ROSS ENVIRONMENTAL ASSOCIATES, INC.

Hydrogeology, Water Quality, GIS Planning, Remediation,
Contaminant Fate & Transport, Regulatory Compliance and
Permitting, Environmental Site Assessments, and Radon Mitigation

15 May 2013

Mr. Jim Townsend
Ferriter Oil Company
22 Tatro Hill Road
Randolph, VT 05060

RE: Groundwater Quality Monitoring Report – May 2013
Ferriter Oil Company (SMS Site # 2011-4210)

Dear Mr. Townsend,

On 2 May 2013, Ross Environmental Associates, Inc. (***R.E.A.***) completed groundwater sampling at the Ferriter Oil Company Bulk Facility located in Randolph, Vermont (**Figure 1 & 2**, Attachment A). Groundwater samples were collected from three of the monitoring wells (MW-1, MW-6, and MW-7. This work was performed as requested by Mr. Gerold Noyes in the letter dated 29 November 2012.

Contaminant concentrations have increased slightly since the last monitoring event completed in November 2012, but none of the Vermont Groundwater Enforcement Standards (VGESs) were exceeded. Approximately 1.00 feet of free product was detected in MW-2, which was not observed during the last sampling event. Based on available information, residual petroleum contamination appears to be present within the shallow soil predominantly in the vicinity of the inactive ASTs and adjacent to the active loading area; however, no off-site sensitive receptors appear to be impacted at this time and no contamination appears to have migrated off site.

The findings of this sampling event are summarized below:

- None of the VGESs were exceeded in the groundwater samples collected during this sampling event.
- Approximately 1.0 feet of free product was observed in MW-2, no groundwater sample was collected.
- 1,2,4-trimethylbenzene, sec-butylbenzene, & 4-isopropyltoluene were detected in the sample collected from MW-7 at concentrations of 4.1, 2.6, and 2.6 micrograms per liter (µg/L), respectively.
- 1,2,4-trimethylbenzene was detected in the sample collected from MW-6 at a concentration of 2.8 µg/L.
- Low concentrations of total petroleum hydrocarbons (TPH) were detected in the samples collected from MW-1, MW-6, and MW-7 at concentrations ranging between 1.0 and 3.9 milligrams per liter (mg/L), respectively.
- No volatile petroleum compounds were detected above the laboratory detection limits in the sample collected from MW-1, which is consistent with previous results.
- Monitoring wells MW-3, MW-4, and MW-5 were dry during this sampling event; therefore, no groundwater samples or elevations were obtained from these wells.

- Available information indicates that groundwater direction and elevations vary seasonally. Groundwater flow in the unconfined surficial aquifer at the site on 2 May 2013 was generally toward the east with an estimated hydraulic gradient of approximately 0.3 percent.

Copies of site maps showing approximate monitoring well locations (**Figure 3**), groundwater flow direction (**Figure 4**), and contaminant distribution (**Figure 5**) are included in Attachment A. Tables summarizing groundwater elevation data (**Table 1**), ground water analytical results (**Table 2**), and field measurement data (**Table 3**) are included in Attachment B. Time-series graphs summarizing historical water quality data are included in Attachment C and laboratory analytical reports are included in Attachment D.

Site Setting and Background

The subject property, Ferriter Oil Company, is located at 6 Hull Street approximately one-half mile east of downtown Randolph, Vermont (**Figure 1**). The property encompasses approximately 1.0 acres on the northern side of Hull Street. The facility is occupied by three active and two inactive above ground storage tanks (ASTs), associated piping and two loading stations. According to Mr. Jim Townsend the inactive ASTs were temporarily taken out-of-service in the spring of 2011. The southern portion of the property and the areas immediately adjacent to the ASTs are open land, while the northern portion of the property is primarily wooded. One active tank contains heating oil (UST # 8 – 17,000 gallons), another services kerosene (UST # 7 – 10,000 gallons), while the third tank is used for storing off-road diesel fuel (UST # 6 – 10,000 gallons). All three active tanks are located on the southwestern corner of the property within 20 feet of Hull Street. The active loading area is located between Hull Street and the active ASTs. The two inactive tanks are located along the northern property boundary, which borders the Montague Golf Course. The inactive loading area is located on the southern side of the inactive ASTs. A partial earthen-berm is located around three sides of the inactive ASTs. An aerial photograph showing the site and surrounding properties is included as **Figure 2**.

The ground surface in the vicinity of the ASTs is relatively flat with a slight slope toward a wooded area located to the north. The ground surface in the vicinity of the former ASTs has an approximate elevation of 660 feet above mean sea level, (USGS: Randolph, Vermont Quadrangle 1981). The nearest surface water body is the Third River located approximately 1,200 feet to the east. An unnamed tributary to the Third River is located approximately 2,200 feet to the south.

On 16 September 2011, ***R.E.A.*** was contact by Mr. Jim Townsend of Ferriter Oil Company, regarding a possible sale of the property and questions about the U.S. EPA Spill Prevention Control and Countermeasure (SPCC) rules and regulations. At that time, Mr. Townsend provided ***R.E.A.*** with a tour of the property and brief overview of the site operations. The ASTs were found to be in very good condition, but some visibly stained soil was present in the vicinity of the active loading area. According to Mr. Townsend the facility has been in operation for over 40 years and was previously owned by Tom Ferriter. Mr. Townsend has owned the property since 1988 and has never had a reportable spill, which was confirmed based on review of the Vermont Agency of Natural Resources (ANR) on-line spill database.

On 21 September 2011, ***R.E.A.*** personnel returned to the site to collect soil samples in areas of visible staining and in areas of the property where product transfers routinely occurred. Soil samples were screened for the possible presence of VOCs with a photo-ionization detector (PID). Elevated PID readings were obtained on soil samples collected on-site ranging from 0.2 to 109 parts per

million per volume (ppmv), which are above the VT DEC action level of 10 ppmv for fuel oil/diesel contaminated soil. The highest PID readings (46 to 109 ppmv) were obtained in the area of visibly stained soil adjacent to the active loading station. In addition, the soil sampling survey conducted in September 2011 also revealed the presence of evident surface soil contamination. Based on the presence of PID readings detected above the VT DEC action level, ***R.E.A.*** recommended that Mr. Townsend report the findings to the VT DEC.

On 23 September 2011, the VT DEC approved the work plan and cost estimate to perform an ISI at the Ferriter Oil Company property in Randolph, Vermont. The ISI, completed in October and November 2011 by Ross Environmental Associates identified groundwater contamination in one monitoring well above applicable groundwater enforcement standards.

Groundwater Elevations and Flow Direction

On 2 May 2013, groundwater flow in the unconfined surficial aquifer at the site was generally toward the northeast with an estimated hydraulic gradient of approximately 0.3 percent. Water-level measurements and elevation calculations for the 2 May 2013 sampling event are presented in **Table 1** Attachment B and groundwater flow direction is shown on **Figure 3** in Attachment A.

On 2 May 2013, depth to groundwater ranged from 5.17 (MW-1) to 6.38 (MW-7) feet below the ground surface (bgs). Three monitoring wells (MW-3, MW-4, and MW-5) were dry during this sampling event. Approximately 1.0 feet of free product was present in MW-2; therefore, the groundwater elevation was adjusted accordingly. Static water table elevations were computed for each monitoring well by subtracting the corrected or measured depth-to-water readings from the surveyed top-of-casing (TOC) elevations, which are relative to an arbitrary site datum of 100.00 feet.

Groundwater Sampling and Analysis

Groundwater beneath the site has been impacted by contamination characteristic of weathered petroleum. Low concentrations of volatile petroleum compounds were detected in the samples collected from MW-6 and MW-7; however, no VGESs[1] were exceeded during this sampling event.

1,2,4-trimethylbenzene, sec-Butylbenzene, and 4-Isopropyltoluene were detected in the sample collected from MW-7 at concentrations of 4.1, 2.6, and 2.6 µg/L, respectively. 1,2,4-trimethylbenzene was detected in the sample collected from MW-6 at a concentrations of 2.8 µg/L. No volatile organic compounds were detected above the laboratory detection limits in the samples collected from MW-1. Total petroleum hydrocarbons (TPH) were detected in the samples collected from MW-1, MW-6, and MW-7 at 1.0, 3.9, and 3.8 mg/L, respectively. It should be noted that the VT DEC does not currently have an enforcement standard or guideline for TPH concentrations in groundwater.

No petroleum compounds were detected in the trip-blank sample and the blind field duplicate sample (MW-1) were within the acceptable EPA criteria. The analytical results are summarized on **Table 2**, and a copy of the groundwater laboratory analytical report is included as **Appendix D**. Contaminant distribution, based on samples collected on 2 May 2013, is shown on **Figure 5.**

Prior to sample collection, ***R.E.A.*** field personnel measured the water level in each monitoring well and purged approximately three to five standing volumes of water from each well. All of the

[1]The Vermont DEC has established groundwater enforcement standards for eight petroleum related VOCs, as follows: benzene - 5 ug/L; toluene - 1,000 ug/L; ethylbenzene - 700 ug/L; xylenes - 10,000 ug/L; MTBE - 40 ug/L; naphthalene – 20 ug/L; and 1,3,5-trimethyl benzene, & 1,2,4-trimethyl benzene – 350 ug/L (combined).

groundwater samples were collected using dedicated polyethylene tubing. Groundwater was pumped directly into unpreserved one-liter amber jars and 40-milliliter glass vials with Teflon-lined septum lids. Each 40-millilter volatile organic compound (VOC) sample vial was preserved with hydrochloric acid to reduce the pH to less than two standard units. Immediately after sample collection, field measurements were obtained for pH, specific conductivity, temperature, total dissolved solids (TDS), and oxygen reduction potential (ORP). A summary of the field measurement data is included on **Table 3**.

On 2 May 2013, groundwater samples were collected from three on-site monitoring wells (MW-1, MW-6, and MW-7). No samples were collected from MW-3, MW-4, or MW-5, which were dry at the time of the sampling event and no sample was collected from MW-2 which contained approximately 1.0 feet of free product. Groundwater samples were analyzed for the possible presence of volatile petroleum compounds and total petroleum hydrocarbons (TPH) in accordance with U.S. EPA Methods 8260 and 8015DRO (diesel range organics), respectively. Samples were transported under chain-of-custody in an ice-filled cooler to AMRO Environmental Laboratories Inc. of Merrimack, New Hampshire.

Recommendations

Due to the presence of free product in one on-site monitoring well (MW-2) and based on the current use of the property (Active Petroleum Aboveground Storage Tank Facility), ***R.E.A.*** recommends the following:

1. Free product appears to be limited to the area of MW-2, which apparently occurs during high water table conditions. The ASTs in that area of the site are no longer in use; therefore, petroleum contaminated soils in that area of the property should be excavated and treated offsite. After completion of the soil excavation, the site should be eligible for Sites Management Activity Completed (SMAC) designation with a notice to the land record being filed with the Town of Randolph as outlined in Appendix H of the IROCP. The notice should describe current environmental conditions that exist on the property at the time of submittal.
2. A maintenance and inspection plan for the monitoring wells should be developed as outlined in Appendix G of the IROCP.
3. Operation and/or decommissioning of the ASTs should be implemented in accordance with the "Vermont Aboveground Storage Tank Rules" dated October 2011.

Limitations

The work was undertaken to assess environmental conditions specifically on the subject property in accordance with generally accepted engineering and hydrogeological practices. No other warranty, express or implied, is made. Absolute assurance that any and all possible contamination at the site was identified cannot be provided. In addition, no lead paint assessment, asbestos survey, or radon evaluation was completed as part of this assessment.

The report conclusions are based, in part, on information provided by the client, their agents, or third parties, including state or local officials. ***R.E.A.*** assumes no responsibility for the accuracy and completeness of the information. Where visual observations are included in the report, they represent conditions at the time of the inspection, and may not be indicative of past or future site conditions.

****

Please call me if you have any questions or concerns regarding the enclosed data or recommendations. A copy of this report will be forwarded to the VT DEC after receiving your approval.

