Quarterly Groundwater Monitoring Report
Red Hill Fuel Storage Facility

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Executive Summary

This Quarterly Groundwater Monitoring Report presents the results of groundwater sampling conducted on October 22, November 11, and December 16, 2008 at the United States (US) Navy Bulk Fuel Storage Facility at Red Hill, Oahu, Hawaii (the Facility). The sampling and reporting was conducted by TEC Inc. (TEC) for the Air Force Center for Engineering and the Environment (AFCEE) and the Fleet Industrial Supply Center (FISC) at Pearl Harbor, Hawaii. This report is part of a series of quarterly groundwater monitoring reports provided by the US Navy to the State of Hawaii Department of Health (HDOH) in accordance with HDOH's release response requirements. Currently, there are 18 active and 2 inactive, 12.5 million gallon, field-constructed underground storage tanks (USTs) located at the Facility.

Background

In 2002, the United States (US) Navy installed a groundwater monitoring well (currently named RHMW01) into the basal aquifer, directly down-gradient from the Facility, within the lower access tunnel. Groundwater samples from this well indicated that petroleum from the Facility had migrated to the basal aquifer (AMEC, 2002). In 2005, the US Navy began quarterly monitoring of the aquifer to protect their down-gradient drinking water resource associated with the US Navy Well 2254-01. The US Navy Well 2254-01 is located approximately 3,000 feet downgradient from the Red Hill Fuel Storage Facility and provides approximately 24 % of the potable water to the Pearl Harbor Water System (PHWS).

By September 2005, the US Navy had installed two more groundwater monitoring wells (RHMW02 and RHMW03) within the Facility lower access tunnel, a background groundwater monitoring well (RHMW04) up-gradient from the Facility at ground surface adjacent to the US Navy Firing Range, and a groundwater monitoring well within the US Navy Well 2254-01 infiltration gallery (RHMW2254-01).

All five wells were sampled twice as part of a comprehensive environmental investigation and risk assessment (TEC, 2006). For this investigation, groundwater samples were analyzed for petroleum constituents and compared against HDOH Drinking Water Environmental Action Levels (EALs) (HDOH, 2005a). In addition, a three-dimensional (3-D) groundwater model was developed to produce site-specific risk-based action levels (SSRBLs) for compounds of concern. The results of this modeling effort indicated that Jet Propulsion (JP)–5 fuel presented the biggest risk to the US Navy water supply, due to its mobility and toxicity. Finally, the model indicated that a non-aqueous plume (free product) of JP-5 must migrate to within 1,100 feet of the US Navy Well 2254-01 infiltration gallery for HDOH EALs to be exceeded within the gallery. Based on this, free-product must be observed at RHMW01 for EALs to be exceeded at the US Navy Well 2254-01.

During the Summer and Fall of 2008, HDOH updated their EALs, which resulted in significant changes to the action levels associated with methylnaphthalenes. The drinking water toxicity EAL for these compounds were each previously 240 μg/L, assuming they were not carcinogens. Evidence that they are carcinogenic to humans has now been accepted by the United States

Environmental Protection Agency (USEPA), and HDOH adopted more rigorous EALs of 4.7 µg/L for 1-methylnaphthalene and 24 µg/L for 2-methylnaphthalene (HDOH, 2008).

The drinking water EAL for naphthalene was also updated during this process. Previously, HDOH based their naphthalene EAL on USEPA Region 9 Preliminary Remediation Goal (USEPA PRG) of 6.2 µg/L, which is associated with a non-cancer Hazard Index of 1. HDOH has updated their naphthalene drinking water EAL to 17 µg/L, in deference to the California Department of Public Health's Drinking Water Notification Levels (HDOH, 2008).

Finally, the drinking water EAL for TPH-DRO was increased from 100 µg/L to 210 µg/L, although the gross contamination EAL for TPH-DRO remains 100 µg/L.

Groundwater Protection Plan

In 2008, the US Navy completed the *Red Hill Bulk Fuel Storage Facility Final Groundwater Protection Plan* (TEC, 2008), or Plan, which specified SSRBLs for each well, and actions that would occur for the pertinent cases, based on categories for each groundwater monitoring well (Categories 1 through 4). The main object of the Plan is to protect groundwater quality entering the US Navy Well 2254-01, which provides potable water to the PHWS. This is accomplished by comparing petroleum concentrations in the Facility wells (RHMW01, RHMW02, and RHMW03) to the SSRBLs and taking the corresponding action. A secondary but important objective of the Plan is to identify leaking USTs by evaluating increasing concentration trends, or the sudden and lasting presence of free product in one or more groundwater monitoring wells. In the current quarterly groundwater monitoring report, the current water quality is compared to these categories and actions are recommended, based on those specified in the Plan.

Current Results

In October 2008, four normal samples were collected from RHMW01, RHMW02, RHMW03 and the US Navy Well 2254-01, along with the required quality control samples (duplicate, matrix spike, spike duplicate, trip blank). Samples were analyzed for Total Petroleum Hydrocarbons (TPH) quantified as Diesel-Range Organics (DRO) and Gasoline Range Organics (GRO), Volatile Organic Compounds (VOCs), Polynuclear Aromatic Hydrocarbons (PAHs), and lead. Naphthalene and 1-methylnaphthalene were detected at trace concentrations in the sample from US Navy Well 2254-01; therefore, the well was re-sampled in December 2008 for VOCs. VOCs were not detected in the re-sample aliquot.

TPH-DRO was detected at 459 micrograms per liter (µg/L) in RHMW01, at 5,420 µg/L (average of normal and duplicate sample) in RHMW02, and 244 µg/L in RHMW03. The HDOH Drinking Water EAL and Site-Specific Risk Based Level for TPH-DRO are 210 µg/L and 4,500 µg/L, respectively. Two PAHs were detected by USEPA method 8270C SIM in the normal and duplicate samples associated with RHMW02 at average concentrations above the HDOH Drinking Water EALs: naphthalene at 89.85 µg/L (HDOH EAL is 17 µg/L) and 1-methylnaphthalene at 67.25 µg/L (HDOH toxicity EAL is 4.7 µg/L). Naphthalene was also measured by USEPA method 8260B in RHMW02, at an average concentration of 242 µg/L.

Trend Analysis

At RHMW01, concentrations of TPH-DRO have been greater than the HDOH Drinking Water EAL since September 2005 but less than 25 percent of the SSRBL of 4,500 µg/L. In October 2008, TPH-DRO increased in concentration following a decreasing trend over three previous rounds, since January 2008.

At RHMW02, concentrations of TPH-DRO have been greater than the HDOH Drinking Water EAL since September 2005 and greater than 50 percent of the SSRBL of 4,500 µg/L over that same period. TPH-DRO has been increasing in concentration over the last four rounds, since January 2008, and the average concentration from the October 2008 sampling event was greater than the SSRBL (solubility limit). Three PAHs (naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene) also have exceeded the EALs since September 2005. In October 2008, these PAHs decreased in concentrations following increasing trends over three previous rounds (since January 2008). There are no SSRBLs set for these PAHs to date.

At RHMW03, concentrations of TPH-DRO have fluctuated around the HDOH EAL since September 2005 and are significantly lower than at RHMW01 and RHMW02. TPH-DRO at RHMW03 has been increasing in concentration over the past three rounds, since April 2008.

Current Groundwater Status

Based on the monitoring event that occurred in October 2008, no free product was observed at RHMW01, RHMW02, or RHMW03. Results from groundwater samples indicate that RHMW01 and RHMW03 are presently in Category 2 status, since TPH-DRO is greater than the HDOH EAL for drinking water (210 µg/L), but less than half the SSRBL of 4,500 µg/L (solubility limit of JP-5). Category 2 response at RHMW01 and RHMW03 requires:

1. Quarterly reports to be sent to HDOH; and
2. Initiation of a leak determination program to identify if tanks are leaking.

Results from groundwater samples indicate that RHMW02 is presently in Category 4 status, since TPH-DRO (4,540 µg/L and 6,300 µg/L [duplicate]) is greater than the HDOH EAL for drinking water (210 µg/L), and greater than the SSRBL of 4,500 µg/L (solubility limit of JP-5). Category 4 response at RHMW02 requires:

A. Send quarterly reports to HDOH
C. Notify HDOH verbally within 1 day and follow with written notification in 30 days
D. Notify FISC Chain of Command within 1 day
E. Send Type 1 Report to HDOH
F. Send Type 2 Report to HDOH
I. Remove sampling pumps, measure product in pertinent wells with interface probe, re-install pumps if product is not detected.
J. Immediately evaluate tanks for leaks
K. Collect samples from nearby Halawa Deep Monitoring Well (2253-03) and OWDF MW01

M. Prepare for alternative water source at US Navy Well 2254-01
N. Re-measure for product every month with reports to HDOH

Conclusions and Recommendations

There is no indication of an imminent threat to the US Navy Well 2254-01 water resources based on this report, since petroleum concentrations at RHMW01 remain less than half the SSRBLs. However, the groundwater status at RHMW02 is Category 4 since the associated TPH-DRO result was greater than the SSRBL (4,500 μg/L). The Groundwater Protection Plan requires specific responses to Category 4, which should be conducted.

The US Navy plans to install an additional monitoring well in the Facility lower access tunnel and dedicated oil/water interface probes in four lower access tunnel wells in the coming year to better monitor contaminant migration in the basal drinking water aquifer.

It is also recommended that quarterly groundwater sampling for TPH-DRO, TPH-GRO, VOCs, PAHs, and lead be continued as previously scheduled until new data indicates a different schedule is required.

1.0 Introduction

This report presents the results of the 13th groundwater sampling and analysis event, conducted in October 2008 (with follow-up sampling in November and December) at the Red Hill Fuel Storage Facility, Oahu, Hawaii (hereafter referred to as "the Facility"). The Facility consists of 18 active and 2 inactive underground storage tanks (USTs) operated by the Fleet Industrial and Supply Center (FISC), Pearl Harbor. The groundwater sampling and analysis event is part of a groundwater monitoring program for the UST site in response to past UST releases, previous environmental investigations, and recommendations from the State of Hawaii Department of Health (HDOH).

1.1 Project Objective

This groundwater sampling and analysis project was performed to evaluate the presence of chemicals of potential concern in groundwater underlying the Facility. The project was conducted to ensure the Navy remains in compliance with HDOH UST release response requirements as described in Hawaii Administrative Rules (HAR) 11-281 Subchapter 7, Release Response Action. The groundwater sampling and analysis procedures generally followed the procedures described in *Red Hill Bulk Fuel Storage Facility Groundwater Protection Plan* (TEC Inc [TEC], 2008) (Also referred to as "the Plan").

This groundwater sampling and analysis event was conducted by TEC under Air Force Center for Engineering and the Environment (AFCEE) Contract Number F41624-03-D-8618, Task Order 021.

1.2 Previous Reports

The following groundwater monitoring reports were previously submitted to the HDOH:

1. Groundwater Sampling Report, First Quarter 2005 (submitted April 2005);
2. Groundwater Sampling Report, Second Quarter 2005 (submitted August 2005);
3. Groundwater Sampling Report, Third Quarter 2005 (submitted November 2005);
4. Groundwater Sampling Report, Fourth Quarter 2005 (submitted February 2006);
5. Groundwater Monitoring Results, July 2006 (submitted September 2006);
6. Groundwater Monitoring Results, December 2006 (submitted January 2007);
7. Groundwater Monitoring Results, March 2007 (submitted May 2007);
8. Groundwater Monitoring Results, June 2007 (submitted August 2007);
9. Groundwater Monitoring Results, September 2007 (submitted October 2007);
10. Groundwater Monitoring Results, January 2008 (submitted March 2008);
11. Groundwater Monitoring Results, April 2008 (submitted May 2008); and
12. Groundwater Monitoring Results, July 2008 (submitted October 2008).

1.3 Background

The following sections provide a description of the site and information on the Facility and USTs.

1.3.1 Site Description

The Facility is located in Halawa Heights on Oahu, Hawaii. Land adjacent to the north of the Facility is occupied by Halawa Correctional Facility and private businesses. Land to the south and west of the Facility includes the Coast Guard Reservation. Moanalua Valley is located east of the Facility (Dawson, 2006).

The Navy Public Works Department operates a potable water infiltration tunnel approximately 1,550 feet hydraulically down-gradient from the Facility (Dawson, 2006). The US Navy Well 2254-01 is located approximately 3,000 feet down-gradient (west) of the Facility and provides approximately 24 % of the potable water to the Pearl Harbor Water System, which serves approximately 52,200 military consumers (TEC, 2008).

1.3.2 Facility Information

The Facility consists of 18 active and 2 inactive USTs operated by Navy FISC Pearl Harbor. Each UST has a capacity of 12.5 million gallons. The Facility is located approximately 100 feet above the basal aquifer (Dawson, 2006).

1.3.3 UST Information

The USTs were constructed in the early 1940s. The tanks were constructed of steel and currently contain Jet Propulsion (JP)–5 fuel and F-76 (diesel marine fuel). Previously, several tanks stored Navy Special Fuel Oil, Navy Distillate, aviation gasoline, and motor gasoline. Each tank measures approximately 245 feet in height and 100 feet in diameter. The upper domes of the tanks lie at depths varying between approximately 100 feet and 200 feet below the existing ground surface (TEC, 2006).

1.4 Previous Environmental Investigations

1998 to 2001: From 1998 to 2001, the Navy conducted an investigation at the Facility to assess potential releases from the fuel storage USTs and piping systems. In February 2001, the Navy installed a one-inch diameter sentinel well RHMW01 (previously known as MW-V1D) to monitor for contamination of the basal aquifer underlying the Facility. The well was installed and completed at approximately 100 feet below grade within the underground access tunnel. At the time of well completion, depth to water in RHMW01 was measured at 86 feet below grade (Dawson, 2006).

In February 2001, groundwater samples collected from sentinel well RHMW01 contained total petroleum hydrocarbons (TPH) concentrations ranging from 883 micrograms per liter (µg/L) to 1,050 µg/L and total lead ranging from 10.4 µg/L to 15 µg/L. The maximum total lead concentration in the samples was equal to the primary drinking water standard of 15 µg/L for lead and exceeded the HDOH Tier 1 groundwater action level of 5.6 µg/L (Dawson, 2006).

2005 – Groundwater Sampling: The Navy began quarterly groundwater sampling at existing monitoring wells in 2005. Dawson Group, Inc. collected groundwater samples from RHMW01 and the Red Hill Navy Pump Station (US Navy Well 2254-01) in February, June, September, and December 2005.

Samples collected in February and June 2005 were not filtered in the field prior to analysis for lead. Analytical results for samples collected from RHMW01 indicated concentrations of total lead were above the HDOH Tier 1 action level of 5.6 μg/L. The results were not considered appropriate for risk assessment since the sample had not been filtered. In addition, lead was not a component of fuels from the tanks near RHMW01. Lead may have been part of the Facility construction material (TEC, 2007).

Samples were filtered in September and December 2005, and dissolved lead concentrations were below the HDOH Tier 1 action level. Concentrations of all other contaminants of potential concern were below HDOH Tier 1 action levels.

2005 – Site Investigation: As part of a site investigation, TEC installed three groundwater monitoring wells at the Facility between June and September 2005. Well RHMW02 was installed in the lower access tunnel near Tanks 5 and 6. Well RHMW03 was installed in the lower access tunnel near Tanks 13 and 14. Well RHMW04 was installed hydraulically upgradient of the USTs to provide geochemistry for water moving through the basal aquifer beneath the Facility. Wells RHMW02 and RHMW03 were completed to depths of approximately 125 feet below the tunnel floor, and well RHMW04 was completed to a depth of approximately 300 feet below ground surface outside the tunnel. Groundwater samples were collected from the three newly installed wells and two existing wells (RHMW01 and US Navy Well 2254-01) in September 2005.

Naphthalene and trichloroethylene were detected in samples collected from RHMW02 at concentrations greater than the HDOH Tier 1 action levels. Lead was detected in the sample collected from RHMW01 at a concentration greater than the HDOH Tier 1 action level; however, the sample was not filtered in the field prior to analysis. Analytical results for filtered samples obtained by Dawson during the same period indicated concentrations of dissolved lead were below the HDOH Tier 1 action level.

2006 – Site Investigation: Dedicated sampling pumps were installed in five wells (RHMW01, RHMW02, RHMW03, RHMW04, and US Navy Well 2254-01). TEC collected groundwater samples from the wells in July 2006. The groundwater samples were analyzed for petroleum constituents. Naphthalene was detected in samples collected from RHMW02 at concentrations above the HDOH Tier 1 action level.

In September 2005, with concurrence from the HDOH, the Navy decided to use the newer HDOH Environmental Action Levels (EALs) for the Red Hill Site Investigation and Risk Assessment project. The EALs are current and provide action levels for more chemicals, and are much more useful for conducting screening risk assessments. Since the HDOH June 2005 Policy Letter stated that the two sets of action levels should not be mixed, the Tier 1 screening levels

presented in HAR Section 11-281-78 would no longer be used to evaluate environmental impact at the Facility.

2006 – Groundwater Sampling: Groundwater samples were collected in December 2006. Analytical results indicated the following:

- No chemicals were detected in groundwater from US Navy Well 2254-01 or RHMW03;
- TPH as diesel range organics (TPH-DRO) was detected in groundwater above the HDOH Drinking Water EALs in RHMW01; and
- TPH as gasoline range organics (TPH-GRO), TPH-DRO, and naphthalene were detected in groundwater above the HDOH Drinking Water EALs in RHMW02.

