38.1	44.5	117		-	-		48-158	-		30
Perfluorotetradecanoic Acid (PFTTA)	ND	38.1	41.1	108		-	-		59-182	-		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	92				10-162
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	142				12-142
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	110				14-147
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70				27-126
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	84				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	81				55-137
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87				62-124
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	112				71-134
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	88				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	99				22-136
Perfluoro[13C4]Butanoic Acid (MPFBA)	88				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103				62-163
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	18				5-112
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98				69-131
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89				62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	80				59-139
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103				70-131

## Lab Duplicate Analysis

### Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Project Number: 22129

Lab Number: L2308730

Report Date: 03/06/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1746338-4 QC Sample: L2308443-03 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	3.54	3.59	ng/l	1		30
Perfluoropentanoic Acid (PFPeA)	2.51	2.58	ng/l	3		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	1.06J	0.540J	ng/l	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ng/l	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorononanesulfonic Acid (PFNS)	ND	ND	ng/l	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/l	NC		30

## Lab Duplicate Analysis

Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Project Number: 22129

Lab Number: L2308730

Report Date: 03/06/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1746338-4 QC Sample: L2308443-03 Client ID: DUP Sample						
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30
Perfluorotridecanoic Acid (PFTTrDA)	ND	ND	ng/l	NC		30
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		85		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102		100		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		103		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	132		125		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78		77		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84		81		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	109		108		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	87		86		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		91		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	80		75		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		94		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		82		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	82		80		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	80		89		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85		88		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	21		12		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	85		84		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	86		89		48-131

## Lab Duplicate Analysis

Batch Quality Control

Project Name: SAND PIT ROAD, TRURO

Project Number: 22129

Lab Number: L2308730

Report Date: 03/06/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1746338-4 QC Sample: L2308443-03 Client ID: DUP Sample						

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		96		22-136

**Project Name:** SAND PIT ROAD, TRURO**Lab Number:** L2308730**Project Number:** 22129**Report Date:** 03/06/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2308730-01A	Plastic 250ml unpreserved	A	NA		5.9	Y	Absent		A2-537-ISOTOPE(28)
L2308730-01B	Plastic 250ml unpreserved	A	NA		5.9	Y	Absent		A2-537-ISOTOPE(28)
L2308730-02A	Plastic 250ml unpreserved	A	NA		5.9	Y	Absent		A2-537-ISOTOPE(28)
L2308730-02B	Plastic 250ml unpreserved	A	NA		5.9	Y	Absent		A2-537-ISOTOPE(28)
L2308730-03A	Plastic 250ml unpreserved	A	NA		5.9	Y	Absent		A2-537-ISOTOPE(28)
L2308730-03B	Plastic 250ml unpreserved	A	NA		5.9	Y	Absent		A2-537-ISOTOPE(28)

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

Serial\_No:03062310:45  
**Lab Number:** L2308730  
**Report Date:** 03/06/23

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEEA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

Serial\_No:03062310:45  
**Lab Number:** L2308730  
**Report Date:** 03/06/23

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

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**Report Date:** 03/06/23

#### **Data Qualifiers**

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



**Project Name:** SAND PIT ROAD, TRURO  
**Project Number:** 22129

**Lab Number:** L2308730  
**Report Date:** 03/06/23

## REFERENCES

- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625/625.1:** alpha-Terpineol

**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.





## ANALYTICAL REPORT

Lab Number:	L2314332
Client:	Horseley & Witten, Inc. Sextant Hill Office Park 90 Route 6A Sandwich, MA 02563
ATTN:	Brian Massa
Phone:	(508) 833-6600
Project Name:	SAND PIT TRURO
Project Number:	22129
Report Date:	04/07/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2314332-01	MW-1	WATER	SAND PIT RD, TRURO	03/15/23 17:00	03/20/23

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

**Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

*Darian Dailey* Darian Dailey

Title: Technical Director/Representative

Date: 04/07/23

# ORGANICS

# SEMIVOLATILES

**Project Name:** SAND PIT TRURO**Lab Number:** L2314332**Project Number:** 22129**Report Date:** 04/07/23**SAMPLE RESULTS**

Lab ID: L2314332-01  
 Client ID: MW-1  
 Sample Location: SAND PIT RD, TRURO

Date Collected: 03/15/23 17:00  
 Date Received: 03/20/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 04/07/23 00:25  
 Analyst: AC