Sincerely,

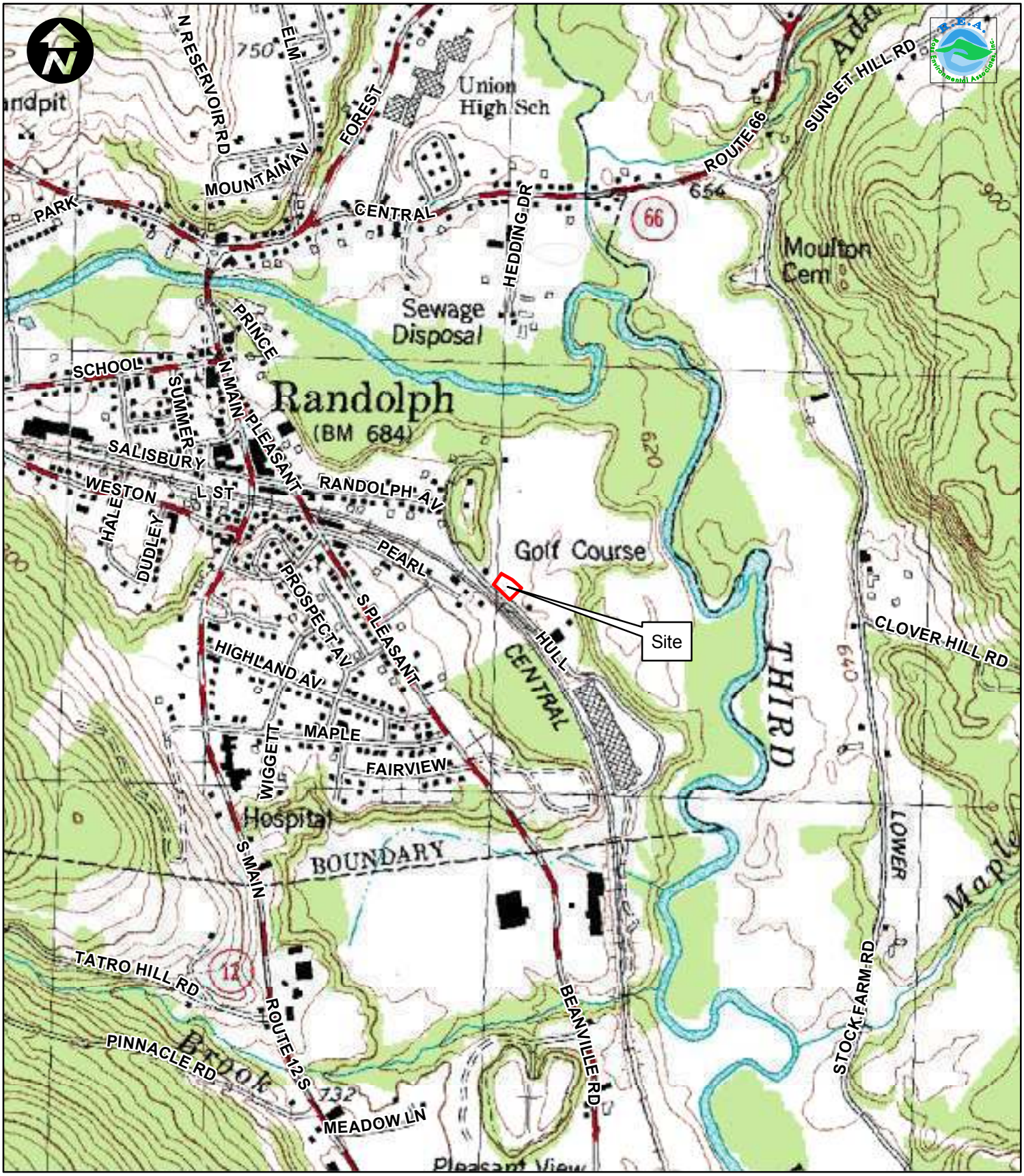
Ross Environmental Associates, Inc.

Robert J. Ross
Principal Hydrogeologist

Attachments

Saf/ref: 31-168GWR04May2013

ATTACHMENT A



0 375 750 1,500 2,250 3,000 Feet

Site Coordinates: 43° 55' 13.33" N 72° 39' 26.168" W

Figure 1
USGS Map
Ferriter Oil Bulk Facility
6 Hull Street
Randolph Vermont

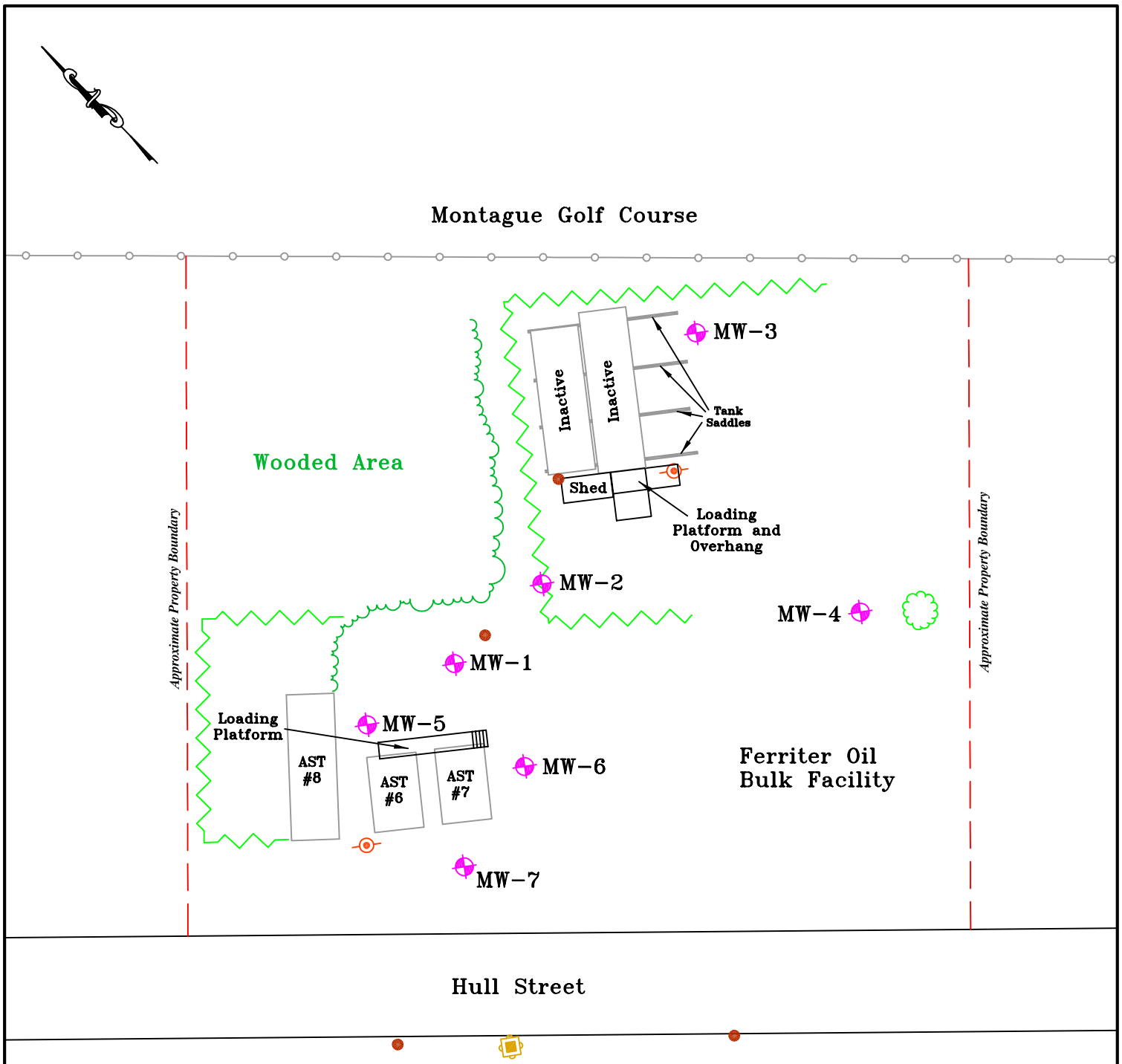
USGS: Randolph, Vermont Quadrangle, 1:24,000, 1981

0 250 500 1,000 1,500 2,000 Feet

Site Coordinates: 43° 55' 13.33" N 72° 39' 26.168" W

Figure 2
Ortho Photo
Ferriter Oil Bulk Facility
6 Hull Street
Randolph Vermont

NAIP 2009 - Randolph, Vermont



All Locations are Approximate

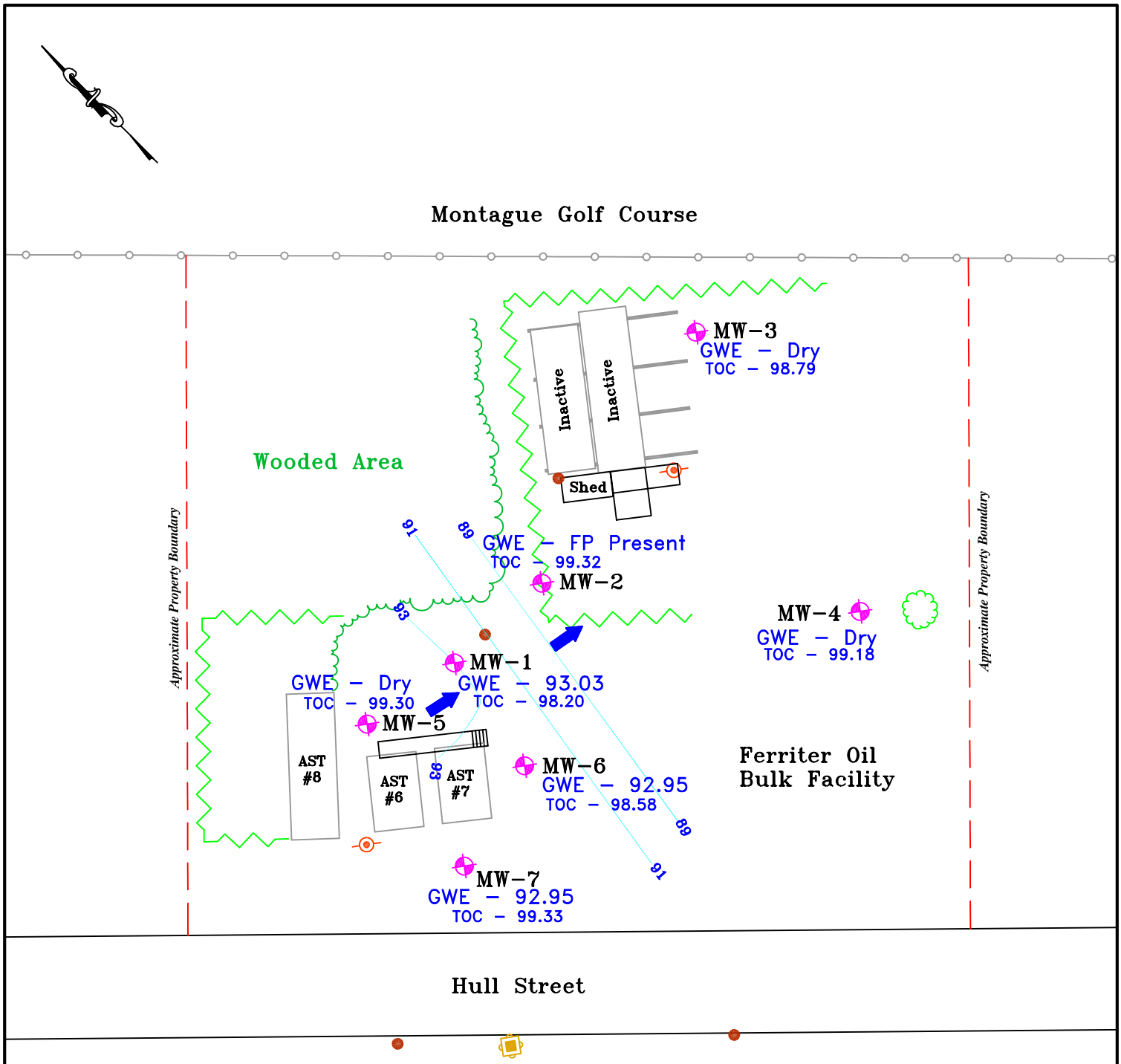
Legend:
- Monitoring Well
- AST Piping Valve
- Earthen Berm
- Tree
- Telephone Pole
- Wooded Area
- Fire Hydrant

Scale: 1" = 30'	**Date:** 7 November 2011
File Name: 31-168fig	**Drawn By:** MBM

Ross Environmental Associates, Inc.
P.O. Box 1533 Stowe, Vt 05672
(802) 253-4280

FIGURE 3.
SITE PLAN
(with monitoring well locations)

Ferriter Oil Bulk Facility - Randolph, VT



GWE – Groundwater Elevation
TOC – Top of Well Casing
All Locations are Approximate

Legend:

- Monitoring Well
- AST Piping Valve
- Earthen Berm
- Tree
- Telephone Pole
- Wooded Area
- Fire Hydrant