2007 – Groundwater Sampling: Groundwater samples were collected in March, June, and September 2007. Analytical results indicated the following:

- No chemicals were detected above HDOH Drinking Water EALs at US Navy Well 2254-01;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW01 during all three sampling events;
- TPH-GRO exceeded HDOH Drinking Water EALs at RHMW02 in March;
- TPH-DRO and naphthalene exceeded HDOH Drinking Water EALs at RHMW02 during all three sampling events;
- 1-methylnaphthalene and 2-methylnaphthalene exceeded HDOH Drinking Water EAL for taste and odor at RHMW02 during all three sampling events; and
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW03 in June.

2008 – Groundwater Sampling: Groundwater samples were collected in January, April, and July 2008. Analytical results indicated the following:

- No chemicals were detected above HDOH Drinking Water EALs at US Navy Well 2254-01;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW01;
- TPH-GRO did not exceed HDOH Drinking Water EALs at RHMW02;
- TPH-DRO, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene exceeded HDOH Drinking Water EALs at RHMW02; and
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW03.

1.5 Regulatory Updates

During the summer and fall of 2008, HDOH updated their EALs, which resulted in significant changes to the action levels associated with methylnaphthalenes. The drinking water toxicity EAL for these compounds was previously 240 μg/L, assuming they were not carcinogens. Evidence that they are carcinogenic to humans has now been accepted by the United States Environmental Protection Agency (USEPA), and HDOH adopted more rigorous EALs of 4.7 μg/L for 1-methylnaphthalene and 24 μg/L for 2-methylnaphthalene, corresponding to a residential tap water scenario, and a 1 in a million cancer risk (HDOH, 2008).

The drinking water EAL for naphthalene has also been updated during this process. Previously, HDOH based their naphthalene EAL on USEPA Region 9 Preliminary Remediation Goal (USEPA PRG) of 6.2 μg/L, which is associated with a non-cancer Hazard Index of 1. HDOH has updated their naphthalene drinking water EAL to 17 μg/L, in deference to the California Department of Public Health's Drinking Water Notification Levels, a Hazard Index of 2.7 (HDOH, 2008).

Finally, the drinking water EAL for TPH-DRO was increased from 100 μg/L to 210 μg/L, although the gross contamination EAL for TPH-DRO remains 100 μg/L.

2.0 Sample Collection and Analyses

The majority of field activities relating to groundwater sample collection were conducted on October 22, 2008. Groundwater samples were collected from three monitoring wells located inside the Facility lower access tunnel and one monitoring well located at the Red Hill Navy Pump Station. Sampling and analysis were conducted according to *Red Hill Bulk Fuel Storage Facility Groundwater Protection Plan* (TEC, 2008). A total of seven samples were collected; one normal sample from monitoring wells US Navy Well 2254-01, RHMW01, RHMW02 and RHMW03, one duplicate sample from RHMW02 (Sampled as RHMWA01 and reported as RHMW02-WG11D), and one matrix spike and matrix spike duplicate from US Navy Well 2254-01.

The groundwater at RHMW01 was resampled for dissolved lead on November 3, 2008 because the original sample was not filtered in the field.

Due to trace concentrations of naphthalene detected in the October 22, 2008 sample from the US Navy Well 2254-01, an additional sample was collected for Volatile Organic Compounds (VOCs) at US Navy Well 2254-01 on December 16, 2008, including one duplicate for VOCs.

2.1 Monitoring Well Purging

The groundwater monitoring wells were purged and sampled using a dedicated pump system. Well purging was considered complete when no less than three successive water quality parameter measurements had stabilized within approximately 10 percent. Field parameters were measured at regular intervals during well purging and included pH, temperature, specific conductivity, dissolved oxygen, and turbidity. Purge water was disposed in the Facility oil/water separator system.

2.2 Groundwater Sample Collection

Each monitoring well was sampled immediately following purging. All wells were sampled directly from their dedicated bladder pump system. Samples were placed into sampling containers with appropriate preservatives (i.e., hydrochloric acid [HCl] for volatile organic analysis, nitric acid [HNO_3] for dissolved lead). Dissolved lead samples were filtered in the field and placed in preserved bottles. Sample containers were labeled with the date, sample identification number, type of analysis, and sampler's name. The containers were placed on ice in sample coolers and transported under chain-of-custody procedures to the certified laboratory for analysis.

2.3 Groundwater Sample Analyses

Groundwater samples were analyzed by SGS Environmental Service, Inc. in Anchorage, Alaska for TPH-DRO and TPH-GRO by EPA Method 8015B, VOCs by EPA Method 8260B, polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270C SIM, and dissolved lead by EPA Method 6020.

3.0 Groundwater Sample Analytical Results

This section provides a summary of analytical results for groundwater samples collected from three monitoring wells located in the lower access tunnel of the Facility and one monitoring well located at the Red Hill Navy Pump Station. Duplicate sample results from monitoring wells RHMW02 and RHMW2254-01 are reported in this document as RHMW02D and RHMW2254-01D, respectively. A summary of groundwater analytical results is included in Table 1. Complete analytical laboratory reports are provided in Appendix A.

3.1 October 2008 Sample Analytical Results

All groundwater samples were analyzed for TPH-DRO, TPH-GRO, VOCs, PAHs, and dissolved lead. Naphthalene and 1-methylnaphthalene were detected at US Navy Well 2254-01 at 0.05F µg/L and 0.03F µg/L, respectively. This is below the HDOH Drinking Water EALs of 17 µg/L for naphthalene and 4.7 µg/L for 1-methylnaphthlene. Data qualifier "F" indicates the result is between the method detection limit (MDL) and the reporting limit (RL) and considered an estimated value. However, naphthalene or 1-methynapthalene are generally not observed in groundwater from JP-5 releases when TPH is not detected. For this reason, these low-concentration PAH results may not be from the groundwater, but the source of the expected cross-contamination is not known. Following the receipt of the preliminary results, FISC implemented an immediate re-sampling of the US Navy Well 2254-01 for VOCs, including naphthalene.

RHMW01

Four petroleum constituents were detected at RHMW01: TPH-DRO, fluorene, naphthalene, and lead. TPH-DRO was detected at RHMW01 at 459 µg/L, which is above the HDOH Drinking Water EAL of 210 µg/L. All other petroleum constituents were below HDOH Drinking Water EALs at RHMW01.

RHMW02

Eight petroleum constituents were detected at RHMW02: TPH-DRO, TPH-GRO, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, fluorene, naphthalene, benzene, and ethylbenzene. TPH-DRO was detected at RHMW02 in the normal and duplicate samples, at 4,540 µg/L and 6,300 µg/L, respectively. Both results exceeded the HDOH EAL and site-specific risk based level (SSRBL) (the HDOH EAL is 210 µg/L and the SSRBL is 4,500 µg/L).

Naphthalene was analyzed by USEPA Method 8270C SIM and USEPA Method 8260B. USEPA Method 8260B produced the highest naphthalene concentrations, which averaged 242 µg/L from the normal and duplicate sample (HDOH EAL is 17 µg/L). In addition, 1-methylnaphthalene and 2-methylnapthalene were detected by USEPA Method 8270C SIM in the normal and duplicate samples. The average result for 1-methylnaphthalene was 67.25 µg/L, greater than the HDOH toxicity EAL of 4.7 µg/L. The average result for 2-methylnaphthalene was 13.2 µg/L, less than the HDOH toxicity EAL of 24 µg/L but greater than the HDOH taste and odor EAL of 10 µg/L. All other petroleum constituents were below HDOH Drinking Water EALs at RHMW02.

RHMW03

Four constituents were detected at RHMW03: TPH-DRO, 1-methylnaphthylene, 2-methylnaphthalene, and naphthalene. TPH-DRO was detected at RHMW03 at 244 µg/L, slightly above the HDOH EAL of 210 µg/L. All other petroleum constituents were below HDOH Drinking Water EALs at RHMW03.

US Navy Well 2254-01 as RHMW2254

RHMW2254 was sampled twice during this reporting period. On October 22, 2008, trace concentrations (less than the reporting limit but greater than the detection limit) of naphthalene (0.05 µg/L) and 1-methylnaphthalene (0.03 µg/L) were detected by USEPA Method 8270C SIM. On December 16, 2008, RHMW2254 was re-sampled by USEPA Method 8260B. Although no petroleum constituents were observed in the re-sample, the method detection limit for naphthalene was 0.62 µg/L and 1-methylnaphthalene was not analyzed.

Table 1. Analytical Results for Quarterly Groundwater Monitoring Release Response Report (October 22, 2008 and December 16, 2008)
Red Hill Fuel Storage Facility, Pearl Harbor, Hawaii

Method	Chemical	HDOH Residential Drinking Water EALs[1] UG/L	HDOH Drinking Water Ceiling EALs[2] UG/L	RHMW01 UG/L October 22, 2008				RHMW02 UG/L October 22, 2008				RHMW02D UG/L October 22, 2008				RHMW03 UG/L October 22, 2008				RHMW2254 UG/L October 22, 2008				RHMW2254 UG/L December 16, 2008				RHMW2254D UG/L December 16, 2008			
				Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
8015B (Petroleum)	TPH as DIESEL RANGE ORGANICS	210	100	***459***		82.50	412.00	***4540***		80.00	400.00	***6300***		98.20	491.00	***244***	F	88.40	442.00	ND	U	84.20	421.00	NA	NA	NA	NA	NA	NA	NA	NA
	TPH as GASOLINE RANGE ORGANICS	100	100	ND	U	10.00	100.00	52.80	F	10.00	100.00	52.90	F	10.00	100.00	ND	U	10.00	100.00	ND	U	10.00	100.00	NA	NA	NA	NA	NA	NA	NA	NA
8270C SIM (PAHs)	1-METHYLNAPHTHALENE	4.7	10	ND	U	0.015	0.05	***72.10***		0.781	2.6	***62.40***		0.75	2.5	0.07		0.0155	0.0515	0.03	F	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	2-METHYLNAPHTHALENE	24	10	ND	U	0.015	0.05	***13.70***		0.313	1.04	***12.70***		0.3	1	0.09		0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	ACENAPHTHENE	370	20	ND	U	0.015	0.05	0.37		0.0156	0.0521	0.21		0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	ACENAPHTHYLENE	240	2000	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	ANTHRACENE	1800	22	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	BENZO(a)ANTHRACENE	0.092	5	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	BENZO(a)PYRENE	0.2	1.9	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	BENZO(b)FLUORANTHENE	0.092	7	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	BENZO(g,h,i)PERYLENE	1500	0.13	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	BENZO(k)FLUORANTHENE	0.92	0.4	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	CHRYSENE	9.2	0.8	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	DIBENZ(a,h)ANTHRACENE	0.0092	0.25	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	FLUORANTHENE	1500	130	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	FLUORENE	240	950	0.02	F	0.015	0.05	0.21		0.0156	0.0521	0.12		0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	INDENO(1,2,3-c,d)PYRENE	0.092	0.27	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	NAPHTHALENE	17	21	0.10		0.031	0.1	***97.40***		1.61	5.21	***82.30***		1.55	5	0.22		0.032	0.103	0.05	F	0.031	0.1	NA	NA	NA	NA	NA	NA	NA	NA
	PHENANTHRENE	240	410	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
	PYRENE	180	68	ND	U	0.015	0.05	ND	U	0.0156	0.0521	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.015	0.05	NA	NA	NA	NA	NA	NA	NA	NA
8260B (VOCs)	1,1,1,2-TETRACHLOROETHANE	0.43	50000	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5
	1,1,1-TRICHLOROETHANE	200	970	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	1,1,2,2-TETRACHLOROETHANE	0.067	500	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5
	1,1,2-TRICHLOROETHANE	5	50000	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	1,1-DICHLOROETHANE	2.4	50000	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	1,2,4-TRICHLOROBENZENE	3.8	3000	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.04	10	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2
	1,2-DICHLOROPROPANE	5	10	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	1,3-DICHLOROBENZENE	180	50000	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	1,3-DICHLOROPROPANE	0.4	50000	ND	U	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4
	1,4-DICHLOROBENZENE	75	5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5
	ACETONE	22000	20000	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10
	BENZENE	5	170	ND	U	0.12	0.4	0.14	F	0.12	0.4	0.15	F	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4	ND	U	0.12	0.4
	BROMODICHLOROMETHANE	0.18	50000	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5
	BROMOFORM	100	510	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	BROMOMETHANE	8.5	50000	ND	U	0.94	3	ND	U	0.94	3	ND	U	0.94	3	ND	U	0.94	3	ND	U	0.94	3	ND	U	0.94	3	ND	U	0.94	3
	CARBON TETRACHLORIDE	5	520	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	CHLOROBENZENE	100	50	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5	ND	U	0.15	0.5
	CHLOROETHANE	3.9	16	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	CHLOROFORM	100	2400	ND	U	0.3	1	ND	U	0.3	1	ND	U	0.3	1	ND	U	0.3	1	ND	U	0.3	1	ND	U	0.3	1	ND	U	0.3	1
	CHLOROMETHANE	160	50000	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	cis-1,2-DICHLOROETHYLENE	70	50000	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	DIBROMOMETHANE	0.0056	50000	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	ETHYLBENZENE	1.5	30	ND	U	0.31	1	0.45	F	0.31	1	0.42	F	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	HEXACHLOROBUTADIENE	0.86	6	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	M,P-XYLENE (SUM OF ISOMERS)	10000	20	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2
	METHYL ETHYL KETONE (2-BUTANONE)	7000	8400	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10
	METHYL ISOBUTYL KETONE	2000	1300	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10
	METHYLENE CHLORIDE	4.3	9100	ND	U	1	5	ND	U	1	5	ND	U	1	5	ND	U	1	5	ND	U	1	5	ND	U	1	5	ND	U	1	5
	NAPHTHALENE	17	21	ND	U	0.62	2	***239.00***		12.4	40	***245.00***		12.4	40	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2
	STYRENE	100	10	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	TETRACHLOROETHYLENE(PCE)	5	170	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	TOLUENE	1000	40	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	trans-1,2-DICHLOROETHENE	100	260	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	TRICHLOROETHYLENE (TCE)	5	310	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	VINYL CHLORIDE	2	3400	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
6020	LEAD	15	50000	0.97	F	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	NA	NA	NA	NA	NA	NA	NA	NA

PAHs - Polynuclear aromatic hydrocarbons
VOCs - Volatile organic compounds
UG/L - Micrograms per Liter
Q - Data qualifier
U - Indicates that the compound was analyzed for but not detected at or above the stated limit
F - Indicates that the compound was identified but the concentration was above the MDL and below the RL
200 - Result exceeds one or both HDOH EALs
[1] Toxicity-based environmental action levels, Table D-1b, *Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater,* HDOH, 2008
[2] Taste, odor and solubility thresholds, Table G-1, *Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater* , HDOH, 2008

MDL - Method detection limit
RL - Reporting limit
TPH - Total petroleum hydrocarbons
ND - Indicates that the compound was not detected above the stated method detection limit
NA - not analyzed

3.2 Groundwater Contaminant Trend

Groundwater samples have been collected and analyzed by TEC since September 2005. Figure 1 shows TPH trends in groundwater at the Facility. Figure 2 shows PAH trends in groundwater at the Facility. In these figures, open icons (without fill) represent the method detection limit for chemicals that were not detected.

RHMW01

TPH-GRO has only been detected in April 2008 at 13.6F µg/L, which is below the HDOH Drinking Water EAL of 100 µg/L. In October 2008, TPH-GRO was not detected. TPH-DRO was detected above the HDOH Drinking Water EAL during all groundwater sampling events and showed a decreasing trend until the January 2008 sampling event. Concentration of TPH-DRO observed during the October 2008 sampling event was greater than the concentrations observed in April and July 2008, but lower than the January 2008 sampling event.

RHMW02

TPH-GRO was detected in nine of ten sampling events since September 2005, and exceeded the HDOH Drinking Water EAL three times during 2006 and 2007. The maximum concentration detected was 148 µg/L. The concentration of TPH-DRO was relatively stable at RHMW02 until January 2008, ranging from 2,250 to 3,180 µg/L. However, since January 2008 it has shown an increasing trend with concentrations up to 5,420 µg/L, well above the HDOH EAL, and above the SSRBL of 4,500 µg/L. PAHs at RHMW02 remain above the HDOH Drinking Water EALs, and concentrations have decreased in October 2008 after showing an increasing trend since January 2008.

RHMW03

TPH-GRO has never been detected. TPH-DRO had shown a decreasing trend until the January 2008 sampling event. Concentrations of TPH-DRO observed during the October 2008 sampling event were higher than the previous rounds. In general, concentrations of petroleum-related compounds at RHMW03 have been the lowest of the three wells located within the Facility.

3.3 Results of Oil/Water Interface Measurements

The presence and thickness of light-non aqueous phased liquids (LNAPL), otherwise known as free product, released from the USTs were measured during this sampling event using a 300 ft Heron Oil/Water Interface Meter. The static water levels were measured to a precision of ± 0.01 ft and fuel thickness was measured to a precision of ± 0.01 ft with this equipment.

In January 2008, fuel was measured in monitoring wells RHMW01 and RHMW02 at a thickness of < 0.01 ft, but has not been observed in other monitoring wells as of this document.

Measurements to determine the presence and thickness of fuel were conducted at RHMW01, RHMW02, and RHMW03 during the current sampling round. No fuel product was observed in any of these wells during this event (see Table 2).