Extraction Method: ALPHA 23528  
 Extraction Date: 04/04/23 11:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	5.48		ng/l	1.76	0.360	1
Perfluoropentanoic Acid (PFPeA)	6.34		ng/l	1.76	0.349	1
Perfluorobutanesulfonic Acid (PFBS)	9.62		ng/l	1.76	0.210	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.76	0.399	1
Perfluorohexanoic Acid (PFHxA)	20.3		ng/l	1.76	0.289	1
Perfluoropentanesulfonic Acid (PFPeS)	13.0		ng/l	1.76	0.216	1
Perfluoroheptanoic Acid (PFHpA)	43.8		ng/l	1.76	0.199	1
Perfluorohexanesulfonic Acid (PFHxS)	33.2		ng/l	1.76	0.332	1
Perfluorooctanoic Acid (PFOA)	9.36		ng/l	1.76	0.208	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	3.62		ng/l	1.76	0.607	1
Perfluorononanoic Acid (PFNA)	0.791	J	ng/l	1.76	0.275	1
Perfluorooctanesulfonic Acid (PFOS)	238		ng/l	1.76	0.445	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.268	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	1.07	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.76	0.988	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.76	0.572	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.229	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.76	0.865	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.76	0.512	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.76	0.709	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.328	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.76	0.289	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.76	0.219	1

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

**SAMPLE RESULTS**

Lab ID: L2314332-01  
 Client ID: MW-1  
 Sample Location: SAND PIT RD, TRURO

Date Collected: 03/15/23 17:00  
 Date Received: 03/20/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	78		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	121		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	72		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	74		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	79		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	103		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	72		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	78		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	94		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	69		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	75		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	76		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	62		22-136

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 04/06/23 23:35  
Analyst: AC

Extraction Method: ALPHA 23528  
Extraction Date: 04/04/23 11:55

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1762567-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	0.452
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	0.245
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	2.00	1.12
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 04/06/23 23:35  
Analyst: AC

Extraction Method: ALPHA 23528  
Extraction Date: 04/04/23 11:55

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1762567-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	91		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	100		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	92		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	91		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	84		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	84		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	75		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	61		22-136

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT TRURO

Lab Number: L2314332

Project Number: 22129

Report Date: 04/07/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1762567-2								
Perfluorobutanoic Acid (PFBA)	105		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	102		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	104		-		65-157	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	109		-		37-219	-		30
Perfluorohexanoic Acid (PFHxA)	103		-		69-168	-		30
Perfluoropentanesulfonic Acid (PFPeS)	107		-		52-156	-		30
Perfluoroheptanoic Acid (PFHpA)	104		-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	104		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	103		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	103		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	115		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	103		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	110		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	108		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	116		-		56-173	-		30
Perfluorononanesulfonic Acid (PFNS)	115		-		48-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	94		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	105		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	116		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	107		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	108		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	109		-		67-153	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: SAND PIT TRURO

Lab Number: L2314332

Project Number: 22129

Report Date: 04/07/23

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1762567-2									
Perfluorotridecanoic Acid (PFTTrDA)	113		-		48-158		-		30
Perfluorotetradecanoic Acid (PFTA)	107		-		59-182		-		30

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102				62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99				70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	103				12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	103				71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95				62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	111				14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99				59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93				69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90				62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	108				10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	86				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93				55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	23				5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	87				27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	87				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	75				22-136

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** SAND PIT TRURO

**Lab Number:** L2314332

**Project Number:** 22129

**Report Date:** 04/07/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1762567-3 QC Sample: L2314332-01 Client ID: MW-1												
Perfluorobutanoic Acid (PFBA)	5.48	37.4	45.0	106		-	-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	6.34	37.4	45.2	104		-	-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	9.62	33.2	45.6	108		-	-		65-157	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	35.1	39.4	112		-	-		37-219	-		30
Perfluorohexanoic Acid (PFHxA)	20.3	37.4	57.6	100		-	-		69-168	-		30
Perfluoropentanesulfonic Acid (PFPeS)	13.0	35.2	49.6	104		-	-		52-156	-		30
Perfluoroheptanoic Acid (PFHpA)	43.8	37.4	80.0	97		-	-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	33.2	34.2	70.0	108		-	-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	9.36	37.4	49.2	107		-	-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	35.6	38.8	109		-	-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	3.62	35.6	44.4	114		-	-		61-179	-		30
Perfluorononanoic Acid (PFNA)	0.791J	37.4	43.4	114		-	-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	238	34.7	275	107		-	-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	ND	37.4	42.3	113		-	-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	35.9	39.9	111		-	-		56-173	-		30
Perfluorononanesulfonic Acid (PFNS)	ND	36	38.3	107		-	-		48-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	37.4	42.2	113		-	-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	37.4	39.7	106		-	-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	ND	36.1	40.5	112		-	-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	ND	37.4	37.3F	100		-	-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	37.4	39.3	105		-	-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	ND	37.4	41.8	112		-	-		67-153	-		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** SAND PIT TRURO