Scale: 1" = 30'	**Date:** 7 November 2011
File Name: 31-168fig	**Drawn By:** MBM

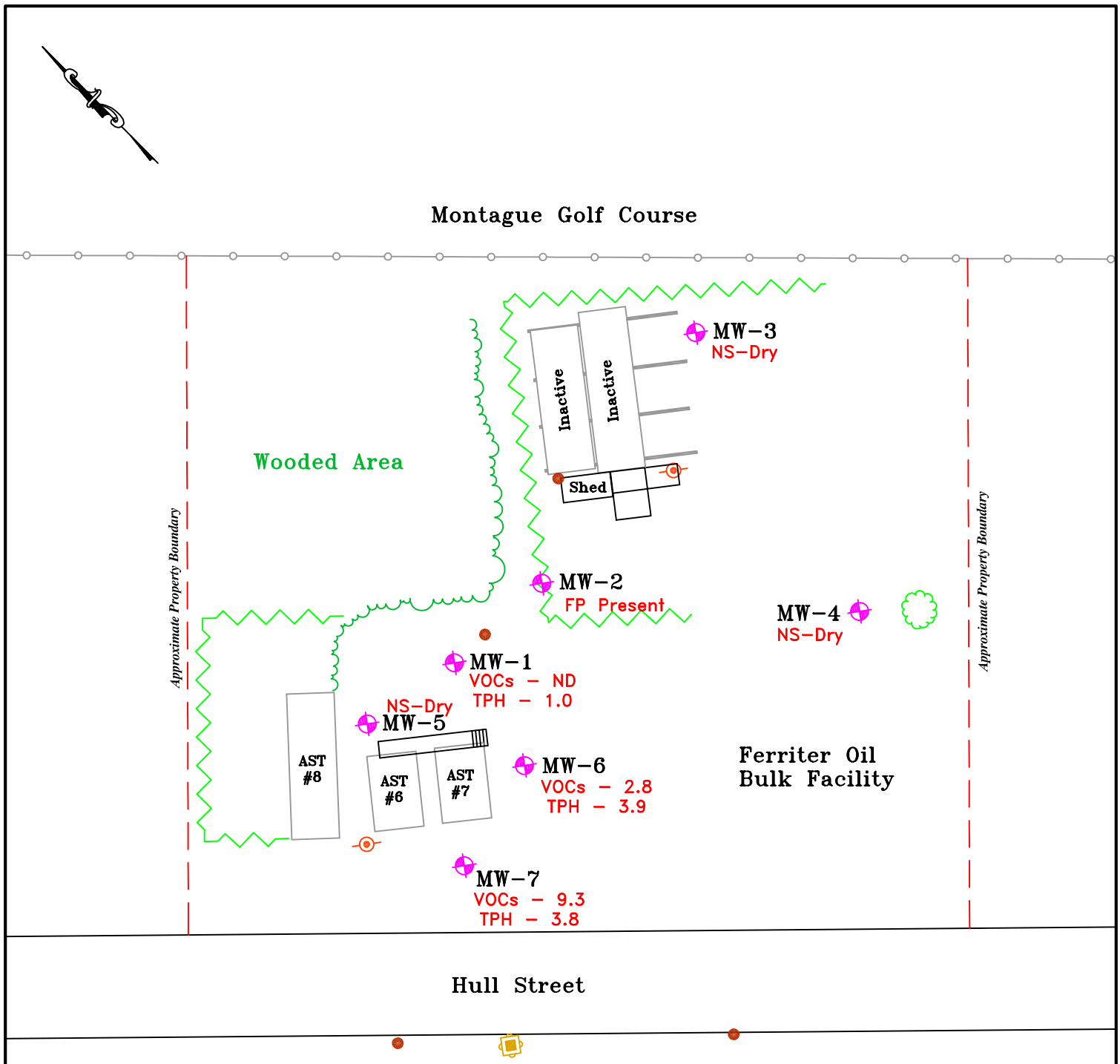
Ross Environmental Associates, Inc.
P.O. Box 1533 Stowe, Vt 05672
(802) 253-4280

FIGURE 4.

GROUNDWATER CONTOUR MAP

(Monitoring Date: 2 May 2013)

Ferriter Oil Bulk Facility - Randolph, VT



All Locations are Approximate

VOC - Total Volatile Organic Compounds, ug/L
TPH - Total Petroleum Hydrocarbons, mg/L
ND - None Detected NS - Not Sampled

Legend:

- Monitoring Well
- AST Piping Valve
- Earthen Berm
- Tree
- Telephone Pole
- Wooded Area
- Fire Hydrant

Scale: 1" = 30'	**Date:** 7 November 2011
File Name: 31-168fig	**Drawn By:** MBM

Ross Environmental Associates, Inc.
P.O. Box 1533 Stowe, Vt 05672
(802) 253-4280

FIGURE 5.

CONTAMINANT DISTRIBUTION

(Monitoring Date: 2 May 2012)

Ferriter Oil Bulk Facility - Randolph, VT

ATTACHMENT B

TABLE 1
GROUND WATER ELEVATION CALCULATIONS

Ferriter Oil Company
Randolph, Vermont

Monitoring Date: 2 May 2013

Well I.D.	Top of Casing Elevation (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (feet)	Corrected Depth to Water (feet)	Water Table Elevation (ft)
MW-1	98.20		5.17			93.03
MW-2	99.32	10.83	11.83	**1.00**	10.96	87.49
MW-3	98.79		DRY			
MW-4	99.18		DRY			
MW-5	99.30		DRY			
MW-6	98.58		5.63			92.95
MW-7	99.33		6.38			92.95

All values reported in feet relative to arbitrary site datum of 100.00 feet

Corrected depth to water calculated from product thickness and assumed specific gravity for fuel oil of 0.87.

TABLE 2
GROUND-WATER ANALYTICAL RESULTS

Ferriter Oil Company
Randolph, Vermont

Monitoring Date: 2 May 2013

Parameter	*VGES*	MW-1	MW-6	MW-7	Dup (MW-1)	% Difference	Trip Blank
MtBE	***40***	ND<2.0	ND<2.0	ND<2.0	ND<2.0		ND<2.0
Benzene	***5.0***	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	ND<1.0
Toluene	***1,000***	ND<2.0	ND<2.0	ND<2.0	ND<2.0	---	ND<2.0
Ethylbenzene	***700***	ND<2.0	ND<2.0	ND<2.0	ND<2.0	---	ND<2.0
Total Xylenes	***10,000***	ND<2.0	ND<2.0	ND<2.0	ND<2.0	---	ND<2.0
1,3,5-trimethylbenzene	***350***	ND<2.0	ND<2.0	ND<2.0	ND<2.0	---	ND<2.0
1,2,4-trimethylbenzene		ND<1.0	**2.8**	**4.1**	ND<1.0	---	ND<2.0
Naphthalene	***20***	ND<5.0	ND<5.0	ND<5.0	ND<5.0	---	ND<5.0
sec-Butylbenzene	**--**	ND<2.0	ND<2.0	**2.6**	ND<2.0	---	ND<2.0
4-Isopropyltoluene	**--**	ND<2.0	ND<2.0	**2.6**	ND<2.0	---	ND<2.0
Total VOCs*	**--**	**ND**	**2.8**	**9.3**	**ND**	---	**ND**
TPH (mg/L)	**--**	**1.0**	**3.9**	**3.8**	**1.1**	**9.1**	---

Notes:
All results reported as micrograms per liter (ug/L), unless indicated otherwise.
ND: None detected at indicated detection limit.
Shaded values indicate exceedance of Vermont Groundwater Enforcement standard (VGES)
TPH: Total Petroleum Hydrocarbons; diesel range organics reported in milligrams per liter (mg/L)

TABLE 3
FIELD MEASUREMENT DATA

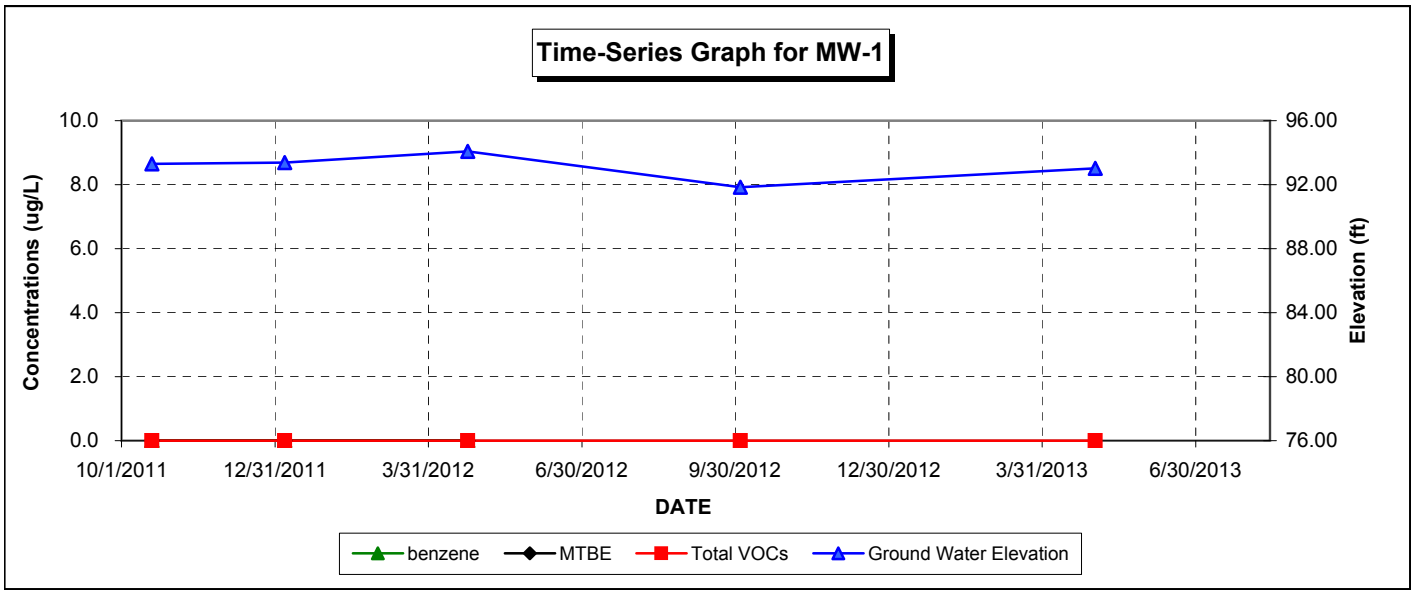
Ferriter Oil Company
Randolph, Vermont

Monitoring Date: 2 May 2013

Well ID	pH (su)	temperature (^oC)	Specific conductivity (µS/cm)	ORP (mV)	DO	TDS (ppm)	Comments
MW-1	7.16	6.50	306	7.8	2.06	0.307	Clear, no odor, good recharge
MW-2	---	---	---	---	---	---	Free Product present
MW-3	---	---	---	---	---	---	Dry - no sample collected
MW-4	---	---	---	---	---	---	Dry - no sample collected
MW-5	---	---	---	---	---	---	Dry - no sample collected
MW-6	7.05	6.94	1148	-104	0.99	1.139	Good recharge, clear, sulfur odor
MW-7	6.49	7.10	1131	-105.2	1.72	1.116	Good recharge, clear, sulfur odor

pH reported in standard units (s.u.).
Specific conductivity reported in microsiemens per centimeter (µS/cm) or millisiemens per centimeter (mS/cm).
Oxidation-reduction potential (ORP) reported in millivolts (mV).
Total dissolved solids (TDS) reported in parts per million (ppm) or parts per (ppt) thousand.
Dissolved oxygen (DO) reported in milligrams per liter (mg/L).
Photo-ionization detector (PID) readings reported in parts per million per volume (ppmv).

ATTACHMENT C

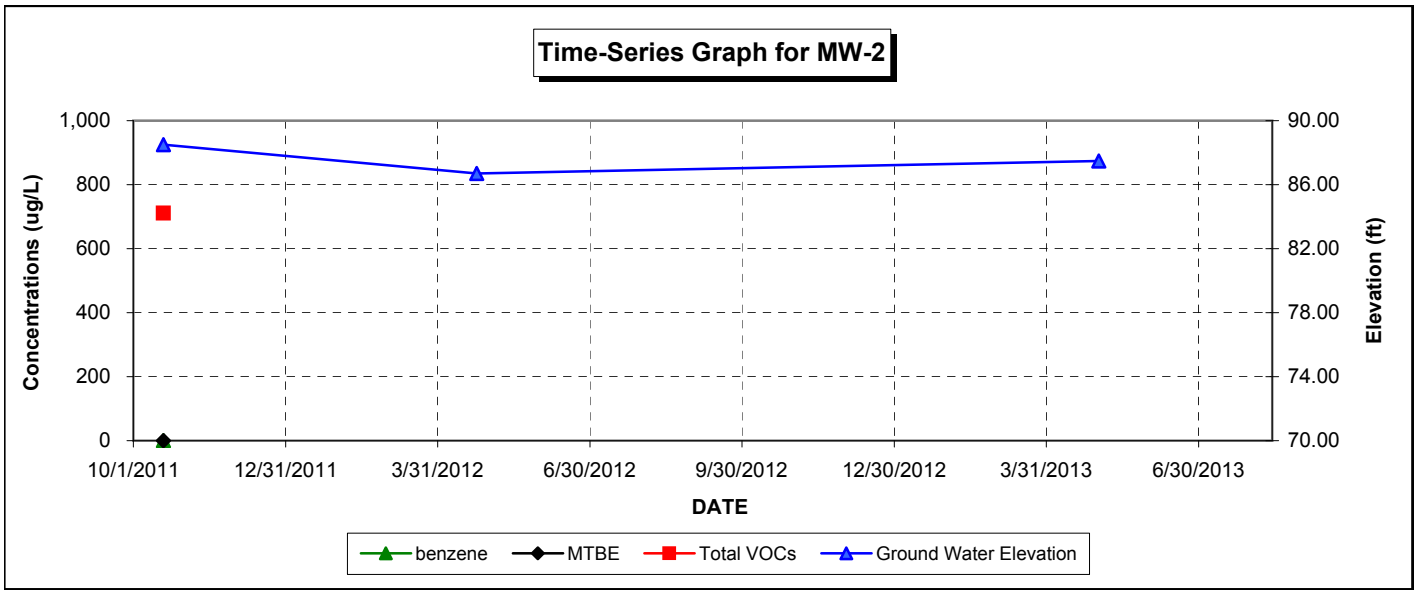


Summary of Ground Water Analytical Results for MW-1

Ferriter Oil Company
Randolph, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphtha-lene	Total VOCs	Ground Water Elevation
10/19/2011	ND<2.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.0	**ND**	**93.30**
1/6/2012	ND<2.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.0	**ND**	**93.39**
4/24/2012	ND<2.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.0	**ND**	**94.08**
10/3/2012	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	**ND**	**91.84**
5/2/2013	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	**ND**	**93.03**
VGES	***40***	***5.0***	***1,000***	***700***	***10,000***	***350***		***20***	***---***	***---***