Table 2. Oil/Water Interface Measurements

Date	RHMW01		RHMW02		RHMW03	
	SWL (ft)	LNAPL (ft)	SWL (ft)	LNAPL (ft)	SWL (ft)	LNAPL (ft)
January 2008	17.74	< 0.01	18.78	< 0.01	NT	NT
July 2008	19.04	0.00	18.91	0.00	18.86	0.00
October 2008	18.61	0.00	18.56	0.00	18.82	0.00
November 2008	18.50	0.00	18.45	0.00	18.51	0.00

SWL Static water level, elevation above mean sea level
LNAPL Light Non-Aqueous Phased Liquid, fuel product on groundwater
ft Feet
NT Not Taken

3.4 Groundwater Status

Compounds of concern are defined as those petroleum-related chemicals that have been observed in the groundwater samples above the HDOH EALs. In accordance with the *Red Hill Bulk Fuel Storage Facility Final Groundwater Protection Plan* (TEC, 2008), Table 3 defines the constituents of concern in groundwater at the Facility and the SSRBLs and updated EALs for each (HDOH 2008).

Table 3. Action Levels for Constituents of Concern

Chemical	EAL (µg/L)	SSRBL (µg/L)
Petroleum Mixtures		
TPH-DRO	210	4,500
TPH-GRO	100	4,500
Semi-Volatile Compounds		
1-Methylnaphthalene	4.7	NA
2-Methylnaphthalene	24	NA
Naphthalene	17	NA

NA – Not applicable or not determined
SSRBLs are applicable at RHMW01, RHMW02, and RHMW03
EALs are applicable at US Navy Well 2254-01

In addition, the Plan defines four results categories of groundwater status for the Facility, based on concentrations of constituents of concern in RHMW01, RHMW02, RHMW03 and the US Navy Well 2254-01, and requires specific responses when these categories are observed during quarterly groundwater sampling. Table 4 describes each of the four results categories and identifies response actions to be taken in accordance with the Plan.

Table 4. Results Categories and Response Actions to Changes in Groundwater Status

Results Category	RHMW02 or RHMW03	RHMW01	US Navy Pumping Well 2254-01
Results Category 1: Result above detection limit but below drinking water EAL and trend for all compounds stable or decreasing	A	A	A,D,M,E,P
Results Category 2: Trend for any compound increasing or drinking water EAL exceeded	A, B	A, B	A,B,C,D,E,F,G,K, L,O
Results Category 3: Result Between 1/10X SSRBL and SSRBL for benzene, or between 1/2X SSRBL and SSRBL for TPH	A,B,G,H,I,J	A,B,E,G,H,I,J	A,B,C,D,E,F,G,I,J, K,L,O
Results Category 4: Result Exceeding any SSRBL or petroleum product observed	A,C,D,E,F,I,J, K,M,N	A,C,D,E,F,I, J,K,M,N,O	A,C,D,E,F,G,I,J,K, L,O

Specific Responses:
A. Send quarterly reports to HDOH
B. Begin program to determine the source of leak
C. Notify HDOH verbally within 1 day and follow with written notification in 30 days
D. Notify FISC Chain of Command within 1 day
E. Send Type 1 Report (see box below) to HDOH
F. Send Type 2 Report (see box below) to HDOH
G. Increase monitoring frequency to once per month (if concentrations increasing)
H. Notify HDOH verbally within 7 days and follow with written notification in 30 days
I. Remove sampling pumps, measure product in pertinent wells with interface probe, re-install pumps if product is not detected.
J. Immediately determine leaking tank
K. Collect samples from nearby Halawa Deep Monitoring Well (2253-03) and OWDF MW01
L. Provide alternative water source at 2254-01
M. Prepare for alternative water source at US Navy Well 2254-01
N. Re-measure for product every month with reports to HDOH
O. Install additional monitoring well downgradient

Report Types

HDOH Type 1 Report

- Re-evaluate Tier 3 Risk Assessment/groundwater model results
- Proposal to HDOH on a course of action

HDOH Type 2 Report

- Proposal for groundwater treatment

Based on the monitoring event that occurred in October and November 2008, no free product was observed at RHMW01, RHMW02, or RHMW03. Results from groundwater samples indicate that RHMW01 and RHMW03 are presently in Category 2 status, since TPH-DRO is greater than the HDOH EAL for drinking water (210 µg/L), but less than half the SSRBL of 4,500 µg/L (solubility limit of JP-5). Category 2 response at RHMW01 and RHMW03 requires:

1. Quarterly reports to be sent to HDOH; and
2. Initiation of a leak determination program to identify if tanks are leaking.

Results from groundwater samples indicate that RHMW02 is presently in Category 4 status, since TPH-DRO (4,540 µg/L and 6,300 µg/L [duplicate]) is greater than the SSRBL of 4,500 µg/L (solubility limit of JP-5). Category 4 response at RHMW02 requires:

A. Send quarterly reports to HDOH
C. Notify HDOH verbally within 1 day and follow with written notification in 30 days
D. Notify FISC Chain of Command within 1 day
E. Send Type 1 Report to HDOH
F. Send Type 2 Report to HDOH
I. Remove sampling pumps measure product in pertinent wells with interface probe, re-install pumps if product is not detected.
J. Immediately evaluate tanks for leaks
K. Collect samples from nearby Halawa Deep Monitoring Well (2253-03) and OWDF MW01. For permission to sample 2253-03, call DLNR Commission on Water Resource Management (808) 587-0214, DLNR.CWRM@Hawaii.gov
M. Prepare for alternative water source at US Navy Well 2254-01
N. Re-measure for product every month with reports to HDOH

In response to the previous Category 3 conditions at RHMW02, oil/water interface measurements were collected in October 2008 and November 2008 at RHMW01, RHMW02 and RHMW03. To date, there is no evidence of fuel on groundwater at any of these wells based on oil/water interface measurements.

Category 4 groundwater status at RHMW02 requires additional efforts, including:

- Re-evaluate risk assessment and groundwater model (TEC, 2007) to ensure both are valid and protective of human health and the environment under the existing conditions and provide a report describing the results of this re-evaluation to the HDOH;
- Evaluate potential requirement for groundwater treatment and provide a report describing the results of this re-evaluation to the HDOH;
- Implement monthly oil/water interface measurements at RHMW01, RHMW02, RHMW03, and provide monthly letter reports of the results;
- Evaluate tanks associated with the middle section of the Facility (Tanks 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14);
- Collect samples from nearby Halawa Deep Monitoring Well (2253-03) and OWDF MW01;
- Prepare for alternative water source at US Navy Well 2254-01, as necessary.

4.0 Summary and Conclusions

At RHMW02, the concentration of TPH-DRO in groundwater exceeded the SSRBL of 4,500 µg/L, which indicates Category 4 groundwater status at RHMW02.

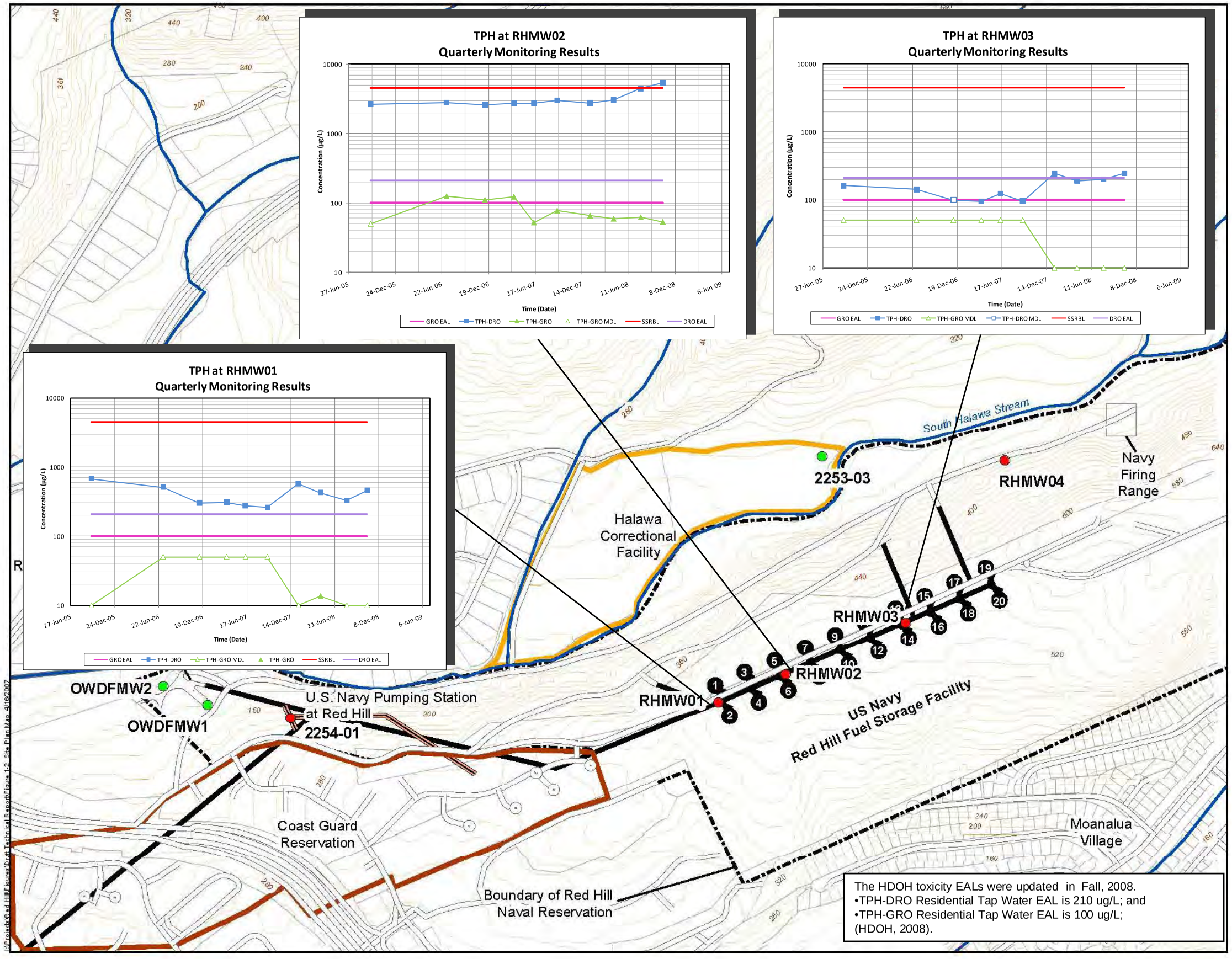
- The SSRBL of TPH-DRO is set at the solubility limit of JP-5 and exceeding the SSRBL implies that JP-5 is in direct contact with groundwater in the vicinity of RHMW02.
- Oil/water interface measurements were collected in October 2008 and November 2008 from RHMW01, RHMW02, and RHMW03 and no fuel thickness was measured.
- The concentration of TPH-DRO measured at RHMW01 in October 2008 was one tenth of the SSRBL. RHMW01 is down-gradient from RHMW02 and between RHMW02 and the US Navy Well 2254-01, an important drinking water source for the Pearl Harbor Water System.
- The US Navy Well 2254-01 is not imminently threatened at this time; however, conditions should be monitored closely to determine if any USTs in the Facility are currently leaking fuel into the subsurface.
- Category 4 activities should be implemented, including:
    - Re-evaluate risk assessment and groundwater model (TEC, 2007) to ensure both are valid and protective of human health and the environment under the existing conditions and provide a report describing the results of this re-evaluation to the HDOH;
    - Evaluate potential requirement for groundwater treatment and provide a report describing the results of this re-evaluation to the HDOH;
    - Implement monthly oil/water interface measurements at RHMW01, RHMW02, RHMW03, and provide monthly letter reports of the results;
    - Evaluate tanks associated with the middle section of the Facility (Tanks 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14);
    - Collect samples from nearby Halawa Deep Monitoring Well (2253-03) and OWDF MW01;
    - Prepare for alternative water source at US Navy Well 2254-01, as necessary.

The US Navy plans to install an additional monitoring well (RHMW05) in the lower access tunnel of the Facility between RHMW01 and the US Navy Well 2254-01 to better monitor the quality of the groundwater moving from the Facility to the US Navy Well 2254-01.

Although the results from the groundwater sample collected from US Navy Well 2254-01 in October 2008 showed trace concentrations of naphthalene and 1-methylnaphthalene, no other petroleum constituents were detected in this sample. This well was re-sampled in December 2008. The sample was analyzed by USEPA Method 8620B and no petroleum constituents were detected.

It is recommended that RHMW01, RHMW02, RHMW03, and RHMW05 be evaluated monthly for the presence of fuel on groundwater, in accordance with the Plan. The US Navy plans to install dedicated oil/water interface probes in each of these wells to facilitate these measurements.

It is also recommended that quarterly groundwater sampling for TPH-DRO, TPH-GRO, VOCs, PAHs, and lead be continued as previously scheduled until new data indicates that a different schedule is required. The quarterly collection and analysis of groundwater samples will continue to monitor the quality of the groundwater located beneath the Facility. Groundwater monitoring reports will be submitted to the HDOH upon receipt and evaluation of laboratory analytical results.



Legend

- Red Hill UST ID Number
- Parcel
- 40-foot Interval Contour Line
- Unpaved Road
- Road
- Stream
- Red Hill Navy Installation Boundary
- Red Hill Tunnels
- 2254-01 Infiltration Gallery
- Halawa Correctional Facility Boundary
- Coast Guard Reservation

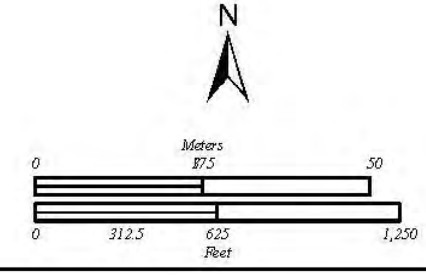
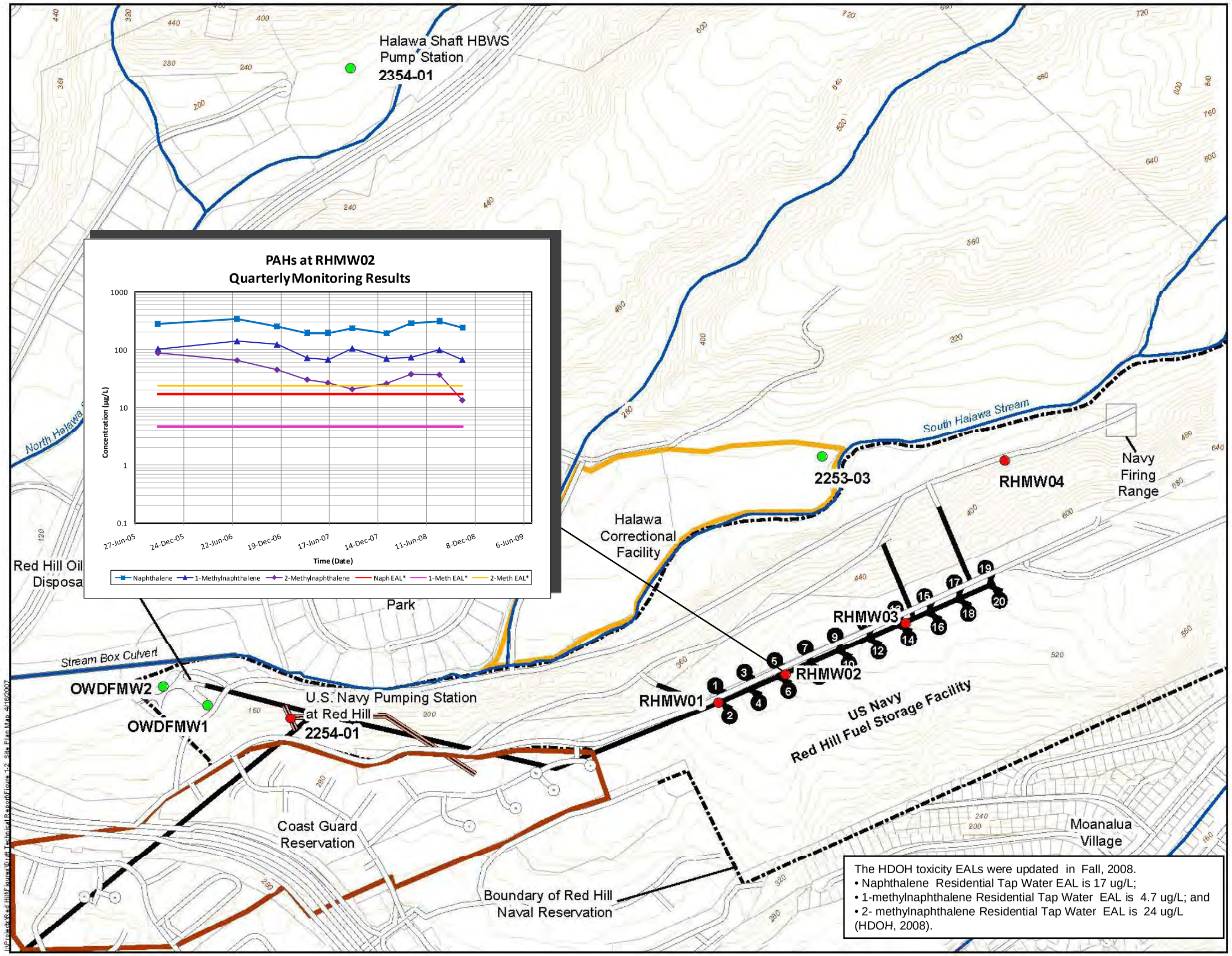


Figure 1
TPH Trends in Groundwater
Round 13 (October 22, 2008)
Red Hill Fuel Storage Facility
Oahu, Hawaii



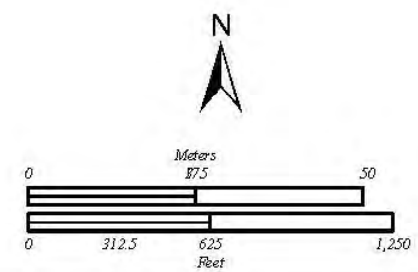


Figure 2
PAH Trends in Groundwater
Round 13 (October 22, 2008)
Red Hill Fuel Storage Facility
Oahu, Hawaii

5.0 References

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Appendix A
Laboratory Analytical Reports

SGS Environmental Services
Alaska Division
Level II Laboratory Data Report

Project:	9121-003 Red Hill BFSF
Client:	The Environmental Company, Inc. (TEC)
SGS Work Order:	1085813

Released by:

Contents:

Note:
Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

SGS Environmental Services Inc.