**Lab Number:** L2314332

**Project Number:** 22129

**Report Date:** 04/07/23

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1762567-3 QC Sample: L2314332-01 Client ID: MW-1												
Perfluorotridecanoic Acid (PFTrDA)	ND	37.4	40.7	109		-	-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	ND	37.4	38.1	102		-	-		59-182	-		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	101				10-162
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	122				12-142
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108				14-147
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77				27-126
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	66				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83				55-137
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	72				62-124
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	73				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	72				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104				71-134
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	70				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	70				22-136
Perfluoro[13C4]Butanoic Acid (MPFBA)	79				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89				62-163
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	29				5-112
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93				69-131
Perfluoro[13C8]Octanoic Acid (M8PFOA)	75				62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	72				59-139
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98				70-131

## Lab Duplicate Analysis

### Batch Quality Control

Project Name: SAND PIT TRURO

Project Number: 22129

Lab Number: L2314332

Report Date: 04/07/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1762567-4 QC Sample: L2314333-01 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	4.97	5.08	ng/l	2		30
Perfluoropentanoic Acid (PFPeA)	4.88	5.08	ng/l	4		30
Perfluorobutanesulfonic Acid (PFBS)	1.07J	1.05J	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	4.98	4.82	ng/l	3		30
Perfluoropentanesulfonic Acid (PFPeS)	0.230J	0.254J	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	3.40	3.70	ng/l	8		30
Perfluorohexanesulfonic Acid (PFHxS)	3.98F	3.80	ng/l	5		30
Perfluorooctanoic Acid (PFOA)	16.2	16.1	ng/l	1		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	1.92	1.67J	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	12.9	13.0	ng/l	1		30
Perfluorooctanesulfonic Acid (PFOS)	35.5	35.8	ng/l	1		30
Perfluorodecanoic Acid (PFDA)	1.77J	1.36J	ng/l	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorononanesulfonic Acid (PFNS)	ND	ND	ng/l	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/l	NC		30

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1762567-4 QC Sample: L2314333-01 Client ID: DUP Sample						
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30
Perfluorotridecanoic Acid (PFTTrDA)	ND	ND	ng/l	NC		30
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	80		77		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		82		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		91		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	99		100		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79		74		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82		72		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		94		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83		77		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		90		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	75		72		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		84		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	72		69		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	87		86		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	63		55		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	76		73		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	27		15		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65		56		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	60		61		48-131

**Lab Duplicate Analysis**  
**Batch Quality Control**

**Project Name:** SAND PIT TRURO

**Project Number:** 22129

**Lab Number:** L2314332

**Report Date:** 04/07/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1762567-4 QC Sample: L2314333-01 Client ID: DUP Sample						

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	52		66		22-136

**Project Name:** SAND PIT TRURO**Lab Number:** L2314332**Project Number:** 22129**Report Date:** 04/07/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information****Cooler**                      **Custody Seal**

A                                      Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2314332-01A	Plastic 250ml unpreserved	A	NA		2.8	Y	Absent		A2-537-ISOTOPE(28)
L2314332-01B	Plastic 250ml unpreserved	A	NA		2.8	Y	Absent		A2-537-ISOTOPE(28)

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

Serial\_No:04072316:42  
**Lab Number:** L2314332  
**Report Date:** 04/07/23

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEEA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

Serial\_No:04072316:42  
**Lab Number:** L2314332  
**Report Date:** 04/07/23

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

**Lab Number:** L2314332  
**Report Date:** 04/07/23

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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#### **Data Qualifiers**

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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**Project Name:** SAND PIT TRURO  
**Project Number:** 22129

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## REFERENCES

- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625/625.1:** alpha-Terpineol

**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