Notes: Results given in micrograms per liter (ug/L), unless indicated otherwise.
ND- None detected at indicated detection limit.
VGES - Vermont Groundwater Enforcement Standards

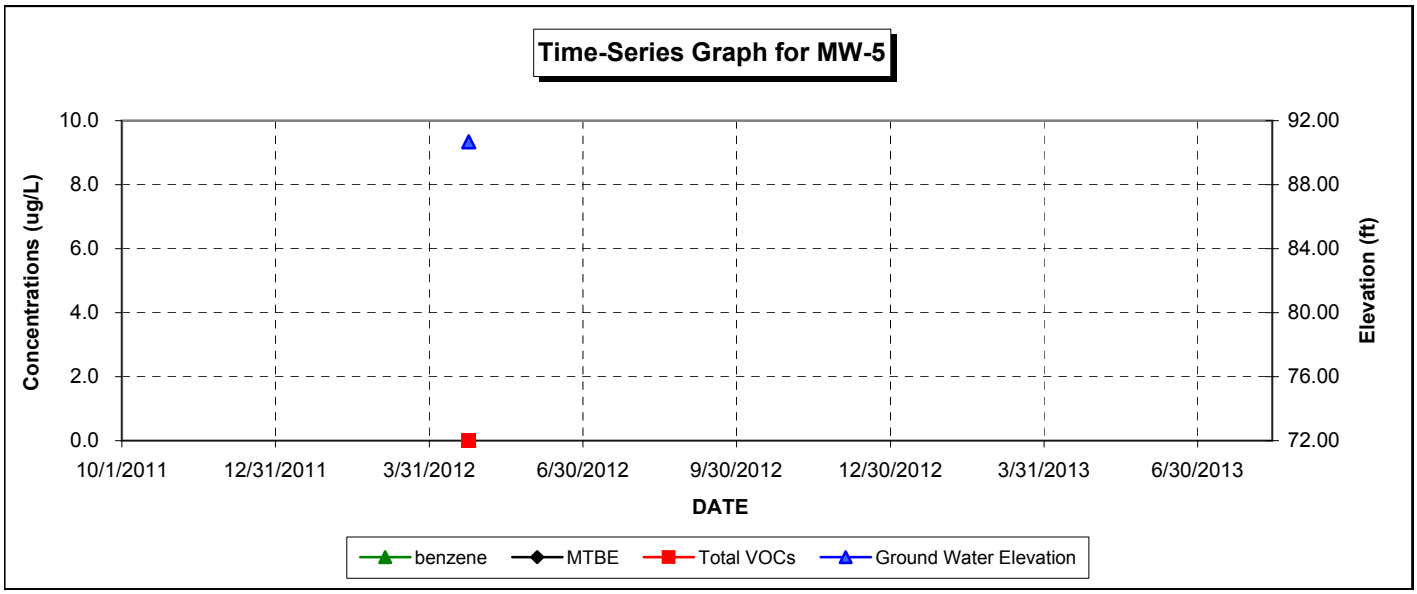


Summary of Ground Water Analytical Results for MW-2

Ferriter Oil Company
Randolph, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphtha-lene	Total VOCs	Ground Water Elevation
10/19/2011	ND<2.0	ND<1.0	ND<5.0	**47.8**	**94**	**49.7**	**149**	**292**	**711**	**88.50**
4/24/2012		1.48 Feet free product								**86.70**
5/2/2013		1.00 feet free product								**87.49**
VGES	***40***	***5.0***	***1,000***	***700***	***10,000***	***350***		***20***	***---***	***---***

Notes: Results given in micrograms per liter (ug/L), unless indicated otherwise.
ND- None detected at indicated detection limit.
VGES - Vermont Groundwater Enforcement Standards
n-propylbenzene, isopropyltoluene, sec-butylbenzene, n-butylbenzene and 4-Isopropyltoluene were detected on 19 Oct. 2011
1.48 feet of free product was detected on 24 April 2012
dry - not sampled on 3 Oct. 2012
1.00 feet of free product was detected on 2 May 2013.

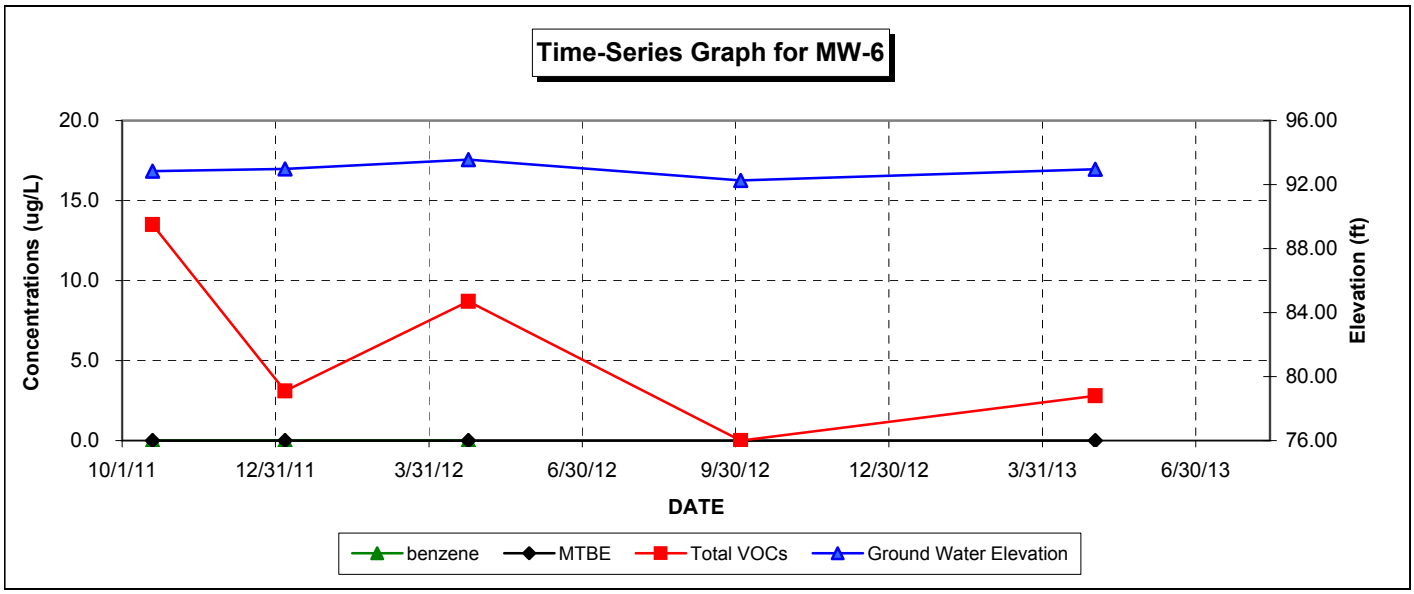


Summary of Ground Water Analytical Results for MW-5

Ferriter Oil Company
Randolph, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphtha-lene	Total VOCs	Ground Water Elevation
4/24/2012	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**ND**	**90.69**
VGES	***40***	***5.0***	***1,000***	***700***	***10,000***	***350***		***20***	***---***	***---***

Notes: Results given in micrograms per liter (ug/L), unless indicated otherwise.
ND- None detected at indicated detection limit.
VGES - Vermont Groundwater Enforcement Standards
dry - not sampled on 3 Oct. 2012 or 2 May 2013

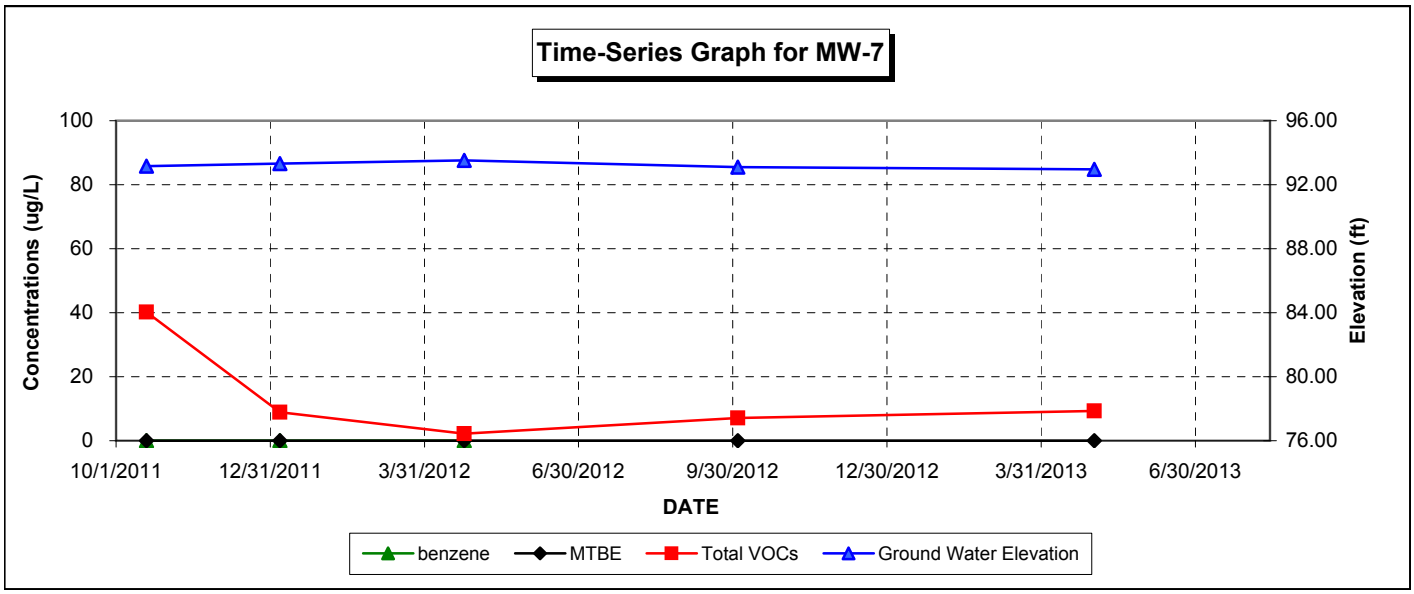


Summary of Ground Water Analytical Results for MW-6

Ferriter Oil Company
Randolph, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphtha-lene	Total VOCs	Ground Water Elevation
10/19/2011	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	**1.2**	**3.3**	**5.3**	**13.5**	**92.85**
1/6/2012	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	**1.1**	**2.0**	ND<2.0	**3.1**	**92.99**
4/24/2012	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	**1.5**	**3.5**	**3.7**	**8.7**	**93.56**
10/3/2012	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	**ND**	**92.27**
5/2/2013	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	**2.8**	ND<5.0	**2.8**	**92.95**
VGES	***40***	***5.0***	***1,000***	***700***	***10,000***	***350***		***20***	***---***	***---***

Notes: Results given in micrograms per liter (ug/L), unless indicated otherwise.
ND- None detected at indicated detection limit.
VGES - Vermont Groundwater Enforcement Standards
sec-Butylbenzene and 4-Isopropyltoluene detected in the sample collected on 19 Oct. 2011



Summary of Ground Water Analytical Results for MW-7

Ferriter Oil Company
Randolph, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphtha-lene	Total VOCs	Ground Water Elevation
10/19/2011	ND<2.0	ND< 1.0	ND< 2.0	ND< 2.0	ND< 2.0	**4.3**	**12.4**	**7.7**	**40.2**	**93.15**
1/6/2012	ND<2.0	ND< 1.0	ND< 2.0	ND< 2.0	ND< 2.0	**1.7**	**5.1**	**2.1**	**8.9**	**93.33**
4/24/2012	ND< 1.0	ND< 1.0	ND< 1.0	ND< 1.0	ND< 2.0	ND< 1.0	**2.2**	ND< 2.0	**2.2**	**93.52**
10/3/2012	ND<2.0	ND< 1.0	ND<2.0	ND<2.0	ND< 2.0	ND< 2.0	**2.5**	ND< 5.0	**7.1**	**93.10**
5/2/2013	ND<2.0	ND< 1.0	ND<2.0	ND<2.0	ND< 2.0	ND< 2.0	**4.1**	ND< 5.0	**9.3**	**92.95**
VGES	***40***	***5.0***	***1,000***	***700***	***10,000***	***350***		***20***	***---***	***---***

Notes: Results given in micrograms per liter (ug/L), unless indicated otherwise.
ND- None detected at indicated detection limit.
VGES - Vermont Groundwater Enforcement Standards
sec-Butylbenzenen-butylbenzene and 4-Isopropyltoluene detected in the sample collected on 19 Oct. 2011
sec-Butylbenzene and 4-Isopropyltoluene detected in the sample collected on 3 Oct. 2012
sec-Butylbenzene and 4-Isopropyltoluene detected in the sample collected on 2 May 2013

ATTACHMENT D

AMRO Environmental Laboratories Corporation

111 Herrick Street, Merrimack, NH 03054
TEL: (603) 424-2022 • FAX: (603) 429-8496
www.amrolabs.com

May 09, 2013

ANALYTICAL TEST RESULTS

Robert Ross
Ross Environmental Associates
P.O. BOX 1533
Stowe, VT 05672
TEL: (802) 253-4280
FAX: (802) 253-4258

Subject: 31-168 Ferriter Oil Bulk

Workorder No.: 1305008

Dear Robert Ross:

AMRO Environmental Laboratories Corp. received 5 samples on 5/3/2013 for the analyses presented in the following report.