Case Narrative

Customer: THEENVC **The Environmental Company, Inc. (TEC)**

Project: 1085813 **9121-003 Red Hill BFSF**

NPDL WO:

Refer to the sample receipt form for information on sample condition.

1085813001 PS **RHMW2254-WG13**

8015C DRO - LCS recovery is outside of acceptance criteria (biased low). The sample was re-extracted outside of the 14 day holding time and reanalyzed. The results did confirm with passing QC. Results for all associated samples are considered estimated.

1085813004 PS **RHMW03-WG13**

8015C DRO - MS/MSD were not spiked due to lab error. See LCS/LCSD for precision and accuracy.

1085813005 PS **RHMW02-WG13**

8015C DRO - The pattern is consistent with a weathered middle distillate.

8015C DRO - MS/MSD were not spiked due to lab error. See LCS/LCSD for precision and accuracy.

1085813006 PS **RHMWA01-WG13**

8015C DRO - The pattern is consistent with a weathered middle distillate.

8015C DRO - MS/MSD were not spiked due to lab error. See LCS/LCSD for precision and accuracy.

1085813007 PS **RHMW01-WG13**

8015C DRO - Unknown hydrocarbon with several peaks is present.

8015C DRO - MS/MSD were not spiked due to lab error. See LCS/LCSD for precision and accuracy.

1085813002 BMS **RHMW2254-WG13 MS**

8015C DRO - LCS recovery is outside of acceptance criteria (biased low). The sample was re-extracted outside of the 14 day holding time and reanalyzed. The results did confirm with passing QC. Results for all associated samples are considered estimated.

868545 MS **1085813001MS**

8015C DRO - MS/MSD were not spiked due to lab error. See LCS/LCSD for precision and accuracy.

1085813003 BMSD **RHMW2254-WG13 MSD**

8015C DRO - LCS recovery is outside of acceptance criteria (biased low). The sample was re-extracted outside of the 14 day holding time and reanalyzed. The results did confirm with passing QC. Results for all associated samples are considered estimated.

868546 MSD **1085813001MSD**

8015C DRO - MS/MSD were not spiked due to lab error. See LCS/LCSD for precision and accuracy.

869198 LCS **XXX/20313]**

8015C DRO - LCS recovery is outside of acceptance criteria (biased low). Results for all associated samples are considered estimated.

Laboratory Analytical Report

Client: **The Environmental Company, Inc.**
1001 Bishop Street Ste 1400
ASB Tower
Honolulu, HI 96813

Attn: **Jeff Hart**
T: (808)528-1445 F:(808)528-0768
jshart@tecinc.com

Project: **9121-003 Red Hill BFSF**

Workorder No.: **1085813**

Certification:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, other than the conditions noted on the sample data sheet(s) and/or the case narrative. This certification applies only to the tested parameters and the specific sample(s) received at the laboratory.

If you have any questions regarding this report, or if we can be of further assistance, please contact your SGS Project Manager.

Tamara Rentz
tamara.rentz@sgs.com
Project Manager

Print Date: 11/20/2008

Enclosed are the analytical results associated with this workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Assurance Plan (QAP), which outlines this program is available at your request.

The Laboratory certification numbers are AK971-05 (DW), UTS-005 (CS) and AK00971 (Micro) for ADEC and AK100001 for NELAP (RCRA methods: 1020A, 1311, 6010B, 7470A, 7471A, 9040B, 9045C, 9056, 9060, 8015B, 8021B, 8081A/8082, 8260B, 8270C).

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP, the National Environmental Laboratory Accreditation Program and, when applicable, other regulatory authorities.

If you have any questions regarding this report or if we can be of any assistance, please contact your SGS Project Manager at 907-562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

MDL	Method Detection Limit
PQL	Practical Quantitation Limit (reporting limit).
CL	Control Limit
U	Indicates the analyte was analyzed for but not detected.
F	Indicates value that is greater than or equal to the MDL.
J	The quantitation is an estimation.
ND	Indicates the analyte is not detected
B	Indicates the analyte is found in a blank associated with the sample.
*	The analyte has exceeded allowable regulatory or control limits.
D	The analyte concentration is the result of dilution.
GT	Greater Than
LT	Less Than
Q	QC parameter out of acceptance range.
M	A matrix effect was present.
E	The analyte result is above the calibrated range.
R	Rejected
DF	Analytical Dilution Factor
JL	The analyte was positively identified, but the quantitation is a low estimation.
<Surr>	Surrogate QC spiked standard
<Surr/IS>	Surrogate / Internal Standard QC spiked standard
QC	Quality Control
QA	Quality Assurance
MB	Method Blank
LCS (D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
BMS(D)	Site Specific Matrix Spike
RPD	Relative Percent Difference
ICV	Initial Calibration Verification
CCV	Continuous Calibration Verification
MSA	Method of Standard Addition

Notes: Soil samples are reported on a dry weight basis unless otherwise specified
All DRO/RRO analysese are integrated per SOP.

SAMPLE SUMMARY

Print Date: 11/20/2008

Client Name: The Environmental Company, Inc. (TEC)
Project Name: 9121-003 Red Hill BFSF
Workorder No.: 1085813

Analytical Methods

Method Description	Analytical Method
8270 PAH SIM Semi-Vol GC/MS Liq/Liq ext.	8270D SIMS
AFCEE 3.1 8260 (W)	SW8260B
Dissolved Metals by ICP-MS	SW6020
DRO by 8015B (W)	SW8015C
GRO (W)	SW8015C

Sample ID Cross Reference

Lab Sample ID	Client Sample ID
1085813001	RHMW2254-WG13
1085813002	RHMW2254-WG13 MS
1085813003	RHMW2254-WG13 MSD
1085813004	RHMW03-WG13
1085813005	RHMW02-WG13
1085813006	RHMWA01-WG13
1085813007	RHMW01-WG13
1085813008	TB01-WG13

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW2254-WG13**
SGS Ref. #: 1085813001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 09:30
Receipt Date/Time: 10/24/08 10:50

Dissolved Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Lead	ND	1.00	0.310	ug/L	5	MMS5719	MXX21031	

Batch Information

Analytical Batch: MMS5719
Analytical Method: SW6020
Analysis Date/Time: 11/14/08 20:12
Dilution Factor: 5

Prep Batch: MXX21031
Prep Method: SW3010A
Prep Date/Time: 11/04/08 18:15

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1085813001-G
Analyst: NRB

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW2254-WG13**
SGS Ref. #: 1085813001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 09:30
Receipt Date/Time: 10/24/08 10:50

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	ND	100	10.0	ug/L	1	VFC9248	VXX18967	
4-Bromofluorobenzene <surr>	99.1	50-150		%	1	VFC9248	VXX18967	

Batch Information

Analytical Batch: VFC9248
Analytical Method: SW8015C
Analysis Date/Time: 10/30/08 10:09
Dilution Factor: 1

Prep Batch: VXX18967
Prep Method: SW5030B
Prep Date/Time: 10/30/08 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813001-A
Analyst: HM

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW2254-WG13**
SGS Ref. #: 1085813001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 09:30
Receipt Date/Time: 10/24/08 10:50

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	ND	0.421	0.0842	mg/L	1	XFC8338	XXX20313	
5a Androstane <surr>	93.1	50-150		%	1	XFC8338	XXX20313	

Batch Information

Analytical Batch: XFC8338
Analytical Method: SW8015C
Analysis Date/Time: 11/05/08 09:36
Dilution Factor: 1

Prep Batch: XXX20313
Prep Method: SW3520C
Prep Date/Time: 11/03/08 17:15

Initial Prep Wt./Vol.: 950 mL
Prep Extract Vol.: 1 mL
Container ID:1085813001-I
Analyst: GL

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW2254-WG13**
SGS Ref. #: 1085813001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 09:30
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
Toluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Styrene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Acetone	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10242	VXX18954	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10242	VXX18954	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10242	VXX18954	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW2254-WG13**
SGS Ref. #: 1085813001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 09:30
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10242	VXX18954	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane-D4 <surr>	105	73-120		%	1	VMS10242	VXX18954	
Toluene-d8 <surr>	104	80-120		%	1	VMS10242	VXX18954	
4-Bromofluorobenzene <surr>	111	76-120		%	1	VMS10242	VXX18954	

Batch Information

Analytical Batch: VMS10242
Analytical Method: SW8260B
Analysis Date/Time: 10/27/08 17:17
Dilution Factor: 1

Prep Batch: VXX18954
Prep Method: SW5030B
Prep Date/Time: 10/27/08 11:41

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813001-D
Analyst: JDB

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW2254-WG13**
SGS Ref. #: 1085813001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 09:30
Receipt Date/Time: 10/24/08 10:50

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Acenaphthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Fluorene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Phenanthrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Chrysene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Naphthalene	0.0466 J	0.100	0.0310	ug/L	1	XMS4761	XXX20276	
1-Methylnaphthalene	0.0276 J	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Terphenyl-d14 <surr>	92.2	50-135		%	1	XMS4761	XXX20276	

Batch Information

Analytical Batch: XMS4761
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/30/08 14:48
Dilution Factor: 1

Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10

Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1085813001-J
Analyst: JDH

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW03-WG13**
SGS Ref. #: 1085813004
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 11:15
Receipt Date/Time: 10/24/08 10:50

Dissolved Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Lead	ND	1.00	0.310	ug/L	5	MMS5719	MXX21031	

Batch Information

Analytical Batch: MMS5719
Analytical Method: SW6020
Analysis Date/Time: 11/14/08 22:05
Dilution Factor: 5

Prep Batch: MXX21031
Prep Method: SW3010A
Prep Date/Time: 11/04/08 18:15

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1085813004-G
Analyst: NRB

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW03-WG13**
SGS Ref. #: 1085813004
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 11:15
Receipt Date/Time: 10/24/08 10:50

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	ND	100	10.0	ug/L	1	VFC9248	VXX18967	
4-Bromofluorobenzene <surr>	94.8	50-150		%	1	VFC9248	VXX18967	

Batch Information

Analytical Batch: VFC9248
Analytical Method: SW8015C
Analysis Date/Time: 10/30/08 11:18
Dilution Factor: 1

Prep Batch: VXX18967
Prep Method: SW5030B
Prep Date/Time: 10/30/08 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813004-A
Analyst: HM

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW03-WG13**
SGS Ref. #: 1085813004
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 11:15
Receipt Date/Time: 10/24/08 10:50

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	0.244 J	0.442	0.0884	mg/L	1	XFC8323	XXX20290	
5a Androstane <surr>	101	50-150		%	1	XFC8323	XXX20290	

Batch Information

Analytical Batch: XFC8323
Analytical Method: SW8015C
Analysis Date/Time: 10/31/08 12:33
Dilution Factor: 1

Prep Batch: XXX20290
Prep Method: SW3520C
Prep Date/Time: 10/29/08 18:00

Initial Prep Wt./Vol.: 905 mL
Prep Extract Vol.: 1 mL
Container ID:1085813004-H
Analyst: GL

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW03-WG13**
SGS Ref. #: 1085813004
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 11:15
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
Toluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Styrene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Acetone	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10242	VXX18954	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10242	VXX18954	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10242	VXX18954	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW03-WG13**
SGS Ref. #: 1085813004
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 11:15
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10242	VXX18954	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane-D4 <surr>	104	73-120		%	1	VMS10242	VXX18954	
Toluene-d8 <surr>	103	80-120		%	1	VMS10242	VXX18954	
4-Bromofluorobenzene <surr>	113	76-120		%	1	VMS10242	VXX18954	

Batch Information

Analytical Batch: VMS10242
Analytical Method: SW8260B
Analysis Date/Time: 10/27/08 17:50
Dilution Factor: 1

Prep Batch: VXX18954
Prep Method: SW5030B
Prep Date/Time: 10/27/08 11:41

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813004-D
Analyst: JDB

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW03-WG13**
SGS Ref. #: 1085813004
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 11:15
Receipt Date/Time: 10/24/08 10:50

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Acenaphthene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Fluorene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Phenanthrene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Anthracene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Fluoranthene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Pyrene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Benzo(a)Anthracene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Chrysene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Benzo[b]Fluoranthene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Benzo[k]fluoranthene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Benzo[a]pyrene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Indeno[1,2,3-c,d] pyrene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Dibenzo[a,h]anthracene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Benzo[g,h,i]perylene	ND	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Naphthalene	0.219	0.103	0.0320	ug/L	1	XMS4761	XXX20276	
1-Methylnaphthalene	0.0658	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
2-Methylnaphthalene	0.0937	0.0515	0.0155	ug/L	1	XMS4761	XXX20276	
Terphenyl-d14 <surr>	89.4	50-135		%	1	XMS4761	XXX20276	

Batch Information

Analytical Batch: XMS4761
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/30/08 16:29
Dilution Factor: 1

Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10

Initial Prep Wt./Vol.: 970 mL
Prep Extract Vol.: 1 mL
Container ID:1085813004-J
Analyst: JDH

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW02-WG13**
SGS Ref. #: 1085813005
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:45
Receipt Date/Time: 10/24/08 10:50

Dissolved Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Lead	ND	1.00	0.310	ug/L	5	MMS5719	MXX21031	

Batch Information

Analytical Batch: MMS5719
Analytical Method: SW6020
Analysis Date/Time: 11/14/08 22:12
Dilution Factor: 5

Prep Batch: MXX21031
Prep Method: SW3010A
Prep Date/Time: 11/04/08 18:15

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1085813005-G
Analyst: NRB

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW02-WG13**
SGS Ref. #: 1085813005
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:45
Receipt Date/Time: 10/24/08 10:50

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	52.8 J	100	10.0	ug/L	1	VFC9248	VXX18967	
4-Bromofluorobenzene <surr>	129	50-150		%	1	VFC9248	VXX18967	

Batch Information

Analytical Batch: VFC9248
Analytical Method: SW8015C
Analysis Date/Time: 10/30/08 11:36
Dilution Factor: 1

Prep Batch: VXX18967
Prep Method: SW5030B
Prep Date/Time: 10/30/08 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813005-A
Analyst: HM

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW02-WG13**
SGS Ref. #: 1085813005
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:45
Receipt Date/Time: 10/24/08 10:50

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	4.54	0.400	0.0800	mg/L	1	XFC8323	XXX20290	
5a Androstane <surr>	97.8	50-150		%	1	XFC8323	XXX20290	

Batch Information

Analytical Batch: XFC8323
Analytical Method: SW8015C
Analysis Date/Time: 10/31/08 12:42
Dilution Factor: 1

Prep Batch: XXX20290
Prep Method: SW3520C
Prep Date/Time: 10/29/08 18:00

Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1085813005-H
Analyst: GL

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW02-WG13**
SGS Ref. #: 1085813005
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:45
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	0.140 J	0.400	0.120	ug/L	1	VMS10242	VXX18954	
Toluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Ethylbenzene	0.450 J	1.00	0.310	ug/L	1	VMS10242	VXX18954	
n-Butylbenzene	9.65	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
n-Propylbenzene	12.4	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Styrene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Acetone	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10242	VXX18954	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10242	VXX18954	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10242	VXX18954	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW02-WG13**
SGS Ref. #: 1085813005
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:45
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
sec-Butylbenzene	8.48	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10242	VXX18954	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Naphthalene	239	40.0	12.4	ug/L	20	VMS10254	VXX18976	
o-Xylene	0.450 J	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
tert-Butylbenzene	1.29	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Isopropylbenzene (Cumene)	6.64	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane-D4 <surr>	104	73-120		%	1	VMS10242	VXX18954	
Toluene-d8 <surr>	104	80-120		%	1	VMS10242	VXX18954	
4-Bromofluorobenzene <surr>	104	76-120		%	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW02-WG13**
SGS Ref. #: 1085813005
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:45
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10242		Prep Batch: VXX18954				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 10/27/08 18:24		Prep Date/Time: 10/27/08 11:41				Container ID:1085813005-E		
Dilution Factor: 1						Analyst: JDB		
Analytical Batch: VMS10254		Prep Batch: VXX18976				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 10/31/08 08:38		Prep Date/Time: 10/31/08 01:28				Container ID:1085813005-C		
Dilution Factor: 20						Analyst: DSH		

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW02-WG13**
SGS Ref. #: 1085813005
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:45
Receipt Date/Time: 10/24/08 10:50

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Acenaphthene	0.365	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Fluorene	0.214	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Phenanthrene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Anthracene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Fluoranthene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Pyrene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Benzo(a)Anthracene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Chrysene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Benzo[b]Fluoranthene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Benzo[k]fluoranthene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Benzo[a]pyrene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Indeno[1,2,3-c,d] pyrene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Dibenzo[a,h]anthracene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Benzo[g,h,i]perylene	ND	0.0521	0.0156	ug/L	1	XMS4761	XXX20276	
Naphthalene	97.4	5.21	1.61	ug/L	50	XMS4763	XXX20276	
1-Methylnaphthalene	72.1	2.60	0.781	ug/L	50	XMS4763	XXX20276	
2-Methylnaphthalene	13.7	1.04	0.313	ug/L	20	XMS4763	XXX20276	
Terphenyl-d14 <surr>	89.6	50-135		%	1	XMS4761	XXX20276	