AMRO is accredited in accordance with NELAC and certifies that these test results meet all the requirements of NELAC, where applicable, unless otherwise noted in the case narrative.

The enclosed Sample Receipt Checklist details the condition of your sample(s) upon receipt. Please be advised that any unused sample volume and sample extracts will be stored for a period of 60 days from sample receipt date (90 days for samples from New York). After this time, AMRO will properly dispose of the remaining sample(s). If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This report consists of a total of 33 pages. This letter is an integral part of your data report. All results in this project relate only to the sample(s) as received by the laboratory and documented in the Chain-of-Custody. This report shall not be reproduced except in full, without the written approval of the laboratory. If you have any questions regarding this project in the future, please refer to the Workorder Number above.

Sincerely,

Nancy Stewart
Vice President

State Certifications: NH (NELAC): 1001, MA: M-NH012, CT: PH-0758, NY: 11278 (NELAC), ME: NH012 and 1001.

Hard copy of the State Certification is available upon request.

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Project: 31-168 Ferriter Oil Bulk
Lab Order: 1305008
Date Received: 5/3/2013

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date	Collection Time
1305008-01A	MW-1	5/2/2013	11:40 AM
1305008-01B	MW-1	5/2/2013	11:40 AM
1305008-02A	MW-6	5/2/2013	12:15 PM
1305008-02B	MW-6	5/2/2013	12:15 PM
1305008-03A	MW-7	5/2/2013	1:00 PM
1305008-03B	MW-7	5/2/2013	1:00 PM
1305008-04A	DUP	5/2/2013	12:00 AM
1305008-04B	DUP	5/2/2013	12:00 AM
1305008-05A	TB	5/2/2013	8:00 AM

AMRO Environmental Laboratories Corp.

09-May-13

Lab Order: 1305008
Client: Ross Environmental Associates
Project: 31-168 Ferriter Oil Bulk

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name / Preparatory Test Name	Prep Date	Analysis Date / Batch ID	TCLP Date
1305008-01A	MW-1	5/2/2013 11:40:00 AM	Groundwater	EPA 8260B VOLATILES by GC/MS		5/6/2013	
				EPA 5030B	5/3/2013	R50956	
1305008-01B				EPA 8015B DIESEL RANGE ORGANICS		5/8/2013	
				EPA 3510 AQPREP SEP FUNNEL: DRO	5/7/2013	23208	
1305008-02A	MW-6	5/2/2013 12:15:00 PM		EPA 8260B VOLATILES by GC/MS		5/6/2013	
				EPA 5030B	5/3/2013	R50956	
1305008-02B				EPA 8015B DIESEL RANGE ORGANICS		5/8/2013	
				EPA 3510 AQPREP SEP FUNNEL: DRO	5/7/2013	23208	
1305008-03A	MW-7	5/2/2013 1:00:00 PM		EPA 8260B VOLATILES by GC/MS		5/6/2013	
				EPA 5030B	5/3/2013	R50956	
1305008-03B				EPA 8015B DIESEL RANGE ORGANICS		5/8/2013	
				EPA 3510 AQPREP SEP FUNNEL: DRO	5/7/2013	23208	
1305008-04A	DUP	5/2/2013		EPA 8260B VOLATILES by GC/MS		5/6/2013	
				EPA 5030B	5/3/2013	R50956	
1305008-04B				EPA 8015B DIESEL RANGE ORGANICS		5/8/2013	
				EPA 3510 AQPREP SEP FUNNEL: DRO	5/7/2013	23208	
1305008-05A	TB	5/2/2013 8:00:00 AM	Aqueous	EPA 8260B VOLATILES by GC/MS		5/6/2013	
				EPA 5030B	5/3/2013	R50956	

AMRO Environmental Laboratories Corporation
111 Herrick Street
Merrimack, NH 03054

CHAIN-OF-CUSTODY RECORD

62794

Office: (603) 424-2022
Fax: (603) 429-8496
web: www.amrolabs.com

Project No.: 31-168	Project Name: Ferriter Oil Bulk	Project State: VT	Project Manager: Bob Ross	Samplers (Signature): [signature]	AMRO Project No.: 1305008

P.O.#:

QUOTE #:

Results Needed by:

Seal Intact? Yes No N/A

REQUESTED ANALYSES

Remarks: VT/REA PRICES

Sample ID.;	Date/Time Sampled 5/2/13	Matrix	Total # of Cont. & Size	Comp.	Grab	8260	8015-DRO
MW-1	1140	GW	2/40mL		X	X	
MW-1	1140		2/1L.				X
MW-6	1215		2/40mL			X	
MW-6	1215		2/1L.				X
MW-7	1300		2/40mL			X	
MW-7	1300		2/1L.				X
DUP	—		2/40mL			X	
TB	0800		2/40mL			X	
DUP	—		2/1L.				X

Preservative: (C)-HCl, MeOH, N-HN03, S-H2SO4, Na-NaOH, O- Other

Send Results To: REA.

PRIORITY TURNAROUND TIME AUTHORIZATION
Before submitting samples for expedited TAT, you must *have a coded AUTHORIZATION NUMBER*
AUTHORIZATION No.: BY:

METALS 8 RCRA ☐ 13 PP ☐ 23 TAL ☐ 14 MCP ☐
Method: 6010 ☐ 200.7 ☐ Other Metals:
Dissolved Metals Field Filtered? YES ☐ NO ☐

PHONE #: 802-253-4280 FAX #:
E-mail:

MCP Presumptive Certainty Required? YES ☐ NO ☐

MCP Methods Needed: YES ☐ NO ☐

Required Reporting Limits: S-1 ☐ GW-1 ☐ S-2 ☐ GW-2 ☐ S-3 ☐ GW-3 ☐

AMRO report package level needed:

EDD required:

Other:

Relinquished By:	Date/Time	Received By
[signature]	5/2/13 1600	UPS
UPS	5/3/13 0922	[signature]

Please print clearly, legibly and completely. Samples can not be logged in and the turnaround time clock will not start until any ambiguities are resolved.

Samples arriving after 12:00 noon will be tracked and billed as received on the following day.

AMRO policy requires notification in writing to the laboratory in cases where the samples were collected from highly contaminated sites.

KNOWN SITE CONTAMINATION:

White: Lab Copy Yellow: Client Copy

SHEET 1 OF 1

AMROCOC2004, Rev.3, 08/18/04

AMRO Environmental Laboratories Corporation

SAMPLE RECEIPT CHECKLIST

111 Herrick Street
Merrimack, NH 03054
(603) 424-2022

Client: Ross
Project Name: 31-168 Ferriter Oil Bulk
Ship via: (circle one) Fed Ex., UPS, AMRO Courier, Hand Del., Other Courier, Other:

AMRO ID: 1305008
Date Rec.: 5-3-13
Date Due: 5-10-13

Items to be Checked Upon Receipt	Yes	No	NA	Comments
1. Army Samples received in individual plastic bags?			✓	
2. Custody Seals present?			✓	
3. Custody Seals Intact?			✓	
4. Air Bill included in folder if received?	✓			In folder #1305007
5. Is COC included with samples?	✓			
6. Is COC signed and dated by client?	✓			
7. Laboratory receipt temperature. TEMP = 5°				
Samples rec. with ice ✓ ice packs___ neither___				
8. Were samples received the same day they were sampled?		✓		
Is client temperature = or <6°C ?	✓			
If no obtain authorization from the client for the analyses.				
Client authorization from: Date: Obtained by:				
9. Is the COC filled out correctly and completely?	✓			
10. Does the info on the COC match the samples?	✓			
11. Were samples rec. within holding time?	✓			
12. Were all samples properly labeled?	✓			
13. Were all samples properly preserved?	✓			
14. Were proper sample containers used?	✓			
15. Were all samples received intact? (none broken or leaking)	✓			
16. Were VOA vials rec. with no air bubbles?	✓			
17. Were the sample volumes sufficient for requested analysis?	✓			
18. Were all samples received?	✓			
19. VPH and VOA Soils only:			✓	
Sampling Method VPH (circle one): M=Methanol, E=EnCore (air-tight container)				
Sampling Method VOA (circle one): M=Methanol, SB=Sodium Bisulfate, E=EnCore, B=Bulk				
If M or SB:				
Does preservative cover the soil?				
If NO then client must be faxed.				
Does preservation level come close to the fill line on the vial?				
If NO then client must be faxed.				
Were vials provided by AMRO?				
If NO then weights MUST be obtained from client				
Was dry weight aliquot provided?				
If NO then fax client and inform the VOA lab ASAP.				
20. Subcontracted Samples:			✓	
What samples sent:				
Where sent:				
Date:				
Analysis:				
TAT:				
21. Information entered into:				
Internal Tracking Log?	✓			
Dry Weight Log?			✓	
Client Log?			✓	
Composite Log?			✓	
Filtration Log?			✓	

Received By: PL Date: 5-3-13 Logged in By: NS Date: 5-3-13
Labeled By: NS Date: 5-3-13 Checked By: MG Date: 5-6-13

NA= Not Applicable

Laboratories Corporation
11 Hemlock Street
Merrimack, NH 03054
(603) 424-2022

Please Circle if:
Sample= Soil
Sample= Waste

AMRO ID: 1305008

Sample ID	Analysis	Volume Sample	Preserv. Listed	Initial pH*	Acceptable? Y or N	List Preserv. Added by AMRO	Solution ID # of Preserv.	Volume Preservative Added	Final adjusted pH	Final adjusted pH (after 16 or 24 hours)
01A-05A	VOC	2-40ML	HCL							
01B-04B	DRO	2-1LAMBS	HCL	<2	Y					

Sample ID	Analysis	Volume Sample	Preserv. Listed	Initial TRC	Acceptable? Y or N	List Preserv. Added by AMRO	Solution ID # of Preserv.	Volume Preservative Added	Final adjusted TRC	Acceptable? Y or N

** = if the laboratory preserves the drinking water sample (s) for EPA Method 200 series, sample (s) should be held at least 16 hours prior to analysis or 24 hours for water sample (s).*

pH Checked By: NS Date: 5-3-13 pH adjusted By: _____ Date: _____

pH Checked By: _____ Date: _____ pH adj.(16 or 24hrs)By: _____ Date: _____

CLIENT: Ross Environmental Associates
Project: 31-168 Ferriter Oil Bulk
Lab Order: 1305008

CASE NARRATIVE

GC/MS VOLATILES: 8260B:

1. No QC deviations were noted.

GC/FID-DRO:

1. No QC deviations were noted.

DATA COMMENT PAGE

Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

Micro Data Qualifiers

TNTC	Too numerous to count

Inorganic Data Qualifiers

ND or U	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
PS	The analyte was below the Reporting Limit but has significant matrix interference as noted by the poor recovery of the Post Digestion Spike.
#	See Case Narrative
*	MCL Exceeded

Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-01A

Client Sample ID: MW-1
Collection Date: 5/2/2013 11:40:00 AM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8260B VOLATILES BY GC/MS		**SW8260B**				Analyst: **DH**
Dichlorodifluoromethane	ND	5.0		µg/L	1	5/6/2013 12:26:00 PM
Chloromethane	ND	5.0		µg/L	1	5/6/2013 12:26:00 PM
Vinyl chloride	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Chloroethane	ND	5.0		µg/L	1	5/6/2013 12:26:00 PM
Bromomethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Diethyl ether	ND	5.0		µg/L	1	5/6/2013 12:26:00 PM
Acetone	ND	10		µg/L	1	5/6/2013 12:26:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2013 12:26:00 PM
Carbon disulfide	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Methylene chloride	ND	5.0		µg/L	1	5/6/2013 12:26:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
2-Butanone	ND	10		µg/L	1	5/6/2013 12:26:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Chloroform	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Tetrahydrofuran	ND	10		µg/L	1	5/6/2013 12:26:00 PM
Bromochloromethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Benzene	ND	1.0		µg/L	1	5/6/2013 12:26:00 PM
Trichloroethene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Dibromomethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2013 12:26:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 12:26:00 PM
Toluene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 12:26:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
2-Hexanone	ND	10		µg/L	1	5/6/2013 12:26:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-01A

Client Sample ID: MW-1
Collection Date: 5/2/2013 11:40:00 AM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Ethylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
m,p-Xylene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
o-Xylene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Styrene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Bromoform	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Bromobenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	5/6/2013 12:26:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Naphthalene	ND	5.0		µg/L	1	5/6/2013 12:26:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 12:26:00 PM
Surr: Dibromofluoromethane	100	68-122		%REC	1	5/6/2013 12:26:00 PM
Surr: 1,2-Dichloroethane-d4	102	74-124		%REC	1	5/6/2013 12:26:00 PM
Surr: Toluene-d8	99.0	69-121		%REC	1	5/6/2013 12:26:00 PM
Surr: 4-Bromofluorobenzene	98.9	62-129		%REC	1	5/6/2013 12:26:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-02A

Client Sample ID: MW-6
Collection Date: 5/2/2013 12:15:00 PM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8260B VOLATILES BY GC/MS		**SW8260B**				Analyst: **DH**
Dichlorodifluoromethane	ND	5.0		µg/L	1	5/6/2013 1:00:00 PM
Chloromethane	ND	5.0		µg/L	1	5/6/2013 1:00:00 PM
Vinyl chloride	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Chloroethane	ND	5.0		µg/L	1	5/6/2013 1:00:00 PM
Bromomethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Diethyl ether	ND	5.0		µg/L	1	5/6/2013 1:00:00 PM
Acetone	ND	10		µg/L	1	5/6/2013 1:00:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2013 1:00:00 PM
Carbon disulfide	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Methylene chloride	ND	5.0		µg/L	1	5/6/2013 1:00:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
2-Butanone	ND	10		µg/L	1	5/6/2013 1:00:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Chloroform	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Tetrahydrofuran	ND	10		µg/L	1	5/6/2013 1:00:00 PM
Bromochloromethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Benzene	ND	1.0		µg/L	1	5/6/2013 1:00:00 PM
Trichloroethene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Dibromomethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2013 1:00:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 1:00:00 PM
Toluene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 1:00:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
2-Hexanone	ND	10		µg/L	1	5/6/2013 1:00:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-02A

Client Sample ID: MW-6
Collection Date: 5/2/2013 12:15:00 PM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Ethylbenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
m,p-Xylene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
o-Xylene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Styrene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Bromoform	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Bromobenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,2,4-Trimethylbenzene	2.8	2.0		µg/L	1	5/6/2013 1:00:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	5/6/2013 1:00:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Naphthalene	ND	5.0		µg/L	1	5/6/2013 1:00:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:00:00 PM
Surr: Dibromofluoromethane	104	68-122		%REC	1	5/6/2013 1:00:00 PM
Surr: 1,2-Dichloroethane-d4	103	74-124		%REC	1	5/6/2013 1:00:00 PM
Surr: Toluene-d8	101	69-121		%REC	1	5/6/2013 1:00:00 PM
Surr: 4-Bromofluorobenzene	97.9	62-129		%REC	1	5/6/2013 1:00:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-03A

Client Sample ID: MW-7
Collection Date: 5/2/2013 1:00:00 PM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8260B VOLATILES BY GC/MS		**SW8260B**				Analyst: **DH**
Dichlorodifluoromethane	ND	5.0		µg/L	1	5/6/2013 1:35:00 PM
Chloromethane	ND	5.0		µg/L	1	5/6/2013 1:35:00 PM
Vinyl chloride	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Chloroethane	ND	5.0		µg/L	1	5/6/2013 1:35:00 PM
Bromomethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Diethyl ether	ND	5.0		µg/L	1	5/6/2013 1:35:00 PM
Acetone	ND	10		µg/L	1	5/6/2013 1:35:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2013 1:35:00 PM
Carbon disulfide	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Methylene chloride	ND	5.0		µg/L	1	5/6/2013 1:35:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
2-Butanone	ND	10		µg/L	1	5/6/2013 1:35:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Chloroform	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Tetrahydrofuran	ND	10		µg/L	1	5/6/2013 1:35:00 PM
Bromochloromethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Benzene	ND	1.0		µg/L	1	5/6/2013 1:35:00 PM
Trichloroethene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Dibromomethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2013 1:35:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 1:35:00 PM
Toluene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 1:35:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
2-Hexanone	ND	10		µg/L	1	5/6/2013 1:35:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-03A

Client Sample ID: MW-7
Collection Date: 5/2/2013 1:00:00 PM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Ethylbenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
m,p-Xylene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
o-Xylene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Styrene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Bromoform	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Bromobenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,2,4-Trimethylbenzene	4.1	2.0		µg/L	1	5/6/2013 1:35:00 PM
sec-Butylbenzene	2.6	2.0		µg/L	1	5/6/2013 1:35:00 PM
4-Isopropyltoluene	2.6	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	5/6/2013 1:35:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Naphthalene	ND	5.0		µg/L	1	5/6/2013 1:35:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 1:35:00 PM
Surr: Dibromofluoromethane	103	68-122		%REC	1	5/6/2013 1:35:00 PM
Surr: 1,2-Dichloroethane-d4	105	74-124		%REC	1	5/6/2013 1:35:00 PM
Surr: Toluene-d8	101	69-121		%REC	1	5/6/2013 1:35:00 PM
Surr: 4-Bromofluorobenzene	97.9	62-129		%REC	1	5/6/2013 1:35:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-04A

Client Sample ID: DUP
Collection Date: 5/2/2013
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8260B VOLATILES BY GC/MS		**SW8260B**				Analyst: **DH**
Dichlorodifluoromethane	ND	5.0		µg/L	1	5/6/2013 2:09:00 PM
Chloromethane	ND	5.0		µg/L	1	5/6/2013 2:09:00 PM
Vinyl chloride	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Chloroethane	ND	5.0		µg/L	1	5/6/2013 2:09:00 PM
Bromomethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Diethyl ether	ND	5.0		µg/L	1	5/6/2013 2:09:00 PM
Acetone	ND	10		µg/L	1	5/6/2013 2:09:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2013 2:09:00 PM
Carbon disulfide	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Methylene chloride	ND	5.0		µg/L	1	5/6/2013 2:09:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
2-Butanone	ND	10		µg/L	1	5/6/2013 2:09:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Chloroform	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Tetrahydrofuran	ND	10		µg/L	1	5/6/2013 2:09:00 PM
Bromochloromethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Benzene	ND	1.0		µg/L	1	5/6/2013 2:09:00 PM
Trichloroethene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Dibromomethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2013 2:09:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 2:09:00 PM
Toluene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 2:09:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
2-Hexanone	ND	10		µg/L	1	5/6/2013 2:09:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-04A

Client Sample ID: DUP
Collection Date: 5/2/2013
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Ethylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
m,p-Xylene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
o-Xylene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Styrene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Bromoform	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Bromobenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	5/6/2013 2:09:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Naphthalene	ND	5.0		µg/L	1	5/6/2013 2:09:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 2:09:00 PM
Surr: Dibromofluoromethane	101	68-122		%REC	1	5/6/2013 2:09:00 PM
Surr: 1,2-Dichloroethane-d4	101	74-124		%REC	1	5/6/2013 2:09:00 PM
Surr: Toluene-d8	101	69-121		%REC	1	5/6/2013 2:09:00 PM
Surr: 4-Bromofluorobenzene	97.7	62-129		%REC	1	5/6/2013 2:09:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-05A

Client Sample ID: TB
Collection Date: 5/2/2013 8:00:00 AM
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8260B VOLATILES BY GC/MS		**SW8260B**				Analyst: **DH**
Dichlorodifluoromethane	ND	5.0		µg/L	1	5/6/2013 11:52:00 AM
Chloromethane	ND	5.0		µg/L	1	5/6/2013 11:52:00 AM
Vinyl chloride	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Chloroethane	ND	5.0		µg/L	1	5/6/2013 11:52:00 AM
Bromomethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Trichlorofluoromethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Diethyl ether	ND	5.0		µg/L	1	5/6/2013 11:52:00 AM
Acetone	ND	10		µg/L	1	5/6/2013 11:52:00 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2013 11:52:00 AM
Carbon disulfide	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Methylene chloride	ND	5.0		µg/L	1	5/6/2013 11:52:00 AM
Methyl tert-butyl ether	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,1-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
2-Butanone	ND	10		µg/L	1	5/6/2013 11:52:00 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Chloroform	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Tetrahydrofuran	ND	10		µg/L	1	5/6/2013 11:52:00 AM
Bromochloromethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,1-Dichloropropene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Carbon tetrachloride	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,2-Dichloroethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Benzene	ND	1.0		µg/L	1	5/6/2013 11:52:00 AM
Trichloroethene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Bromodichloromethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Dibromomethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2013 11:52:00 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 11:52:00 AM
Toluene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2013 11:52:00 AM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,2-Dibromoethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
2-Hexanone	ND	10		µg/L	1	5/6/2013 11:52:00 AM
1,3-Dichloropropane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Tetrachloroethene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Dibromochloromethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Lab Order: 1305008
Project: 31-168 Ferriter Oil Bulk
Lab ID: 1305008-05A

Client Sample ID: TB
Collection Date: 5/2/2013 8:00:00 AM
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Ethylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
m,p-Xylene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
o-Xylene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Styrene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Bromoform	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Isopropylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Bromobenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
n-Propylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
2-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
4-Chlorotoluene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
tert-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
sec-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
4-Isopropyltoluene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
n-Butylbenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	5/6/2013 11:52:00 AM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Hexachlorobutadiene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Naphthalene	ND	5.0		µg/L	1	5/6/2013 11:52:00 AM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	5/6/2013 11:52:00 AM
Surr: Dibromofluoromethane	99.1	68-122		%REC	1	5/6/2013 11:52:00 AM
Surr: 1,2-Dichloroethane-d4	102	74-124		%REC	1	5/6/2013 11:52:00 AM
Surr: Toluene-d8	98.1	69-121		%REC	1	5/6/2013 11:52:00 AM
Surr: 4-Bromofluorobenzene	99.6	62-129		%REC	1	5/6/2013 11:52:00 AM

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Method Blank

Sample ID: **mb-05/06/13** Batch ID: **R50956** Test Code: **SW8260B** Units: **µg/L** Analysis Date **5/6/2013 11:18:00 AM** Prep Date: **5/6/2013**

Client ID: Run ID: **V-3_130506A** SeqNo: **848221**

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Dichlorodifluoromethane	ND	5.0	µg/L									
Chloromethane	ND	5.0	µg/L									
Vinyl chloride	ND	2.0	µg/L									
Chloroethane	ND	5.0	µg/L									
Bromomethane	ND	2.0	µg/L									
Trichlorofluoromethane	ND	2.0	µg/L									
Diethyl ether	ND	5.0	µg/L									
Acetone	ND	10	µg/L									
1,1-Dichloroethene	ND	1.0	µg/L									
Carbon disulfide	ND	2.0	µg/L									
Methylene chloride	ND	5.0	µg/L									
Methyl tert-butyl ether	ND	2.0	µg/L									
trans-1,2-Dichloroethene	ND	2.0	µg/L									
1,1-Dichloroethane	ND	2.0	µg/L									
2-Butanone	ND	10	µg/L									
2,2-Dichloropropane	ND	2.0	µg/L									
cis-1,2-Dichloroethene	ND	2.0	µg/L									
Chloroform	ND	2.0	µg/L									
Tetrahydrofuran	ND	10	µg/L									
Bromochloromethane	ND	2.0	µg/L									
1,1,1-Trichloroethane	ND	2.0	µg/L									
1,1-Dichloropropene	ND	2.0	µg/L									
Carbon tetrachloride	ND	2.0	µg/L									
1,2-Dichloroethane	ND	2.0	µg/L									
Benzene	ND	1.0	µg/L									

Qualifiers: ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
NA - Not applicable where J values or ND results occur
RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Method Blank

Trichloroethene	ND	2.0	µg/L
1,2-Dichloropropane	ND	2.0	µg/L
Bromodichloromethane	ND	2.0	µg/L
Dibromomethane	ND	2.0	µg/L
4-Methyl-2-pentanone	ND	10	µg/L
cis-1,3-Dichloropropene	ND	1.0	µg/L
Toluene	ND	2.0	µg/L
trans-1,3-Dichloropropene	ND	1.0	µg/L
1,1,2-Trichloroethane	ND	2.0	µg/L
1,2-Dibromoethane	ND	2.0	µg/L
2-Hexanone	ND	10	µg/L
1,3-Dichloropropane	ND	2.0	µg/L
Tetrachloroethene	ND	2.0	µg/L
Dibromochloromethane	ND	2.0	µg/L
Chlorobenzene	ND	2.0	µg/L
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L
Ethylbenzene	ND	2.0	µg/L
m,p-Xylene	ND	2.0	µg/L
o-Xylene	ND	2.0	µg/L
Styrene	ND	2.0	µg/L
Bromoform	ND	2.0	µg/L
Isopropylbenzene	ND	2.0	µg/L
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L
1,2,3-Trichloropropane	ND	2.0	µg/L
Bromobenzene	ND	2.0	µg/L
n-Propylbenzene	ND	2.0	µg/L
2-Chlorotoluene	ND	2.0	µg/L
4-Chlorotoluene	ND	2.0	µg/L
1,3,5-Trimethylbenzene	ND	2.0	µg/L
tert-Butylbenzene	ND	2.0	µg/L
1,2,4-Trimethylbenzene	ND	2.0	µg/L