Batch Information

Analytical Batch: XMS4761
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/30/08 17:02
Dilution Factor: 1
Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10
Initial Prep Wt./Vol.: 960 mL
Prep Extract Vol.: 1 mL
Container ID:1085813005-J
Analyst: JDH

Analytical Batch: XMS4763
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/31/08 11:49
Dilution Factor: 20
Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10
Initial Prep Wt./Vol.: 960 mL
Prep Extract Vol.: 1 mL
Container ID:1085813005-J
Analyst: JDH

Analytical Batch: XMS4763
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/31/08 15:57
Dilution Factor: 50
Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10
Initial Prep Wt./Vol.: 960 mL
Prep Extract Vol.: 1 mL
Container ID:1085813005-J
Analyst: JDH

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMWA01-WG13**
SGS Ref. #: 1085813006
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:05
Receipt Date/Time: 10/24/08 10:50

Dissolved Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Lead	ND	1.00	0.310	ug/L	5	MMS5719	MXX21031	

Batch Information

Analytical Batch: MMS5719
Analytical Method: SW6020
Analysis Date/Time: 11/14/08 22:19
Dilution Factor: 5

Prep Batch: MXX21031
Prep Method: SW3010A
Prep Date/Time: 11/04/08 18:15

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1085813006-G
Analyst: NRB

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMWA01-WG13**
SGS Ref. #: 1085813006
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:05
Receipt Date/Time: 10/24/08 10:50

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	52.9 J	100	10.0	ug/L	1	VFC9248	VXX18967	
4-Bromofluorobenzene <surr>	130	50-150		%	1	VFC9248	VXX18967	

Batch Information

Analytical Batch: VFC9248
Analytical Method: SW8015C
Analysis Date/Time: 10/30/08 11:54
Dilution Factor: 1

Prep Batch: VXX18967
Prep Method: SW5030B
Prep Date/Time: 10/30/08 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813006-A
Analyst: HM

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMWA01-WG13**
SGS Ref. #: 1085813006
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:05
Receipt Date/Time: 10/24/08 10:50

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	6.30	0.491	0.0982	mg/L	1	XFC8323	XXX20290	
5a Androstane <surr>	104	50-150		%	1	XFC8323	XXX20290	

Batch Information

Analytical Batch: XFC8323
Analytical Method: SW8015C
Analysis Date/Time: 10/31/08 12:52
Dilution Factor: 1

Prep Batch: XXX20290
Prep Method: SW3520C
Prep Date/Time: 10/29/08 18:00

Initial Prep Wt./Vol.: 815 mL
Prep Extract Vol.: 1 mL
Container ID:1085813006-H
Analyst: GL

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMWA01-WG13**
SGS Ref. #: 1085813006
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:05
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	0.150 J	0.400	0.120	ug/L	1	VMS10242	VXX18954	
Toluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Ethylbenzene	0.420 J	1.00	0.310	ug/L	1	VMS10242	VXX18954	
n-Butylbenzene	9.47	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
n-Propylbenzene	12.5	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Styrene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Acetone	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10242	VXX18954	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10242	VXX18954	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10242	VXX18954	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMWA01-WG13**
SGS Ref. #: 1085813006
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:05
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
sec-Butylbenzene	8.57	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10242	VXX18954	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Naphthalene	245	40.0	12.4	ug/L	20	VMS10254	VXX18976	
o-Xylene	0.490 J	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
tert-Butylbenzene	1.31	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Isopropylbenzene (Cumene)	6.48	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane-D4 <surr>	103	73-120		%	1	VMS10242	VXX18954	
Toluene-d8 <surr>	103	80-120		%	1	VMS10242	VXX18954	
4-Bromofluorobenzene <surr>	105	76-120		%	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMWA01-WG13**
SGS Ref. #: 1085813006
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:05
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10242		Prep Batch: VXX18954				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 10/27/08 18:58		Prep Date/Time: 10/27/08 11:41				Container ID:1085813006-D		
Dilution Factor: 1						Analyst: JDB		
Analytical Batch: VMS10254		Prep Batch: VXX18976				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 10/31/08 09:09		Prep Date/Time: 10/31/08 01:28				Container ID:1085813006-C		
Dilution Factor: 20						Analyst: DSH		

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMWA01-WG13**
SGS Ref. #: 1085813006
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 12:05
Receipt Date/Time: 10/24/08 10:50

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Acenaphthene	0.208	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Fluorene	0.122	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Phenanthrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Chrysene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Naphthalene	82.3	5.00	1.55	ug/L	50	XMS4763	XXX20276	
1-Methylnaphthalene	62.4	2.50	0.750	ug/L	50	XMS4763	XXX20276	
2-Methylnaphthalene	12.7	1.00	0.300	ug/L	20	XMS4763	XXX20276	
Terphenyl-d14 <surr>	87.7	50-135		%	1	XMS4761	XXX20276	

Batch Information

Analytical Batch: XMS4761
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/30/08 17:36
Dilution Factor: 1
Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10
Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1085813006-J
Analyst: JDH

Analytical Batch: XMS4763
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/31/08 12:22
Dilution Factor: 20
Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10
Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1085813006-J
Analyst: JDH

Analytical Batch: XMS4763
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/31/08 16:31
Dilution Factor: 50
Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10
Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1085813006-J
Analyst: JDH

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW01-WG13**
SGS Ref. #: 1085813007
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 15:00
Receipt Date/Time: 10/24/08 10:50

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	ND	100	10.0	ug/L	1	VFC9248	VXX18967	
4-Bromofluorobenzene <surr>	92.5	50-150		%	1	VFC9248	VXX18967	

Batch Information

Analytical Batch: VFC9248
Analytical Method: SW8015C
Analysis Date/Time: 10/30/08 12:12
Dilution Factor: 1

Prep Batch: VXX18967
Prep Method: SW5030B
Prep Date/Time: 10/30/08 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813007-A
Analyst: HM

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW01-WG13**
SGS Ref. #: 1085813007
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 15:00
Receipt Date/Time: 10/24/08 10:50

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	0.459	0.412	0.0825	mg/L	1	XFC8323	XXX20290	
5a Androstane <surr>	103	50-150		%	1	XFC8323	XXX20290	

Batch Information

Analytical Batch: XFC8323
Analytical Method: SW8015C
Analysis Date/Time: 10/31/08 13:01
Dilution Factor: 1

Prep Batch: XXX20290
Prep Method: SW3520C
Prep Date/Time: 10/29/08 18:00

Initial Prep Wt./Vol.: 970 mL
Prep Extract Vol.: 1 mL
Container ID:1085813007-H
Analyst: GL

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW01-WG13**
SGS Ref. #: 1085813007
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 15:00
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
Toluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Styrene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Acetone	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10242	VXX18954	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10242	VXX18954	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10242	VXX18954	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW01-WG13**
SGS Ref. #: 1085813007
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 15:00
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10242	VXX18954	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10254	VXX18976	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane-D4 <surr>	103	73-120		%	1	VMS10242	VXX18954	
Toluene-d8 <surr>	104	80-120		%	1	VMS10242	VXX18954	
4-Bromofluorobenzene <surr>	109	76-120		%	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW01-WG13**
SGS Ref. #: 1085813007
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 15:00
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10242			Prep Batch: VXX18954			Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B			Prep Method: SW5030B			Prep Extract Vol.: 5 mL		
Analysis Date/Time: 10/27/08 19:31			Prep Date/Time: 10/27/08 11:41			Container ID:1085813007-D		
Dilution Factor: 1						Analyst: JDB		
Analytical Batch: VMS10254			Prep Batch: VXX18976			Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B			Prep Method: SW5030B			Prep Extract Vol.: 5 mL		
Analysis Date/Time: 10/31/08 07:36			Prep Date/Time: 10/31/08 01:28			Container ID:1085813007-F		
Dilution Factor: 1						Analyst: DSH		

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **RHMW01-WG13**
SGS Ref. #: 1085813007
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 15:00
Receipt Date/Time: 10/24/08 10:50

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Acenaphthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Fluorene	0.0207 J	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Phenanthrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Chrysene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Naphthalene	0.103	0.100	0.0310	ug/L	1	XMS4761	XXX20276	
1-Methylnaphthalene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	1	XMS4761	XXX20276	
Terphenyl-d14 <surr>	91.1	50-135		%	1	XMS4761	XXX20276	

Batch Information

Analytical Batch: XMS4761
Analytical Method: 8270D SIMS
Analysis Date/Time: 10/30/08 18:09
Dilution Factor: 1

Prep Batch: XXX20276
Prep Method: SW3520C
Prep Date/Time: 10/28/08 10:10

Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1085813007-J
Analyst: JDH

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **TB01-WG13**
SGS Ref. #: 1085813008
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 08:05
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
Toluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Styrene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Acetone	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10242	VXX18954	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10242	VXX18954	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10242	VXX18954	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10242	VXX18954	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	

The Environmental Company, Inc. (TEC) Print Date: 11/20/2008

Client Sample ID: **TB01-WG13**
SGS Ref. #: 1085813008
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 10/22/08 08:05
Receipt Date/Time: 10/24/08 10:50

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10242	VXX18954	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10242	VXX18954	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10242	VXX18954	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10242	VXX18954	
1,2-Dichloroethane-D4 <surr>	105	73-120		%	1	VMS10242	VXX18954	
Toluene-d8 <surr>	106	80-120		%	1	VMS10242	VXX18954	
4-Bromofluorobenzene <surr>	112	76-120		%	1	VMS10242	VXX18954	

Batch Information

Analytical Batch: VMS10242
Analytical Method: SW8260B
Analysis Date/Time: 10/27/08 16:09
Dilution Factor: 1

Prep Batch: VXX18954
Prep Method: SW5030B
Prep Date/Time: 10/27/08 11:41

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1085813008-A
Analyst: JDB

SGS Ref.#	867629 Method Blank		**Printed Date/Time**	11/20/2008 8:09	
Client Name	The Environmental Company, Inc. (TEC)		**Prep**	**Batch**	VXX18954
Project Name/#	9121-003 Red Hill BFSF			**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)			**Date**	10/27/2008

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006, 1085813007, 1085813008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
Benzene	ND	0.400	0.120	ug/L	10/27/08
Toluene	ND	1.00	0.310	ug/L	10/27/08
Ethylbenzene	ND	1.00	0.310	ug/L	10/27/08
n-Butylbenzene	ND	1.00	0.310	ug/L	10/27/08
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	10/27/08
1,2-Dichloroethane	ND	0.500	0.150	ug/L	10/27/08
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	10/27/08
4-Chlorotoluene	ND	1.00	0.310	ug/L	10/27/08
Chlorobenzene	ND	0.500	0.150	ug/L	10/27/08
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	10/27/08
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	10/27/08
4-Isopropyltoluene	ND	1.00	0.310	ug/L	10/27/08
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	10/27/08
n-Propylbenzene	ND	1.00	0.310	ug/L	10/27/08
Styrene	ND	1.00	0.310	ug/L	10/27/08
Dibromomethane	ND	1.00	0.310	ug/L	10/27/08
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	10/27/08
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	10/27/08
Acetone	ND	10.0	3.10	ug/L	10/27/08
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	10/27/08
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	10/27/08
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	10/27/08
Tetrachloroethene	ND	1.00	0.310	ug/L	10/27/08
Dibromochloromethane	ND	0.500	0.150	ug/L	10/27/08
1,3-Dichloropropane	ND	0.400	0.120	ug/L	10/27/08
1,2-Dibromoethane	ND	1.00	0.310	ug/L	10/27/08
Carbon tetrachloride	ND	1.00	0.310	ug/L	10/27/08
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	10/27/08
Chloroform	ND	1.00	0.300	ug/L	10/27/08
Bromobenzene	ND	1.00	0.310	ug/L	10/27/08
Chloromethane	ND	1.00	0.310	ug/L	10/27/08
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	10/27/08
Bromomethane	ND	3.00	0.940	ug/L	10/27/08
Bromochloromethane	ND	1.00	0.310	ug/L	10/27/08
Vinyl chloride	ND	1.00	0.310	ug/L	10/27/08
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	10/27/08

SGS Ref.#	867629 Method Blank	**Printed Date/Time**	11/20/2008 8:09
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX18954
Project Name/#	9121-003 Red Hill BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	10/27/2008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
Chloroethane	ND	1.00	0.310	ug/L	10/27/08
sec-Butylbenzene	ND	1.00	0.310	ug/L	10/27/08
Bromodichloromethane	ND	0.500	0.150	ug/L	10/27/08
1,1-Dichloroethene	ND	1.00	0.310	ug/L	10/27/08
2-Butanone (MEK)	ND	10.0	3.10	ug/L	10/27/08
Methylene chloride	ND	5.00	1.00	ug/L	10/27/08
Trichlorofluoromethane	ND	1.00	0.310	ug/L	10/27/08
P & M -Xylene	ND	2.00	0.620	ug/L	10/27/08
Naphthalene	ND	2.00	0.620	ug/L	10/27/08
o-Xylene	ND	1.00	0.310	ug/L	10/27/08
Bromoform	ND	1.00	0.310	ug/L	10/27/08
1-Chlorohexane	ND	1.00	0.310	ug/L	10/27/08
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	10/27/08
tert-Butylbenzene	ND	1.00	0.310	ug/L	10/27/08
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	10/27/08
1,1-Dichloroethane	ND	1.00	0.310	ug/L	10/27/08
2-Chlorotoluene	ND	1.00	0.310	ug/L	10/27/08
Trichloroethene	ND	1.00	0.310	ug/L	10/27/08
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	10/27/08
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	10/27/08
2,2-Dichloropropane	ND	1.00	0.310	ug/L	10/27/08
Hexachlorobutadiene	ND	1.00	0.310	ug/L	10/27/08
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	10/27/08
1,2-Dichloropropane	ND	1.00	0.310	ug/L	10/27/08
1,1-Dichloropropene	ND	1.00	0.310	ug/L	10/27/08
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	10/27/08
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	10/27/08
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	10/27/08
Surrogates					
1,2-Dichloroethane-D4 <surr>	102	73-120		%	10/27/08
Toluene-d8 <surr>	105	80-120		%	10/27/08
4-Bromofluorobenzene <surr>	109	76-120		%	10/27/08

Batch VMS10242
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	867655 Method Blank		**Printed Date/Time**	11/20/2008	8:09
Client Name	The Environmental Company, Inc. (TEC)		**Prep** **Batch**	XXX20276	
Project Name/#	9121-003 Red Hill BFSF		**Method**	SW3520C	
Matrix	Water (Surface, Eff., Ground)		**Date**	10/28/2008	

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006, 1085813007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
Acenaphthylene	ND	0.0500	0.0150	ug/L	10/30/08
Acenaphthene	ND	0.0500	0.0150	ug/L	10/30/08
Fluorene	ND	0.0500	0.0150	ug/L	10/30/08
Phenanthrene	ND	0.0500	0.0150	ug/L	10/30/08
Anthracene	ND	0.0500	0.0150	ug/L	10/30/08
Fluoranthene	ND	0.0500	0.0150	ug/L	10/30/08
Pyrene	ND	0.0500	0.0150	ug/L	10/30/08
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	10/30/08
Chrysene	ND	0.0500	0.0150	ug/L	10/30/08
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	10/30/08
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	10/30/08
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	10/30/08
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	10/30/08
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	10/30/08
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	10/30/08
Naphthalene	ND	0.100	0.0310	ug/L	10/30/08
1-Methylnaphthalene	ND	0.0500	0.0150	ug/L	10/30/08
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	10/30/08
Surrogates					
Terphenyl-d14 <surr>	88.5	50-135		%	10/30/08

Batch XMS4761
Method 8270D SIMS
Instrument HP 5890 Series II MS2 SVOA

SGS Ref.#	868151	Method Blank	**Printed Date/Time**	11/20/2008	8:09
Client Name	The Environmental Company, Inc. (TEC)		**Prep Batch**	XXX20290	
Project Name/#	9121-003 Red Hill BFSF		**Method**	SW3520C	
Matrix	Water (Surface, Eff., Ground)		**Date**	10/29/2008	

QC results affect the following production samples:

1085813004, 1085813005, 1085813006, 1085813007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Semivolatile Organic Fuels Department					
Diesel Range Organics	ND	0.400	0.0800	mg/L	10/31/08
Surrogates					
5a Androstane <surr>	104	60-120		%	10/31/08
Batch XFC8323					
Method SW8015C					
Instrument HP 6890 Series II FID SV D R					

SGS Ref.#	868324	Method Blank	**Printed Date/Time**	11/20/2008	8:09
Client Name	The Environmental Company, Inc. (TEC)		**Prep Batch**	VXX18967	
Project Name/#	9121-003 Red Hill BFSF		**Method**	SW5030B	
Matrix	Water (Surface, Eff., Ground)		**Date**	10/30/2008	

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006, 1085813007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Fuels Department					
Gasoline Range Organics	ND	100	10.0	ug/L	10/30/08
Surrogates					
4-Bromofluorobenzene <surr>	94.9	50-150		%	10/30/08

Batch VFC9248
Method SW8015C
Instrument HP 5890 Series II PID+FID VCA

SGS Ref.#	868746 Method Blank	**Printed Date/Time**		11/20/2008 8:09
Client Name	The Environmental Company, Inc. (TEC)	**Prep**	**Batch**	VXX18976
Project Name/#	9121-003 Red Hill BFSF		**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)		**Date**	10/31/2008

QC results affect the following production samples:

1085813005, 1085813006, 1085813007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
Naphthalene	ND	2.00	0.620	ug/L	10/31/08
Surrogates					
1,2-Dichloroethane-D4 <surr>	102	73-120		%	10/31/08
Toluene-d8 <surr>	100	80-120		%	10/31/08
4-Bromofluorobenzene <surr>	101	76-120		%	10/31/08

Batch VMS10254
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	869197 Method Blank	**Printed Date/Time**	11/20/2008 8:09	
Client Name	The Environmental Company, Inc. (TEC)	**Prep**	**Batch**	XXX20313
Project Name/#	9121-003 Red Hill BFSF		**Method**	SW3520C
Matrix	Water (Surface, Eff., Ground)		**Date**	11/03/2008

QC results affect the following production samples:

1085813001

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Semivolatile Organic Fuels Department					
Diesel Range Organics	ND	0.400	0.0800	mg/L	11/05/08
Surrogates					
5a Androstane <surr>	97.3	60-120		%	11/05/08

Batch XFC8338
Method SW8015C
Instrument HP 6890 Series II FID SV D R

SGS Ref.#	869581 Method Blank	**Printed Date/Time**		11/20/2008 8:09
Client Name	The Environmental Company, Inc. (TEC)	**Prep**	**Batch**	MXX21031
Project Name/#	9121-003 Red Hill BFSF		**Method**	SW3010A
Matrix	Water (Surface, Eff., Ground)		**Date**	11/04/2008

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS					
Lead	ND	1.00	0.310	ug/L	11/14/08
Batch	MMS5719				
Method	SW6020				
Instrument	Perkin Elmer Sciex ICP-MS P4				

SGS Ref.#	867630	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
			Prep Batch	VXX18954	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/27/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006, 1085813007, 1085813008

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
Benzene	LCS	27.9	93	(80-120)			30 ug/L	10/27/2008
Toluene	LCS	29.5	98	(77-120)			30 ug/L	10/27/2008
Ethylbenzene	LCS	30.1	100	(80-120)			30 ug/L	10/27/2008
n-Butylbenzene	LCS	30.2	101	(80-124)			30 ug/L	10/27/2008
1,4-Dichlorobenzene	LCS	29.5	98	(80-120)			30 ug/L	10/27/2008
1,2-Dichloroethane	LCS	28.4	95	(80-129)			30 ug/L	10/27/2008
1,3,5-Trimethylbenzene	LCS	32.7	109	(80-128)			30 ug/L	10/27/2008
4-Chlorotoluene	LCS	31.3	104	(79-128)			30 ug/L	10/27/2008
Chlorobenzene	LCS	30.1	100	(80-120)			30 ug/L	10/27/2008
4-Methyl-2-pentanone (MIBK)	LCS	83.7	93	(69-134)			90 ug/L	10/27/2008
cis-1,2-Dichloroethene	LCS	29.3	98	(80-125)			30 ug/L	10/27/2008
4-Isopropyltoluene	LCS	31.8	106	(80-125)			30 ug/L	10/27/2008
cis-1,3-Dichloropropene	LCS	30.2	101	(80-120)			30 ug/L	10/27/2008
n-Propylbenzene	LCS	31.6	105	(80-129)			30 ug/L	10/27/2008
Styrene	LCS	31.7	106	(80-120)			30 ug/L	10/27/2008
Dibromomethane	LCS	29.4	98	(80-120)			30 ug/L	10/27/2008
trans-1,3-Dichloropropene	LCS	32.1	107	(80-124)			30 ug/L	10/27/2008
1,2,4-Trichlorobenzene	LCS	29.0	97	(80-120)			30 ug/L	10/27/2008
Acetone	LCS	81.6	91	(50-135)			90 ug/L	10/27/2008
1,1,2,2-Tetrachloroethane	LCS	30.3	101	(76-123)			30 ug/L	10/27/2008

SGS Ref.#	867630	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
			Prep Batch	VXX18954	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/27/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
1,2-Dibromo-3-chloropropane	LCS	34.1	114	(73-130)			30 ug/L	10/27/2008
Methyl-t-butyl ether	LCS	45.0	100	(80-120)			45 ug/L	10/27/2008
Tetrachloroethene	LCS	29.6	99	(79-122)			30 ug/L	10/27/2008
Dibromochloromethane	LCS	31.8	106	(80-120)			30 ug/L	10/27/2008
1,3-Dichloropropane	LCS	30.7	102	(80-121)			30 ug/L	10/27/2008
1,2-Dibromoethane	LCS	31.3	104	(80-120)			30 ug/L	10/27/2008
Carbon tetrachloride	LCS	30.7	102	(80-126)			30 ug/L	10/27/2008
1,1,1,2-Tetrachloroethane	LCS	31.9	106	(80-120)			30 ug/L	10/27/2008
Chloroform	LCS	29.8	99	(80-124)			30 ug/L	10/27/2008
Bromobenzene	LCS	30.8	103	(80-120)			30 ug/L	10/27/2008
Chloromethane	LCS	28.6	95	(67-125)			30 ug/L	10/27/2008
1,2,3-Trichloropropane	LCS	30.2	101	(80-120)			30 ug/L	10/27/2008
Bromomethane	LCS	31.6	105	(30-140)			30 ug/L	10/27/2008
Bromochloromethane	LCS	30.5	102	(77-129)			30 ug/L	10/27/2008
Vinyl chloride	LCS	28.8	96	(72-145)			30 ug/L	10/27/2008
Dichlorodifluoromethane	LCS	27.5	92	(62-153)			30 ug/L	10/27/2008
Chloroethane	LCS	28.4	95	(67-133)			30 ug/L	10/27/2008
sec-Butylbenzene	LCS	32.3	108	(80-120)			30 ug/L	10/27/2008
Bromodichloromethane	LCS	31.8	106	(80-120)			30 ug/L	10/27/2008
1,1-Dichloroethene	LCS	29.5	98	(76-130)			30 ug/L	10/27/2008

SGS Ref.#	867630	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
			Prep Batch	VXX18954	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/27/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
2-Butanone (MEK)	LCS	84.4	94	(66-136)			90 ug/L	10/27/2008
Methylene chloride	LCS	30.2	101	(63-131)			30 ug/L	10/27/2008
Trichlorofluoromethane	LCS	30.0	100	(68-145)			30 ug/L	10/27/2008
P & M -Xylene	LCS	62.4	104	(80-120)			60 ug/L	10/27/2008
Naphthalene	LCS	28.5	95	(75-120)			30 ug/L	10/27/2008
o-Xylene	LCS	31.5	105	(80-120)			30 ug/L	10/27/2008
Bromoform	LCS	31.8	106	(80-120)			30 ug/L	10/27/2008
1-Chlorohexane	LCS	44.5	99	(70-125)			45 ug/L	10/27/2008
1,2,4-Trimethylbenzene	LCS	31.8	106	(80-125)			30 ug/L	10/27/2008
tert-Butylbenzene	LCS	32.4	108	(80-122)			30 ug/L	10/27/2008
1,1,1-Trichloroethane	LCS	32.0	107	(80-122)			30 ug/L	10/27/2008
1,1-Dichloroethane	LCS	30.6	102	(80-120)			30 ug/L	10/27/2008
2-Chlorotoluene	LCS	31.0	103	(80-125)			30 ug/L	10/27/2008
Trichloroethene	LCS	28.4	95	(80-125)			30 ug/L	10/27/2008
trans-1,2-Dichloroethene	LCS	30.2	101	(79-132)			30 ug/L	10/27/2008
1,2-Dichlorobenzene	LCS	30.4	101	(80-120)			30 ug/L	10/27/2008
2,2-Dichloropropane	LCS	31.2	104	(80-132)			30 ug/L	10/27/2008
Hexachlorobutadiene	LCS	26.4	88	(77-125)			30 ug/L	10/27/2008
Isopropylbenzene (Cumene)	LCS	31.7	106	(80-121)			30 ug/L	10/27/2008
1,2-Dichloropropane	LCS	29.1	97	(80-121)			30 ug/L	10/27/2008
1,1-Dichloropropene	LCS	29.3	98	(80-122)			30 ug/L	10/27/2008

SGS Ref.#	867630	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
			Prep Batch	VXX18954	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/27/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
1,1,2-Trichloroethane	LCS	30.1	100	(77-120)			30 ug/L	10/27/2008
1,3-Dichlorobenzene	LCS	29.1	97	(80-120)			30 ug/L	10/27/2008
1,2,3-Trichlorobenzene	LCS	26.3	88	(77-120)			30 ug/L	10/27/2008
Surrogates								
1,2-Dichloroethane-D4 <surr>	LCS		103	(73-120)				10/27/2008
Toluene-d8 <surr>	LCS		104	(80-120)				10/27/2008
4-Bromofluorobenzene <surr>	LCS		103	(76-120)				10/27/2008

Batch VMS10242
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	867656	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
			Prep Batch	XXX20276	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/28/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006, 1085813007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

SGS Ref.#	867656 Lab Control Sample		**Printed Date/Time**	11/20/2008	8:09
			Prep Batch	XXX20276	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/28/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS								
Acenaphthylene	LCS	0.333	67	(50-105)			0.5 ug/L	10/30/2008
Acenaphthene	LCS	0.314	63	(45-110)			0.5 ug/L	10/30/2008
Fluorene	LCS	0.342	68	(50-110)			0.5 ug/L	10/30/2008
Phenanthrene	LCS	0.369	74	(50-115)			0.5 ug/L	10/30/2008
Anthracene	LCS	0.382	76	(55-110)			0.5 ug/L	10/30/2008
Fluoranthene	LCS	0.342	68	(55-125)			0.5 ug/L	10/30/2008
Pyrene	LCS	0.323	65	(50-130)			0.5 ug/L	10/30/2008
Benzo(a)Anthracene	LCS	0.376	75	(55-120)			0.5 ug/L	10/30/2008
Chrysene	LCS	0.339	68	(55-120)			0.5 ug/L	10/30/2008
Benzo[b]Fluoranthene	LCS	0.376	75	(46-130)			0.5 ug/L	10/30/2008
Benzo[k]fluoranthene	LCS	0.378	76	(60-125)			0.5 ug/L	10/30/2008
Benzo[a]pyrene	LCS	0.416	83	(55-120)			0.5 ug/L	10/30/2008
Indeno[1,2,3-c,d] pyrene	LCS	0.379	76	(45-125)			0.5 ug/L	10/30/2008
Dibenzo[a,h]anthracene	LCS	0.389	78	(41-140)			0.5 ug/L	10/30/2008
Benzo[g,h,i]perylene	LCS	0.376	75	(46-125)			0.5 ug/L	10/30/2008
Naphthalene	LCS	0.266	53	(42-100)			0.5 ug/L	10/30/2008
1-Methylnaphthalene	LCS	0.277	55	(46-115)			0.5 ug/L	10/30/2008
2-Methylnaphthalene	LCS	0.290	58	(45-105)			0.5 ug/L	10/30/2008
Surrogates								
Terphenyl-d14 <surr>	LCS		93	(50-135)				10/30/2008

SGS Ref.#	867656 Lab Control Sample	**Printed Date/Time**		11/20/2008	8:09
		Prep	**Batch**	XXX20276	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/28/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

Batch	XMS4761
Method	8270D SIMS
Instrument	HP 5890 Series II MS2 SVOA

SGS Ref.#	868152	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
	868153	Lab Control Sample Duplicate	**Prep Batch**	XXX20290	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/29/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1085813004, 1085813005, 1085813006, 1085813007

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic Fuels Department								
Diesel Range Organics	LCS	4.42	89	(75-125)			5 mg/L	10/31/2008
	LCSD	5.32	106		18	(< 20)	5 mg/L	10/31/2008
Surrogates								
5a Androstane <surr>	LCS		100	(60-120)				10/31/2008
	LCSD		110		10			10/31/2008

Batch XFC8323
Method SW8015C
Instrument HP 6890 Series II FID SV D R

SGS Ref.#	868325	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
	868326	Lab Control Sample Duplicate	**Prep Batch**	VXX18967	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/30/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006, 1085813007

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Fuels Department								
Gasoline Range Organics	LCS	192	96	(79-108)			200 ug/L	10/30/2008
	LCSD	189	95		2	(< 20)	200 ug/L	10/30/2008
Surrogates								
4-Bromofluorobenzene <surr>	LCS		96	(50-150)				10/30/2008
	LCSD		95		0			10/30/2008

Batch VFC9248
Method SW8015C
Instrument HP 5890 Series II PID+FID VCA

SGS Ref.#	868747	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
	868748	Lab Control Sample Duplicate	**Prep Batch**	VXX18976	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	10/31/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1085813005, 1085813006, 1085813007

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
Naphthalene	LCS	29.2	97	(75-120)			30 ug/L	10/31/2008
	LCSD	28.9	96		1	(< 20)	30 ug/L	10/31/2008
Surrogates								
1,2-Dichloroethane-D4 <surr>	LCS		102	(73-120)				10/31/2008
	LCSD		99		3			10/31/2008
Toluene-d8 <surr>	LCS		99	(80-120)				10/31/2008
	LCSD		99		0			10/31/2008
4-Bromofluorobenzene <surr>	LCS		99	(76-120)				10/31/2008
	LCSD		97		2			10/31/2008

Batch	VMS10254
Method	SW8260B
Instrument	HP 5890 Series II MS3 VNA

SGS Ref.#	869198	Lab Control Sample	**Printed Date/Time**	11/20/2008	8:09
			Prep Batch	XXX20313	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	9121-003 Red Hill BFSF		**Date**	11/03/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1085813001

Parameter		QC Results	Pct Recov		LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic Fuels Department									
Diesel Range Organics	LCS	2.81	56	*	(75-125)			5 mg/L	11/05/2008
Surrogates									
5a Androstane <surr>	LCS		84		(60-120)				11/05/2008

Batch XFC8338
Method SW8015C
Instrument HP 6890 Series II FID SV D R

SGS Ref.#	869582	Lab Control Sample	**Printed Date/Time**	11/20/2008 8:09
			Prep Batch	MXX21031
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3010A
Project Name/#	9121-003 Red Hill BFSF		**Date**	11/04/2008
Matrix	Water (Surface, Eff., Ground)			

QC results affect the following production samples:

1085813001, 1085813004, 1085813005, 1085813006

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Lead	LCS	1070	107	(80-120)			1000 ug/L	11/14/2008

Batch MMS5719
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P4

SGS Ref.#	868545	Matrix Spike	**Printed Date/Time**		11/20/2008 8:09
	868546	Matrix Spike Duplicate	**Prep**	**Batch**	XXX20290
				Method	Cnt. Liq/Liq Ext. for AK102/3
				Date	10/29/2008
Original	871926				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1085813004, 1085813005, 1085813006, 1085813007

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Semivolatile Organic Fuels Department											
Diesel Range Organics		MS	ND	ND	0*	(75-125)			5.26	mg/L	10/31/2008
		MSD		0.00	0*		0	(< 30)	5.26	mg/L	10/31/2008
Surrogates											
5a Androstane <surr>		MS		.107	102	(50-150)					10/31/2008
		MSD		0.102	97		5				10/31/2008

Batch	XFC8323
Method	SW8015C
Instrument	HP 6890 Series II FID SV D R

SGS Ref.#	1085813002	Billable Matrix Spike	**Printed Date/Time**	11/20/2008 8:09
	1085813003	Billable Matrix Spike Dup.	**Prep Batch**	MXX21031
			Method	3010 H20 Digest for Metals ICI
			Date	11/04/2008
Original	1085813001			
Matrix	Water (Surface, Eff., Ground)			

QC results affect the following production samples:

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Dissolved Metals by ICP/MS										
Lead	BMS	ND	1020	102	(80-120)			1000	ug/L	11/14/2008
	BMSD		1000	100		1	(< 15)	1000	ug/L	11/14/2008
Batch	MMS5719									
Method	SW6020									
Instrument	Perkin Elmer Sciex ICP-MS P4									
Volatile Fuels Department										
Gasoline Range Organics	BMS	ND	448	100	(79-108)			450	ug/L	10/30/2008
	BMSD		401	89		11	(< 20)	450	ug/L	10/30/2008
Surrogates										
4-Bromofluorobenzene <surr>	BMS		50.9	102	(50-150)					10/30/2008
	BMSD		48.6	97		5				10/30/2008
Batch	VFC9248									
Method	SW8015C									
Instrument	HP 5890 Series II PID+FID VCA									
Semivolatile Organic Fuels Department										
Diesel Range Organics	BMS	ND	4.89	94	(75-125)			5.21	mg/L	11/05/2008
	BMSD		4.72	94		4	(< 30)	5.00	mg/L	11/05/2008
Surrogates										
5a Androstane <surr>	BMS		.103	99	(50-150)					11/05/2008
	BMSD		0.102	102		1				11/05/2008
Batch	XFC8338									
Method	SW8015C									
Instrument	HP 6890 Series II FID SV D R									
Volatile Gas Chromatography/Mass Spectroscopy										

SGS Ref.#	1085813002	Billable Matrix Spike	**Printed Date/Time**	11/20/2008 8:09
	1085813003	Billable Matrix Spike Dup.	**Prep Batch**	VXX18954
			Method	Volatiles Extraction AFCEE 3.1
			Date	10/27/2008
Original	1085813001			
Matrix	Water (Surface, Eff., Ground)			