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur
RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Method Blank

sec-Butylbenzene	ND	2.0	µg/L						
4-Isopropyltoluene	ND	2.0	µg/L						
1,3-Dichlorobenzene	ND	2.0	µg/L						
1,4-Dichlorobenzene	ND	2.0	µg/L						
n-Butylbenzene	ND	2.0	µg/L						
1,2-Dichlorobenzene	ND	2.0	µg/L						
1,2-Dibromo-3-chloropropane	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	2.0	µg/L						
Hexachlorobutadiene	ND	2.0	µg/L						
Naphthalene	ND	5.0	µg/L						
1,2,3-Trichlorobenzene	ND	2.0	µg/L						
Surr: Dibromofluoromethane	24.87	2.0	µg/L	25	0	99.5	68	122	0
Surr: 1,2-Dichloroethane-d4	26.2	2.0	µg/L	25	0	105	74	124	0
Surr: Toluene-d8	24.79	2.0	µg/L	25	0	99.2	69	121	0
Surr: 4-Bromofluorobenzene	25.25	2.0	µg/L	25	0	101	62	129	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank
NA - Not applicable where J values or ND results occur

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **lcs-05/06/13** Batch ID: **R50956** Test Code: **SW8260B** Units: **µg/L** Analysis Date **5/6/2013 10:06:00 AM** Prep Date: **5/6/2013**

Client ID: Run ID: **V-3_130506A** SeqNo: **848222**

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qu
Dichlorodifluoromethane	20.07	5.0	µg/L	20	0	100	25	168	0			
Chloromethane	19.47	5.0	µg/L	20	0	97.4	51	149	0			
Vinyl chloride	24.22	2.0	µg/L	20	0	121	59	152	0			
Chloroethane	21.45	5.0	µg/L	20	0	107	65	138	0			
Bromomethane	17.9	2.0	µg/L	20	0	89.5	53	128	0			
Trichlorofluoromethane	24.71	2.0	µg/L	20	0	124	56	157	0			
Diethyl ether	20.32	5.0	µg/L	20	0	102	73	121	0			
Acetone	9.4	10	µg/L	20	0	47	44	133	0			J
1,1-Dichloroethene	18.4	1.0	µg/L	20	0	92	77	139	0			
Carbon disulfide	17.93	2.0	µg/L	20	0	89.7	55	129	0			
Methylene chloride	21.11	5.0	µg/L	20	0	106	77	133	0			
Methyl tert-butyl ether	22.66	2.0	µg/L	20	0	113	66	130	0			
trans-1,2-Dichloroethene	20.38	2.0	µg/L	20	0	102	79	128	0			
1,1-Dichloroethane	21.48	2.0	µg/L	20	0	107	81	131	0			
2-Butanone	12.34	10	µg/L	20	0	61.7	47	141	0			
2,2-Dichloropropane	20.92	2.0	µg/L	20	0	105	47	155	0			
cis-1,2-Dichloroethene	19.98	2.0	µg/L	20	0	99.9	78	128	0			
Chloroform	20	2.0	µg/L	20	0	100	69	132	0			
Tetrahydrofuran	24.27	10	µg/L	20	0	121	63	144	0			
Bromochloromethane	21.11	2.0	µg/L	20	0	106	77	138	0			
1,1,1-Trichloroethane	20.84	2.0	µg/L	20	0	104	68	145	0			
1,1-Dichloropropene	20.43	2.0	µg/L	20	0	102	71	141	0			
Carbon tetrachloride	20.49	2.0	µg/L	20	0	102	58	130	0			
1,2-Dichloroethane	19.64	2.0	µg/L	20	0	98.2	61	140	0			
Benzene	20.03	1.0	µg/L	20	0	100	75	129	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur; RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Laboratory Control Spike

Trichloroethene	20.11	2.0	µg/L	20	0	101	81	129	0
1,2-Dichloropropane	20.78	2.0	µg/L	20	0	104	81	134	0
Bromodichloromethane	21.18	2.0	µg/L	20	0	106	63	118	0
Dibromomethane	21.48	2.0	µg/L	20	0	107	76	123	0
4-Methyl-2-pentanone	18.12	10	µg/L	20	0	90.6	54	124	0
cis-1,3-Dichloropropene	19.94	1.0	µg/L	20	0	99.7	65	115	0
Toluene	20.37	2.0	µg/L	20	0	102	81	123	0
trans-1,3-Dichloropropene	20.73	1.0	µg/L	20	0	104	55	126	0
1,1,2-Trichloroethane	20.6	2.0	µg/L	20	0	103	79	122	0
1,2-Dibromoethane	20.89	2.0	µg/L	20	0	104	71	124	0
2-Hexanone	12.43	10	µg/L	20	0	62.2	41	138	0
1,3-Dichloropropane	20.87	2.0	µg/L	20	0	104	81	129	0
Tetrachloroethene	20.5	2.0	µg/L	20	0	103	87	137	0
Dibromochloromethane	21.2	2.0	µg/L	20	0	106	59	119	0
Chlorobenzene	21	2.0	µg/L	20	0	105	86	121	0
1,1,1,2-Tetrachloroethane	20.57	2.0	µg/L	20	0	103	65	133	0
Ethylbenzene	21.05	2.0	µg/L	20	0	105	81	125	0
m,p-Xylene	41.85	2.0	µg/L	40	0	105	81	125	0
o-Xylene	20.83	2.0	µg/L	20	0	104	68	134	0
Styrene	20.74	2.0	µg/L	20	0	104	66	133	0
Bromoform	17.91	2.0	µg/L	20	0	89.6	44	115	0
Isopropylbenzene	21.01	2.0	µg/L	20	0	105	75	139	0
1,1,2,2-Tetrachloroethane	20.33	2.0	µg/L	20	0	102	65	132	0
1,2,3-Trichloropropane	21.09	2.0	µg/L	20	0	105	64	139	0
Bromobenzene	20.23	2.0	µg/L	20	0	101	82	119	0
n-Propylbenzene	20.6	2.0	µg/L	20	0	103	73	129	0
2-Chlorotoluene	19.97	2.0	µg/L	20	0	99.8	78	121	0
4-Chlorotoluene	20.09	2.0	µg/L	20	0	100	82	122	0
1,3,5-Trimethylbenzene	21.29	2.0	µg/L	20	0	106	76	125	0
tert-Butylbenzene	21.4	2.0	µg/L	20	0	107	69	129	0
1,2,4-Trimethylbenzene	20.78	2.0	µg/L	20	0	104	79	125	0

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Laboratory Control Spike

sec-Butylbenzene	21.16	2.0	µg/L	20	0	106	69	132	0
4-Isopropyltoluene	21.09	2.0	µg/L	20	0	105	66	132	0
1,3-Dichlorobenzene	20.68	2.0	µg/L	20	0	103	86	125	0
1,4-Dichlorobenzene	20.37	2.0	µg/L	20	0	102	82	126	0
n-Butylbenzene	20.94	2.0	µg/L	20	0	105	59	143	0
1,2-Dichlorobenzene	20.86	2.0	µg/L	20	0	104	82	123	0
1,2-Dibromo-3-chloropropane	20.46	5.0	µg/L	20	0	102	44	122	0
1,2,4-Trichlorobenzene	22.25	2.0	µg/L	20	0	111	73	137	0
Hexachlorobutadiene	18.68	2.0	µg/L	20	0	93.4	70	145	0
Naphthalene	21.27	5.0	µg/L	20	0	106	67	128	0
1,2,3-Trichlorobenzene	20.54	2.0	µg/L	20	0	103	63	135	0
Surr: Dibromofluoromethane	25.63	2.0	µg/L	25	0	103	68	122	0
Surr: 1,2-Dichloroethane-d4	25.68	2.0	µg/L	25	0	103	74	124	0
Surr: Toluene-d8	25.43	2.0	µg/L	25	0	102	69	121	0
Surr: 4-Bromofluorobenzene	25.02	2.0	µg/L	25	0	100	62	129	0

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur
RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **1305008-01Ams** Batch ID: **R50956** Test Code: **SW8260B** Units: **µg/L** Analysis Date **5/6/2013 2:43:00 PM** Prep Date: **5/3/2013**

Client ID: **MW-1** Run ID: **V-3_130506A** SeqNo: **848194**

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Dichlorodifluoromethane	99.1	25	µg/L	100	0	99.1	27	173	0			
Chloromethane	108.4	25	µg/L	100	0	108	55	163	0			
Vinyl chloride	120.8	10	µg/L	100	0	121	67	162	0			
Chloroethane	111.6	25	µg/L	100	0	112	77	158	0			
Bromomethane	92.65	10	µg/L	100	0	92.6	50	150	0			
Trichlorofluoromethane	125.2	10	µg/L	100	0	125	75	168	0			
Diethyl ether	98.5	25	µg/L	100	0	98.5	58	149	0			
Acetone	50.35	50	µg/L	100	0	50.4	18	155	0			
1,1-Dichloroethene	109	5.0	µg/L	100	0	109	66	171	0			
Carbon disulfide	95.5	10	µg/L	100	0	95.5	37	165	0			
Methylene chloride	112.8	25	µg/L	100	0	113	76	156	0			
Methyl tert-butyl ether	113.9	10	µg/L	100	0	114	65	150	0			
trans-1,2-Dichloroethene	106.7	10	µg/L	100	0	107	76	151	0			
1,1-Dichloroethane	110.7	10	µg/L	100	0	111	71	157	0			
2-Butanone	58.95	50	µg/L	100	0	59	34	147	0			
2,2-Dichloropropane	102.5	10	µg/L	100	0	103	33	167	0			
cis-1,2-Dichloroethene	106.4	10	µg/L	100	0	106	74	151	0			
Chloroform	105.1	10	µg/L	100	0	105	75	150	0			
Tetrahydrofuran	109.4	50	µg/L	100	0	109	42	169	0			
Bromochloromethane	109.2	10	µg/L	100	0	109	79	146	0			
1,1,1-Trichloroethane	111.8	10	µg/L	100	0	112	67	166	0			
1,1-Dichloropropene	108.4	10	µg/L	100	0	108	76	165	0			
Carbon tetrachloride	107.6	10	µg/L	100	0	108	57	161	0			
1,2-Dichloroethane	105.6	10	µg/L	100	0	106	66	150	0			
Benzene	105.4	5.0	µg/L	100	0	105	77	150	0			

Qualifiers: ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
NA - Not applicable where J values or ND results occur
RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Sample Matrix Spike

Trichloroethene	106.8	10	µg/L	100	0	107	80	150	0
1,2-Dichloropropane	106.6	10	µg/L	100	0	107	76	150	0
Bromodichloromethane	107.2	10	µg/L	100	0	107	57	140	0
Dibromomethane	106.7	10	µg/L	100	0	107	72	144	0
4-Methyl-2-pentanone	85.95	50	µg/L	100	0	86	38	148	0
cis-1,3-Dichloropropene	96.3	5.0	µg/L	100	0	96.3	49	136	0
Toluene	108.5	10	µg/L	100	0	108	77	150	0
trans-1,3-Dichloropropene	96.2	5.0	µg/L	100	0	96.2	37	142	0
1,1,2-Trichloroethane	108.2	10	µg/L	100	0	108	71	144	0
1,2-Dibromoethane	107.3	10	µg/L	100	0	107	61	146	0
2-Hexanone	62.15	50	µg/L	100	0	62.2	28	143	0
1,3-Dichloropropane	108.3	10	µg/L	100	0	108	77	137	0
Tetrachloroethene	108	10	µg/L	100	0	108	84	155	0
Dibromochloromethane	101.2	10	µg/L	100	0	101	45	135	0
Chlorobenzene	108.4	10	µg/L	100	0	108	88	133	0
1,1,1,2-Tetrachloroethane	107.6	10	µg/L	100	0	108	67	142	0
Ethylbenzene	112.2	10	µg/L	100	0	112	80	143	0
m,p-Xylene	220.4	10	µg/L	200	0	110	81	142	0
o-Xylene	112	10	µg/L	100	0	112	70	146	0
Styrene	109.2	10	µg/L	100	0	109	69	145	0
Bromoform	79.55	10	µg/L	100	0	79.6	31	136	0
Isopropylbenzene	114.1	10	µg/L	100	0	114	78	159	0
1,1,2,2-Tetrachloroethane	100.9	10	µg/L	100	0	101	61	140	0
1,2,3-Trichloropropane	107.4	10	µg/L	100	0	107	60	144	0
Bromobenzene	104.4	10	µg/L	100	0	104	81	131	0
n-Propylbenzene	111.4	10	µg/L	100	0	111	74	148	0
2-Chlorotoluene	105.5	10	µg/L	100	0	106	73	139	0
4-Chlorotoluene	107.2	10	µg/L	100	0	107	75	140	0
1,3,5-Trimethylbenzene	112.9	10	µg/L	100	0	113	71	147	0
tert-Butylbenzene	113.1	10	µg/L	100	0	113	72	147	0
1,2,4-Trimethylbenzene	109.4	10	µg/L	100	0	109	72	148	0