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy									
Benzene	BMS	ND	27.9	93	(80-120)			30.0 ug/L	10/27/2008
	BMSD		28.4	95		2	(< 20)	30.0 ug/L	10/27/2008
Toluene	BMS	ND	29.6	99	(77-120)			30.0 ug/L	10/27/2008
	BMSD		29.6	99		0	(< 20)	30.0 ug/L	10/27/2008
Ethylbenzene	BMS	ND	30.6	102	(80-120)			30.0 ug/L	10/27/2008
	BMSD		31.3	104		2	(< 20)	30.0 ug/L	10/27/2008
n-Butylbenzene	BMS	ND	34.4	115	(80-124)			30.0 ug/L	10/27/2008
	BMSD		35.5	118		3	(< 20)	30.0 ug/L	10/27/2008
1,4-Dichlorobenzene	BMS	ND	29.3	98	(80-120)			30.0 ug/L	10/27/2008
	BMSD		30.9	103		5	(< 20)	30.0 ug/L	10/27/2008
1,2-Dichloroethane	BMS	ND	28.3	94	(80-129)			30.0 ug/L	10/27/2008
	BMSD		29.2	97		3	(< 20)	30.0 ug/L	10/27/2008
1,3,5-Trimethylbenzene	BMS	ND	33	110	(80-128)			30.0 ug/L	10/27/2008
	BMSD		34.0	113		3	(< 20)	30.0 ug/L	10/27/2008
4-Chlorotoluene	BMS	ND	31.8	106	(79-128)			30.0 ug/L	10/27/2008
	BMSD		33.0	110		4	(< 20)	30.0 ug/L	10/27/2008
Chlorobenzene	BMS	ND	30	100	(80-120)			30.0 ug/L	10/27/2008
	BMSD		29.9	100		0	(< 20)	30.0 ug/L	10/27/2008
4-Methyl-2-pentanone (MIBK)	BMS	ND	82.4	92	(69-134)			90.0 ug/L	10/27/2008
	BMSD		87.9	98		7	(< 20)	90.0 ug/L	10/27/2008
cis-1,2-Dichloroethene	BMS	ND	29.4	98	(80-125)			30.0 ug/L	10/27/2008
	BMSD		29.8	99		1	(< 20)	30.0 ug/L	10/27/2008
4-Isopropyltoluene	BMS	ND	33.7	112	(80-125)			30.0 ug/L	10/27/2008
	BMSD		34.4	115		2	(< 20)	30.0 ug/L	10/27/2008
cis-1,3-Dichloropropene	BMS	ND	29.5	98	(80-120)			30.0 ug/L	10/27/2008
	BMSD		30.8	103		5	(< 20)	30.0 ug/L	10/27/2008
n-Propylbenzene	BMS	ND	32.5	108	(80-129)			30.0 ug/L	10/27/2008
	BMSD		33.7	112		4	(< 20)	30.0 ug/L	10/27/2008
Styrene	BMS	ND	32	107	(80-120)			30.0 ug/L	10/27/2008
	BMSD		32.3	108		1	(< 20)	30.0 ug/L	10/27/2008
Dibromomethane	BMS	ND	28.4	95	(80-120)			30.0 ug/L	10/27/2008
	BMSD		29.7	99		5	(< 20)	30.0 ug/L	10/27/2008
trans-1,3-Dichloropropene	BMS	ND	30.1	100	(80-124)			30.0 ug/L	10/27/2008
	BMSD		31.5	105		5	(< 20)	30.0 ug/L	10/27/2008
1,2,4-Trichlorobenzene	BMS	ND	30.9	103	(80-120)			30.0 ug/L	10/27/2008
	BMSD		32.2	107		4	(< 20)	30.0 ug/L	10/27/2008
Acetone	BMS	ND	83.2	93	(50-135)			90.0 ug/L	10/27/2008
	BMSD		86.9	97		4	(< 20)	90.0 ug/L	10/27/2008
1,1,2,2-Tetrachloroethane	BMS	ND	29.3	98	(76-123)			30.0 ug/L	10/27/2008
	BMSD		30.7	102		4	(< 20)	30.0 ug/L	10/27/2008

SGS Ref.#	1085813002	Billable Matrix Spike	**Printed Date/Time**		11/20/2008 8:09
	1085813003	Billable Matrix Spike Dup.	**Prep**	**Batch**	VXX18954
				Method	Volatiles Extraction AFCEE 3.1
				Date	10/27/2008
Original	1085813001				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy									
1,2-Dibromo-3-chloropropane	BMS	ND	32.6	109	(73-130)			30.0 ug/L	10/27/2008
	BMSD		34.4	115		5	(< 20)	30.0 ug/L	10/27/2008
Methyl-t-butyl ether	BMS	ND	45.4	101	(80-120)			45.0 ug/L	10/27/2008
	BMSD		47.2	105		4	(< 20)	45.0 ug/L	10/27/2008
Tetrachloroethene	BMS	ND	30.6	102	(79-122)			30.0 ug/L	10/27/2008
	BMSD		30.5	102		0	(< 20)	30.0 ug/L	10/27/2008
Dibromochloromethane	BMS	ND	29.9	100	(80-120)			30.0 ug/L	10/27/2008
	BMSD		30.7	102		3	(< 20)	30.0 ug/L	10/27/2008
1,3-Dichloropropane	BMS	ND	30.2	101	(80-121)			30.0 ug/L	10/27/2008
	BMSD		30.6	102		1	(< 20)	30.0 ug/L	10/27/2008
1,2-Dibromoethane	BMS	ND	29.8	99	(80-120)			30.0 ug/L	10/27/2008
	BMSD		30.4	101		2	(< 20)	30.0 ug/L	10/27/2008
Carbon tetrachloride	BMS	ND	29.4	98	(80-126)			30.0 ug/L	10/27/2008
	BMSD		30.3	101		3	(< 20)	30.0 ug/L	10/27/2008
1,1,1,2-Tetrachloroethane	BMS	ND	30.2	101	(80-120)			30.0 ug/L	10/27/2008
	BMSD		30.6	102		1	(< 20)	30.0 ug/L	10/27/2008
Chloroform	BMS	ND	29.2	97	(80-124)			30.0 ug/L	10/27/2008
	BMSD		29.7	99		2	(< 20)	30.0 ug/L	10/27/2008
Bromobenzene	BMS	ND	29.9	100	(80-120)			30.0 ug/L	10/27/2008
	BMSD		31.2	104		4	(< 20)	30.0 ug/L	10/27/2008
Chloromethane	BMS	ND	28.2	94	(67-125)			30.0 ug/L	10/27/2008
	BMSD		28.9	96		2	(< 20)	30.0 ug/L	10/27/2008
1,2,3-Trichloropropane	BMS	ND	30.4	101	(80-120)			30.0 ug/L	10/27/2008
	BMSD		31.4	105		3	(< 20)	30.0 ug/L	10/27/2008
Bromomethane	BMS	ND	32.8	109	(30-140)			30.0 ug/L	10/27/2008
	BMSD		35.7	119		9	(< 20)	30.0 ug/L	10/27/2008
Bromochloromethane	BMS	ND	28.4	95	(77-129)			30.0 ug/L	10/27/2008
	BMSD		29.0	97		2	(< 20)	30.0 ug/L	10/27/2008
Vinyl chloride	BMS	ND	29.6	99	(72-145)			30.0 ug/L	10/27/2008
	BMSD		30.3	101		2	(< 20)	30.0 ug/L	10/27/2008
Dichlorodifluoromethane	BMS	ND	28.7	96	(62-153)			30.0 ug/L	10/27/2008
	BMSD		29.1	97		2	(< 20)	30.0 ug/L	10/27/2008
Chloroethane	BMS	ND	30	100	(67-133)			30.0 ug/L	10/27/2008
	BMSD		34.5	115		14	(< 20)	30.0 ug/L	10/27/2008
sec-Butylbenzene	BMS	ND	33.3	111	(80-120)			30.0 ug/L	10/27/2008
	BMSD		34.7	116		4	(< 20)	30.0 ug/L	10/27/2008
Bromodichloromethane	BMS	ND	30.5	102	(80-120)			30.0 ug/L	10/27/2008
	BMSD		31.8	106		4	(< 20)	30.0 ug/L	10/27/2008
1,1-Dichloroethene	BMS	ND	31.6	105	(76-130)			30.0 ug/L	10/27/2008
	BMSD		32.5	108		3	(< 20)	30.0 ug/L	10/27/2008

SGS Ref.#	1085813002	Billable Matrix Spike	**Printed Date/Time**		11/20/2008 8:09
	1085813003	Billable Matrix Spike Dup.	**Prep**	**Batch**	VXX18954
				Method	Volatiles Extraction AFCEE 3.1
				Date	10/27/2008
Original	1085813001				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy									
2-Butanone (MEK)	BMS	ND	85.1	95	(66-136)			90.0 ug/L	10/27/2008
	BMSD		87.2	97		2	(< 20)	90.0 ug/L	10/27/2008
Methylene chloride	BMS	ND	31.3	104	(63-131)			30.0 ug/L	10/27/2008
	BMSD		32.9	110		5	(< 20)	30.0 ug/L	10/27/2008
Trichlorofluoromethane	BMS	ND	30.7	102	(68-145)			30.0 ug/L	10/27/2008
	BMSD		31.0	103		1	(< 20)	30.0 ug/L	10/27/2008
P & M -Xylene	BMS	ND	64.7	108	(80-120)			60.0 ug/L	10/27/2008
	BMSD		65.1	109		1	(< 20)	60.0 ug/L	10/27/2008
Naphthalene	BMS	ND	28.8	96	(75-120)			30.0 ug/L	10/27/2008
	BMSD		30.2	101		5	(< 20)	30.0 ug/L	10/27/2008
o-Xylene	BMS	ND	31.8	106	(80-120)			30.0 ug/L	10/27/2008
	BMSD		31.8	106		0	(< 20)	30.0 ug/L	10/27/2008
Bromoform	BMS	ND	29.9	100	(80-120)			30.0 ug/L	10/27/2008
	BMSD		30.9	103		3	(< 20)	30.0 ug/L	10/27/2008
1-Chlorohexane	BMS	ND	50.2	111	(70-125)			45.0 ug/L	10/27/2008
	BMSD		50.2	112		0	(< 20)	45.0 ug/L	10/27/2008
1,2,4-Trimethylbenzene	BMS	ND	32.4	108	(80-125)			30.0 ug/L	10/27/2008
	BMSD		33.6	112		4	(< 20)	30.0 ug/L	10/27/2008
tert-Butylbenzene	BMS	ND	32.1	107	(80-122)			30.0 ug/L	10/27/2008
	BMSD		33.6	112		5	(< 20)	30.0 ug/L	10/27/2008
1,1,1-Trichloroethane	BMS	ND	31.3	104	(80-122)			30.0 ug/L	10/27/2008
	BMSD		32.1	107		3	(< 20)	30.0 ug/L	10/27/2008
1,1-Dichloroethane	BMS	ND	31.6	105	(80-120)			30.0 ug/L	10/27/2008
	BMSD		32.4	108		3	(< 20)	30.0 ug/L	10/27/2008
2-Chlorotoluene	BMS	ND	30.9	103	(80-125)			30.0 ug/L	10/27/2008
	BMSD		32.2	107		4	(< 20)	30.0 ug/L	10/27/2008
Trichloroethene	BMS	ND	29	97	(80-125)			30.0 ug/L	10/27/2008
	BMSD		29.3	98		1	(< 20)	30.0 ug/L	10/27/2008
trans-1,2-Dichloroethene	BMS	ND	32.6	109	(79-132)			30.0 ug/L	10/27/2008
	BMSD		33.0	110		1	(< 20)	30.0 ug/L	10/27/2008
1,2-Dichlorobenzene	BMS	ND	30.2	101	(80-120)			30.0 ug/L	10/27/2008
	BMSD		31.4	105		4	(< 20)	30.0 ug/L	10/27/2008
2,2-Dichloropropane	BMS	ND	31.9	106	(80-132)			30.0 ug/L	10/27/2008
	BMSD		32.9	110		3	(< 20)	30.0 ug/L	10/27/2008
Hexachlorobutadiene	BMS	ND	29.6	99	(77-125)			30.0 ug/L	10/27/2008
	BMSD		30.0	100		1	(< 20)	30.0 ug/L	10/27/2008
Isopropylbenzene (Cumene)	BMS	ND	32.4	108	(80-121)			30.0 ug/L	10/27/2008
	BMSD		32.7	109		1	(< 20)	30.0 ug/L	10/27/2008
1,2-Dichloropropane	BMS	ND	28.9	96	(80-121)			30.0 ug/L	10/27/2008
	BMSD		29.8	99		3	(< 20)	30.0 ug/L	10/27/2008

SGS Ref.#	1085813002	Billable Matrix Spike	**Printed Date/Time**		11/20/2008 8:09
	1085813003	Billable Matrix Spike Dup.	**Prep**	**Batch**	VXX18954
				Method	Volatiles Extraction AFCEE 3.1
				Date	10/27/2008

Original 1085813001

Matrix Water (Surface, Eff., Ground)

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy										
1,1-Dichloropropene	BMS	ND	30.3	101	(80-122)			30.0	ug/L	10/27/2008
	BMSD		30.5	102		1	(< 20)	30.0	ug/L	10/27/2008
1,1,2-Trichloroethane	BMS	ND	29.7	99	(77-120)			30.0	ug/L	10/27/2008
	BMSD		30.1	100		2	(< 20)	30.0	ug/L	10/27/2008
1,3-Dichlorobenzene	BMS	ND	29.5	99	(80-120)			30.0	ug/L	10/27/2008
	BMSD		30.5	102		3	(< 20)	30.0	ug/L	10/27/2008
1,2,3-Trichlorobenzene	BMS	ND	27.7	92	(77-120)			30.0	ug/L	10/27/2008
	BMSD		29.3	98		5	(< 20)	30.0	ug/L	10/27/2008
Surrogates										
1,2-Dichloroethane-D4 <surr>	BMS		30.9	103	(73-120)					10/27/2008
	BMSD		31.0	103		0				10/27/2008
Toluene-d8 <surr>	BMS		30.9	103	(80-120)					10/27/2008
	BMSD		30.8	103		0				10/27/2008
4-Bromofluorobenzene <surr>	BMS		30.3	101	(76-120)					10/27/2008
	BMSD		31.0	103		2				10/27/2008

Batch VMS10242
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

Polynuclear Aromatics GC/MS

SGS Ref.#	1085813002	Billable Matrix Spike	**Printed Date/Time**		11/20/2008 8:09
	1085813003	Billable Matrix Spike Dup.	**Prep**	**Batch**	XXX20276
				Method	3520 Liquid/Liquid Ext for 827
				Date	10/28/2008
Original	1085813001				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS									
Acenaphthylene	BMS	ND	.362	68	(50-105)			0.532 ug/L	10/30/2008
	BMSD		0.350	64		3	(< 30)	0.549 ug/L	10/30/2008
Acenaphthene	BMS	ND	.345	65	(45-110)			0.532 ug/L	10/30/2008
	BMSD		0.342	62		1	(< 30)	0.549 ug/L	10/30/2008
Fluorene	BMS	ND	.36	68	(50-110)			0.532 ug/L	10/30/2008
	BMSD		0.349	64		3	(< 30)	0.549 ug/L	10/30/2008
Phenanthrene	BMS	ND	.348	65	(50-115)			0.532 ug/L	10/30/2008
	BMSD		0.343	63		1	(< 30)	0.549 ug/L	10/30/2008
Anthracene	BMS	ND	.372	70	(55-110)			0.532 ug/L	10/30/2008
	BMSD		0.363	66		2	(< 30)	0.549 ug/L	10/30/2008
Fluoranthene	BMS	ND	.38	71	(55-125)			0.532 ug/L	10/30/2008
	BMSD		0.378	69		1	(< 30)	0.549 ug/L	10/30/2008
Pyrene	BMS	ND	.366	69	(50-130)			0.532 ug/L	10/30/2008
	BMSD		0.364	66		1	(< 30)	0.549 ug/L	10/30/2008
Benzo(a)Anthracene	BMS	ND	.398	75	(55-120)			0.532 ug/L	10/30/2008
	BMSD		0.380	69		5	(< 30)	0.549 ug/L	10/30/2008
Chrysene	BMS	ND	.386	73	(55-120)			0.532 ug/L	10/30/2008
	BMSD		0.387	70		0	(< 30)	0.549 ug/L	10/30/2008
Benzo[b]Fluoranthene	BMS	ND	.406	76	(46-130)			0.532 ug/L	10/30/2008
	BMSD		0.408	74		1	(< 30)	0.549 ug/L	10/30/2008
Benzo[k]fluoranthene	BMS	ND	.413	78	(60-125)			0.532 ug/L	10/30/2008
	BMSD		0.392	71		5	(< 30)	0.549 ug/L	10/30/2008
Benzo[a]pyrene	BMS	ND	.43	81	(55-120)			0.532 ug/L	10/30/2008
	BMSD		0.418	76		3	(< 30)	0.549 ug/L	10/30/2008
Indeno[1,2,3-c,d] pyrene	BMS	ND	.416	78	(45-125)			0.532 ug/L	10/30/2008
	BMSD		0.414	75		1	(< 30)	0.549 ug/L	10/30/2008
Dibenzo[a,h]anthracene	BMS	ND	.424	80	(41-140)			0.532 ug/L	10/30/2008
	BMSD		0.425	77		0	(< 30)	0.549 ug/L	10/30/2008
Benzo[g,h,i]perylene	BMS	ND	.421	79	(46-125)			0.532 ug/L	10/30/2008
	BMSD		0.416	76		1	(< 30)	0.549 ug/L	10/30/2008
Naphthalene	BMS	0.0466 J	.333	54	(42-100)			0.532 ug/L	10/30/2008
	BMSD		0.325	51		3	(< 30)	0.549 ug/L	10/30/2008
1-Methylnaphthalene	BMS	0.0276 J	.341	59	(46-115)			0.532 ug/L	10/30/2008
	BMSD		0.336	56		2	(< 30)	0.549 ug/L	10/30/2008
2-Methylnaphthalene	BMS	ND	.336	63	(45-105)			0.532 ug/L	10/30/2008
	BMSD		0.327	60		3	(< 30)	0.549 ug/L	10/30/2008
Surrogates									
Terphenyl-d14 <surr>	BMS		.457	86	(50-135)				10/30/2008
	BMSD		0.454	83		1			10/30/2008

SGS Ref.#	1085813002	Billable Matrix Spike	**Printed Date/Time**	11/20/2008	8:09
	1085813003	Billable Matrix Spike Dup.	**Prep Batch**	XXX20276	
			Method	3520 Liquid/Liquid Ext for 827	
			Date	10/28/2008	
Original	1085813001				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

Batch	XMS4761
Method	8270D SIMS
Instrument	HP 5890 Series II MS2 SVOA

Hager, Barbara (Anchorage)

From: Adkisson, Richard K. [RKAdkisson@tecinc.com]
Sent: Wednesday, October 29, 2008 8:58 AM
To: Hager, Barbara (Anchorage)
Cc: Hart, Jeff; Whitman, William M.C.; Adkisson, Richard K.
Subject: Analysis of Sample RHMW01-WG13
Importance: High
Attachments: image001.jpg

Barbara,

Please cancel the analysis of sample RHMW01-WG13 for total lead. TEC will collect another sample, filter it in the field, and sent it for dissolved lead analysis. Please press on with the other requested analysis for RHMW01-WG13 and all other samples. Thank you.