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur
RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Sample Matrix Spike

sec-Butylbenzene	113	10	µg/L	100	0	113	73	151	0
4-Isopropyltoluene	112.4	10	µg/L	100	0	112	68	145	0
1,3-Dichlorobenzene	106.8	10	µg/L	100	0	107	84	133	0
1,4-Dichlorobenzene	106.8	10	µg/L	100	0	107	81	134	0
n-Butylbenzene	112.4	10	µg/L	100	0	112	65	153	0
1,2-Dichlorobenzene	106	10	µg/L	100	0	106	81	131	0
1,2-Dibromo-3-chloropropane	94.75	25	µg/L	100	0	94.8	26	144	0
1,2,4-Trichlorobenzene	109.3	10	µg/L	100	0	109	70	142	0
Hexachlorobutadiene	90.05	10	µg/L	100	0	90	61	135	0
Naphthalene	105.2	25	µg/L	100	0	105	50	141	0
1,2,3-Trichlorobenzene	103.2	10	µg/L	100	0	103	57	138	0
Surr: Dibromofluoromethane	125.6	10	µg/L	125	0	100	68	122	0
Surr: 1,2-Dichloroethane-d4	129.7	10	µg/L	125	0	104	74	124	0
Surr: Toluene-d8	126.8	10	µg/L	125	0	101	69	121	0
Surr: 4-Bromofluorobenzene	122.3	10	µg/L	125	0	97.8	62	129	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank
NA - Not applicable where J values or ND results occur
RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Sample ID: **1305008-01Amsd** Batch ID: **R50956** Test Code: **SW8260B** Units: **µg/L** Analysis Date **5/6/2013 3:17:00 PM** Prep Date: **5/3/2013**

Client ID: **MW-1** Run ID: **V-3_130506A** SeqNo: **848195**

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Dichlorodifluoromethane	104	25	µg/L	100	0	104	27	173	99.1	4.87	20	
Chloromethane	108.8	25	µg/L	100	0	109	55	163	108.4	0.322	20	
Vinyl chloride	126.2	10	µg/L	100	0	126	67	162	120.9	4.37	0	
Chloroethane	113.6	25	µg/L	100	0	114	77	158	111.6	1.73	20	
Bromomethane	95.05	10	µg/L	100	0	95	50	150	92.65	2.56	20	
Trichlorofluoromethane	127.2	10	µg/L	100	0	127	75	168	125.2	1.62	0	
Diethyl ether	98.35	25	µg/L	100	0	98.4	58	149	98.5	0.152	20	
Acetone	54.9	50	µg/L	100	0	54.9	18	155	50.35	8.65	20	
1,1-Dichloroethene	109.3	5.0	µg/L	100	0	109	66	171	109	0.229	20	
Carbon disulfide	96.35	10	µg/L	100	0	96.4	37	165	95.5	0.886	20	
Methylene chloride	113	25	µg/L	100	0	113	76	156	112.8	0.133	20	
Methyl tert-butyl ether	111.6	10	µg/L	100	0	112	65	150	113.9	2.08	20	
trans-1,2-Dichloroethene	107.6	10	µg/L	100	0	108	76	151	106.7	0.886	20	
1,1-Dichloroethane	112	10	µg/L	100	0	112	71	157	110.7	1.21	20	
2-Butanone	53.9	50	µg/L	100	0	53.9	34	147	58.95	8.95	20	
2,2-Dichloropropane	105.2	10	µg/L	100	0	105	33	167	102.5	2.6	20	
cis-1,2-Dichloroethene	105.2	10	µg/L	100	0	105	74	151	106.4	1.09	20	
Chloroform	103.3	10	µg/L	100	0	103	75	150	105.1	1.73	20	
Tetrahydrofuran	109.9	50	µg/L	100	0	110	42	169	109.4	0.456	20	
Bromochloromethane	108.9	10	µg/L	100	0	109	79	146	109.2	0.321	20	
1,1,1-Trichloroethane	109.8	10	µg/L	100	0	110	67	166	111.8	1.81	20	
1,1-Dichloropropene	111.8	10	µg/L	100	0	112	76	165	108.4	3.18	20	
Carbon tetrachloride	105.8	10	µg/L	100	0	106	57	161	107.6	1.59	20	
1,2-Dichloroethane	101.8	10	µg/L	100	0	102	66	150	105.6	3.66	20	
Benzene	106.4	5.0	µg/L	100	0	106	77	150	105.4	0.945	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur; RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: *07-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Trichloroethene	110.2	10	µg/L	100	0	110	80	150	106.8	3.09	0
1,2-Dichloropropane	106.7	10	µg/L	100	0	107	76	150	106.6	0.0938	20
Bromodichloromethane	108.9	10	µg/L	100	0	109	57	140	107.2	1.62	20
Dibromomethane	108.6	10	µg/L	100	0	109	72	144	106.7	1.81	20
4-Methyl-2-pentanone	85.35	50	µg/L	100	0	85.4	39	148	85.95	0.701	20
cis-1,3-Dichloropropene	99.85	5.0	µg/L	100	0	99.8	49	136	96.3	3.62	20
Toluene	108.6	10	µg/L	100	0	109	77	150	108.5	0.138	20
trans-1,3-Dichloropropene	101.5	5.0	µg/L	100	0	102	37	142	96.2	5.36	20
1,1,2-Trichloroethane	108.2	10	µg/L	100	0	108	71	144	108.2	0.0462	20
1,2-Dibromoethane	108.7	10	µg/L	100	0	109	61	146	107.3	1.3	20
2-Hexanone	59.95	50	µg/L	100	0	60	28	143	62.15	3.6	20
1,3-Dichloropropane	105.9	10	µg/L	100	0	106	77	137	108.3	2.24	20
Tetrachloroethene	109.4	10	µg/L	100	0	109	84	155	108	1.33	20
Dibromochloromethane	105.5	10	µg/L	100	0	106	45	135	101.2	4.21	20
Chlorobenzene	110	10	µg/L	100	0	110	86	133	108.4	1.47	20
1,1,1,2-Tetrachloroethane	108.4	10	µg/L	100	0	108	67	142	107.6	0.695	20
Ethylbenzene	112.4	10	µg/L	100	0	112	80	143	112.2	0.267	20
m,p-Xylene	222	10	µg/L	200	0	111	81	142	220.4	0.746	20
o-Xylene	112.6	10	µg/L	100	0	113	70	146	112	0.623	20
Styrene	110.8	10	µg/L	100	0	111	69	145	109.2	1.5	20
Bromoform	84.4	10	µg/L	100	0	84.4	31	136	79.55	5.92	20
Isopropylbenzene	117.4	10	µg/L	100	0	117	78	159	114.1	2.89	20
1,1,2,2-Tetrachloroethane	106.5	10	µg/L	100	0	106	61	140	100.9	5.4	20
1,2,3-Trichloropropane	107.8	10	µg/L	100	0	108	60	144	107.4	0.372	20
Bromobenzene	109.6	10	µg/L	100	0	110	81	131	104.4	4.91	20
n-Propylbenzene	116.6	10	µg/L	100	0	117	74	148	111.4	4.56	20
2-Chlorotoluene	110	10	µg/L	100	0	110	73	139	105.5	4.13	20
4-Chlorotoluene	111.1	10	µg/L	100	0	111	75	140	107.2	3.53	20
1,3,5-Trimethylbenzene	115.2	10	µg/L	100	0	115	71	147	112.9	2.02	20
tert-Butylbenzene	119.1	10	µg/L	100	0	119	72	147	113.1	5.13	20
1,2,4-Trimethylbenzene	114.4	10	µg/L	100	0	114	72	148	109.4	4.42	20

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur; RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

sec-Butylbenzene	116.1	10	µg/L	100	0	116	73	151	113	2.66	20
4-Isopropyltoluene	118.6	10	µg/L	100	0	119	68	145	112.4	5.49	20
1,3-Dichlorobenzene	113.5	10	µg/L	100	0	114	84	133	106.8	6.08	20
1,4-Dichlorobenzene	110.7	10	µg/L	100	0	111	81	134	106.8	3.59	20
n-Butylbenzene	117.9	10	µg/L	100	0	118	65	153	112.4	4.73	20
1,2-Dichlorobenzene	111.2	10	µg/L	100	0	111	81	131	106	4.7	20
1,2-Dibromo-3-chloropropane	99.85	25	µg/L	100	0	99.8	26	144	94.75	5.24	20
1,2,4-Trichlorobenzene	112.4	10	µg/L	100	0	112	70	142	109.3	2.8	20
Hexachlorobutadiene	95.95	10	µg/L	100	0	96	61	135	90.05	6.34	20
Naphthalene	109.1	25	µg/L	100	0	109	50	141	105.2	3.59	20
1,2,3-Trichlorobenzene	108.6	10	µg/L	100	0	109	57	138	103.2	5.05	20
Surr: Dibromofluoromethane	128.3	10	µg/L	125	0	103	68	122	0	0	0
Surr: 1,2-Dichloroethane-d4	130.8	10	µg/L	125	0	105	74	124	0	0	0
Surr: Toluene-d8	125.2	10	µg/L	125	0	100	69	121	0	0	0
Surr: 4-Bromofluorobenzene	127.6	10	µg/L	125	0	102	62	129	0	0	0

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur; RL - Reporting Limit: defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Project: 31-168 Ferriter Oil Bulk

Lab Order: 1305008

Lab ID: 1305008-01 **Collection Date:** 5/2/2013 11:40:00 AM
Collection Time:
Client Sample ID: MW-1 **Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015B**				Analyst: **KAM**
Diesel Range Organics	1.0	0.052		mg/L	1	5/8/2013 4:51:00 PM
Surr: o-Terphenyl	62.5	38-122		%REC	1	5/8/2013 4:51:00 PM

Lab ID: 1305008-02 **Collection Date:** 5/2/2013 12:15:00 PM
Collection Time:
Client Sample ID: MW-6 **Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015B**				Analyst: **KAM**
Diesel Range Organics	3.9	0.050		mg/L	1	5/8/2013 5:36:00 PM
Surr: o-Terphenyl	80.1	38-122		%REC	1	5/8/2013 5:36:00 PM

Lab ID: 1305008-03 **Collection Date:** 5/2/2013 1:00:00 PM
Collection Time:
Client Sample ID: MW-7 **Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015B**				Analyst: **KAM**
Diesel Range Organics	3.8	0.050		mg/L	1	5/8/2013 6:23:00 PM
Surr: o-Terphenyl	76.5	38-122		%REC	1	5/8/2013 6:23:00 PM

Lab ID: 1305008-04 **Collection Date:** 5/2/2013
Collection Time:
Client Sample ID: DUP **Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015B**				Analyst: **KAM**
Diesel Range Organics	1.1	0.051		mg/L	1	5/8/2013 7:10:00 PM
Surr: o-Terphenyl	72.7	38-122		%REC	1	5/8/2013 7:10:00 PM

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-23208** Batch ID: **23208** Test Code: **SW8015B** Units: **mg/L** Analysis Date: **5/8/2013 1:20:00 PM** Prep Date: **5/7/2013**

Client ID: Run ID: **GC-FING1_130508A** SeqNo: **848381**

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Diesel Range Organics	ND	0.050	mg/L									
Surr: o-Terphenyl	0.09138	0	mg/L	0.1	0	91.4	38	122	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank
NA - Not applicable where J values or ND results occur

AMRO Environmental Laboratories Corp.

Date: *09-May-13*

CLIENT: Ross Environmental Associates
Work Order: 1305008
Project: 31-168 Ferriter Oil Bulk

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-23208** Batch ID: **23208** Test Code: **SW8015B** Units: **mg/L** Analysis Date **5/8/2013 2:02:00 PM** Prep Date: **5/7/2013**

Client ID: Run ID: **GC-FING1_130508A** SeqNo: **848382**

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Diesel Range Organics	1.556	0.050	mg/L	2	0	77.8	31.9	120	0			
Surr: o-Terphenyl	0.09119	0	mg/L	0.1	0	91.2	38	122	0			

Sample ID: **LCSD-23208** Batch ID: **23208** Test Code: **SW8015B** Units: **mg/L** Analysis Date **5/8/2013 2:44:00 PM** Prep Date: **5/7/2013**

Client ID: Run ID: **GC-FING1_130508A** SeqNo: **848383**

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Diesel Range Organics	1.67	0.050	mg/L	2	0	83.5	31.9	120	1.556	7.09	40	
Surr: o-Terphenyl	0.09153	0	mg/L	0.1	0	91.5	38	122	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; NA - Not applicable where J values or ND results occur; RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.