Rick Adkisson
TEC, Inc.
1001 Bishop Street, Suite 1400
Honolulu, HI 96813
Phone: 808-528-1445
Fax: 808-528-0768

Hager, Barbara (Anchorage)

1085813

From: Adkisson, Richard K. [RKAdkisson@tecinc.com]
Sent: Thursday, October 23, 2008 9:11 AM
To: Hager, Barbara (Anchorage)
Cc: Adkisson, Richard K.; Whitman, William M.C.
Subject: RE: GW Sampling 10/22 - SPECIAL REQUEST
Importance: High
Attachments: image001.jpg

Barbara,

With the Red Hill GW samples that you should be receiving either today or tomorrow you need to be aware of the following:

SHORT HOLDING TIME

- Regarding GW Sample RHMW01-WG13 to be analyzed for dissolved lead: We were **not** able to filter this particular GW sample in the field prior to shipment, therefore **BEFORE** analyzing this **one** sample please filter it in the lab. All other GW samples for dissolved lead **have been** field filtered.

- Also the GW Sample RHMW01-WG13, we were only able to collect 1 (one) vs. 2 (two) amber jars (unpreserved) for this sample due to low pump flow. Mark Abe verified that your lab **only** requires 1 (one) jar for its analysis and that the other jar is requested in the event of breakage.

Please reply by email that you have received this special request ASAP. Also, we **cannot afford** to have the types of delays and mistakes in the analytical data and it's reporting to us that we recently experienced. Our client has been pressing us to ensure that **from now on** the analytical data will be presented in a **timely and accurate manner**.

Barbara, please take personal ownership with this batch of samples to ensure that TEC and our client receive professional, top-notch services.

Thank you and please an knowledge your receipt of this email.

Rick Adkisson
TEC, Inc.
1001 Bishop Street, Suite 1400
Honolulu, HI 96813
Phone: 808-528-1445
Fax: 808-528-0768

From: Whitman, William M.C.
Sent: Tuesday, October 21, 2008 10:54 AM
To: Hager, Barbara (Anchorage)
Cc: Adkisson, Richard K.; Hart, Jeff
Subject: GW Sampling 10/22

Hi Barbara,

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1085813

Locations Nationwide
Alaska Hawaii
Maryland Louisiana
New Jersey West Virginia
North Carolina
www.us.sgs.com

CLIENT: TEC INC.
CONTACT: **Jeff Hart** PHONE NO: 303.273.0231
PROJECT: **9121-003** SITE/PWSID#: Red Hill BFSF
REPORTS TO: Jeff Hart email jshart@tecinc.com
cc wmcwhitman@tecinc.com
INVOICE TO: TEC INC QUOTE #:
P.O. NUMBER:

SGS Reference #:

page _____ of _____

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	Preserv. Used	SAMPLE TYPE C = COMP G = GRAB	TPH-GRO (8015B) HCL	TPH-DRO (8015B) HCL	VOC's (8260B) HCl	PAH's (8270C-SIMS)	Diss Pb (6020) HNO_3	REMARKS
1	RHMW2254-WG13	10/22/2008	0930	Water	23			X	X	X	X	X	3x Volume sent in 2 coolers
2	RHMW03-WG13	10/22/2008	1115	Water	6			X		X			
3	RHMW02-WG13	10/22/2008	1245	Water	6			X		X			
4	RHMWA01-WG13	10/22/2008	1205	Water	6			X		X			
5	RHMW01-WG13	10/22/2008	1500	Water	6			X		X			
6	TB01-WG13	10/22/2008	0805	Water	3					X			

Collected/Relinquished By: (1)	Date 10-22-08	Time 1720	Received By:
Relinquished By: (2)	Date 10/23/08	Time 1430	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 10/24/08	Time 1050	Received For Laboratory By:

Shipping Carrier:
Shipping Ticket No:
Special Deliverable Requirements: See Contract
Samples Received Cold? YES NO
Temperature °C: TB=5.1 C=5.6
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
Requested Turnaround Time and-or Special Instructions: **See Contract**

☐ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 3180 Peger Road **Fairbanks, AK 99701** Tel: (907) 474-8656 Fax: (907) 474-9685
☐ 255 Sand Island Access Rd., Unit 1B **Honolulu, HI 96819** Tel: (808) 224-6217 Fax: (808) 845-2287
☐ 151 James Drive West **St Rose, LA 70087** Tel: (504) 469-6401 Fax: (504) 463-3304
☐ 1258 Greenbrier Street **Charleston, WV 25311** Tel: (304) 346-0725 Fax: (304) 346-0761
☐ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557

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CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1085813

Locations Nationwide
Alaska Hawaii
Maryland Louisiana
New Jersey West Virginia
North Carolina
www.us.sgs.com

CLIENT: TEC INC.
CONTACT: **Jeff Hart** PHONE NO: 303.273.0231
PROJECT: **9121-003** SITE/PWSID#: Red Hill BFSF
REPORTS TO: Jeff Hart email jshart@tecinc.com
cc wmcwhitman@tecinc.com
INVOICE TO: TEC INC QUOTE #:
P.O. NUMBER:

SGS Reference #:

page _____ of _____

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	Preserv. Used	SAMPLE TYPE C = COMP G = GRAB	TPH-GRO (8015B) HCL	TPH-DRO (8015B) HCl	VOC's (8260B)	PAH's (8270C-SIMS) HNO_3	Diss Pb (6020)							REMARKS
0273	**RHMW2254-WG10**	**10/22/2008**	**0930**	**Water**	**10**				X		X	X	(1) A-F M	(2) A-E, G-J	(3) A-F				3x Volume sent in 2 coolers

JJS 10-24-08

Collected/Relinquished By: (1)	Date 10-22-08	Time 1720	Received By:
Relinquished By: (2)	Date 10/23/08	Time 1430	Received By:
Relinquished By: (3)	Date	Time	Received By: 10/24/08 1050
Relinquished By: (4)	Date	Time	Received For Laboratory By:

Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? YES NO
Temperature °C:
Special Deliverable Requirements: See Contract
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
Requested Turnaround Time and-or Special Instructions: **See Contract**

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 3180 Peger Road Fairbanks, AK 99701 Tel: (907) 474-8656 Fax: (907) 474-9685
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☐ 151 James Drive West St Rose, LA 70087 Tel: (504) 469-6401 Fax: (504) 463-3304
☐ 1258 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

COOLER: 2.0 TB: 2.1

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CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1085813

Locations Nationwide
Alaska Hawaii
Maryland Louisiana
New Jersey West Virginia
North Carolina
www.us.sgs.com

CLIENT: TEC INC.
CONTACT: Jeff Hart PHONE NO: 303.273.0231
PROJECT: 9121-003 SITE/PWSID#: Red Hill BFSF
REPORTS TO: Jeff Hart email jshart@tecinc.com
cc wmcwhitman@tecinc.com
INVOICE TO: TEC INC QUOTE #:
P.O. NUMBER:

SGS Reference #:

page ______ of ______

Preserv. Used: HCL (TPH-GRO), HCl (VOC's), HNO3 (Diss Pb)

SAMPLE TYPE: C = COMP, G = GRAB

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE	TPH-GRO (8015B)	TPH-DRO (8015B)	VOC's (8260B)	PAH's (8270C-SIMS)	Diss Pb (6020)							REMARKS
(5) G-K	RHMW02-WG13	10/22/2008	1245	Water	5			X		X	X							
(6) ↓	RHMWA01-WG13	10/22/2008	1205	Water	5			X		X	X							

	Date	Time	
Collected/Relinquished By: (1) [signature]	10-22-08	1720	Received By: [signature]
Relinquished By: (2) [signature]	10/23/08	1430	Received By: [signature]
Relinquished By: (3)			Received By:
Relinquished By: (4)	10/24/08	1050	Received For Laboratory By: [signature]

Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? YES NO
Temperature °C: TB=2.5 C=2.6
Special Deliverable Requirements: **See Contract**
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
Requested Turnaround Time and-or Special Instructions:
See Contract

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 3180 Peger Road Fairbanks, AK 99701 Tel: (907) 474-8656 Fax: (907) 474-9685
☐ 255 Sand Island Access Rd., Unit 1B Honolulu, HI 96819 Tel: (808) 224-6217 Fax: (808) 845-2297
☐ 151 James Drive West St Rose, LA 70087 Tel: (504) 469-6401 Fax: (504) 463-3304
☐ 1258 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1085813

Locations Nationwide
Hawaii
nd Louisiana
Jersey West Virginia
Carolina
www.us.sgs.com

CLIENT:	TEC INC.	SGS Reference #:	page _____ of _____
CONTACT:	**Jeff Hart**	PHONE NO:	303.273.0231
PROJECT:	**9121-003**	SITE/PWSID#:	Red Hill BFSF
REPORTS TO:	Jeff Hart	email	jshart@tecinc.com
		cc	wmcwhitman@tecinc.com
INVOICE TO:	TEC INC	QUOTE #:	
		P.O. NUMBER:	

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	Preserv. Used	SAMPLE TYPE C = COMP G = GRAB	TPH-GRO (8015B) HCL	TPH-DRO (8015B) HCL	VOC's (8260B)	PAH's (8270C-SIMS) HNO_3	Diss Pb (6020)	REMARKS
7 G-J	RHMW01-WG13	10/22/2008	1500	Water	~~5~~ 4				X		X	X	Filter Diss. Pb in Lab
8 G-K	RHMW03-WG13	10/22/2008	1115	Water	5				X		X	X	

Collected/Relinquished By: (1) W. Hart	Date 10/22/08	Time 1720	Received By:
Relinquished By: (2)	Date 10/23/08	Time 14:30	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 10/24/08	Time 1050	Received For Laboratory By:

Shipping Carrier:	Samples Received Cold? YES NO
Shipping Ticket No:	IV Temperature °C: TB=2.0. C=3.5
Special Deliverable Requirements: See Contract	Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Requested Turnaround Time and-or Special Instructions:

See Contract

☐ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 3180 Peger Road **Fairbanks, AK 99701** Tel: (907) 474-8656 Fax: (907) 474-9685
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☐ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557

SGS

1085813

SAMPLE RECEIPT FORM

SGS WO#:

Yes	No	NA		
✓			Are samples **RUSH**, priority or *w/in 72 hrs* of hold time?	**TAT (circle one):** Standard or- Rush
✓			If yes, have you done *e-mail ALERT notification*?	**Received Date:** 10-24-08
	✓		Are samples *within 24 hrs.* of **hold time** or **due date**?	**Received Time:** 1050
		✓	If yes, have you also *spoken with* supervisor?	Is **date/time conversion** necessary? No Yes
		✓	Archiving bottles (if req'd): Are they properly marked?	# of hours to AK Local Time: +2
* ✓			Are there any **problems**? PM Notified?	**Thermometer ID:** 69D, 70D
** ✓			Were samples preserved correctly and pH verified?	

Cooler ID	Temp Blank	Cooler Temp
1	2.1 °C	2.0 °C
2	5.1 °C	5.6 °C
3	2.5 °C	2.6 °C
4	2.0 °C	3.5 °C
	°C	°C

Note: Temperature readings include thermometer correction factors

	✓		If this is for PWS, provide **PWSID.**	
	✓		Will courier charges apply?	
			Method of payment?	
✓			Data package required? (Level: 1 / 2 / 3 / 4)	
			Notes:	
			Is this a DoD project? (USACE, Navy, AFCEE)	

Delivery method (circle all that apply): Client / Alert Courier / UPS / FedEx / USPS / DHL / AA Goldstreak / NAC / ERA / PenAir / Carlile/ Lynden / SGS / Other:

Airbill # 8665 6327 7905

Additional Sample Remarks: *(√if applicable)*

- ___ Extra Sample Volume?
- ✓ Limited Sample Volume?
- ___ MeOH field preserved for volatiles?
- ✓ Field-filtered for dissolved 1-6
- ___ Lab-filtered for dissolved
- ___ Ref Lab required?
- ___ Foreign Soil?

This section must be filled out for DoD projects (USACE, Navy, AFCEE)

Yes	No		
✓		Is received temperature 4 ± 2°C?	
		Exceptions:	Samples/Analyses Affected:
		If temperature(s) <0°C, were containers ice-free?	N/A
		Notify PM immediately of any ice in samples	
✓		Was there an airbill?	*(Note # above in the right hand column)*
✓		Was cooler sealed with custody seals? # / where: 1 on front 1 on back of all	
✓		Were seal(s) intact upon arrival?	
✓		Was there a COC with cooler?	
✓		Was COC sealed in plastic bag & taped inside lid of cooler?	
✓		Was the COC filled out properly?	
	✓	Did the COC indicate USACE / Navy / AFCEE project?	
✓		Did the COC and samples correspond?	
✓		Were all sample packed to prevent breakage? Packing material: Bub	
✓		Were all samples unbroken and clearly labeled?	
✓		Were all samples sealed in separate plastic bags?	
	✓	Were all VOCs free of headspace and/or MeOH preserved?	
*	✓	Were correct container / sample sizes submitted?	
* ✓		Is sample condition good?	
✓		Was copy of CoC, SRF, and custody seals given to PM to fax?	

This section must be filled if problems are found.

Yes No

___ ___ Was client notified of problems?

Individual contacted: ___

Via: Phone / Fax / Email (*circle one*)

Date/Time: ___

Reason for contact: ___

Change Order Required? ___

SGS Contact: ___

Notes: * client wants sample ⑦ filtered at lab but sample is already HNO3 preserved to a pH < 2.

*Bubbles in VOAs, ⑧A-C > 1cm

please proceed with TB analysis. Hold off on dissolved Pb for sample #7. 10/24bc

Completed by (sign): ___ **(print):** James Johnson

Login proof (check one): waived ___ required X performed by: ___

SGS

pg 1 of 2

SAMPLE RECEIPT FORM (page 2)

SGS WO#: 1085813

#	Container ID	Matrix	Test	QC	TB	Container Volume: 1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz (250 mL)	4oz (125 mL)	Other	Container Type: AG	CG	HDPE	Nalgene	Cubie	Coli	Septa	Other	Preservative: None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	Other
1	A-C	1	TPH-GRO 8015B								3				X						X			X						
	D-F		VOC 8260								3				X						X			X						
	G		Diss Pb				1										X								X					FF
	H-I		TPH-DRO 8015			2									X								X							
	J-K		PAH 8270 SIMS			2									X								X							
	L-M		extra vol				2										X								X					
2	A-B	1	TPH-G	MS							2				X						X			X						
	C-E		VOC								3				X						X			X						
	F		Diss Pb								SJADOT																			
	G-H		TPH-DRO			2									X									X						
	I-J		PAH 8270 SIMS	↓		2									X								X							
3	A-C	1	TPH-G	MSD							3				X						X			X						
	D-F		VOC								3				X						X			X						
	G		Diss Pb								SJADOT																			
	H-I		TPH-DRO			2									X									X						
	J-K		PAH 8270 SIMS	↓		2									X								X							

Bottle Totals	1	2	3				16			

Completed by: _____ Date: 10-24-08

Form # F004r16 revised 03/10/03

SGS

Pg 2 of 2

1085813

SAMPLE RECEIPT FORM (page 2)

SGS WO#: 1085813

						Container Volume									Container Type								Preservative							
#	Container ID	Matrix	Test	QC	TB	1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz (250 mL)	4oz (125 mL)	Other	AG	CG	HDPE	Nalgene	Cubie	Coli	Septa	Other	None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	Other
4-6	A-C	1	TPH-GRO 8015B								9				X						X			X						
	D-F		VOC 8260								9				X						X			X						
	G		Diss ~~Pb~~ Pb				1 (4)	2 (5-6)									X								X					FF
	H-I		TPH-DRO 8015			6									X									X						
	J-K		PAH 8270C SIMS			6									X								X							
7	A-C	1	TPH GRO 8015B								3				X						X			X						
	D-F		VOC 8260								3				X						X			X						
	G		Diss Pb					1									X													
	H-I		TPH-DRO 8015			2									X									X						
	J		PAH 8270C SIMS			1									X								X							
8	A-C	1	VOC 8260		X						~~1~~ 3				X						X			X						
	~~B-C~~ JJD 8-24-08				X						~~2~~ JJD 8-24-08																			

Bottle Totals	1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz	4oz	Other
	15	1	3			27			

Completed by: [signature] Date: 10-24-08

FedEx Express US Airbill

8665 6327 7905 0200 Form ID No.

FedEx Retrieval Copy

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From

Date 102308 Sender's FedEx Account Number

Sender's Name Phone 808 847 0067

Company ESN Pacific

Address 1818 Kahai St. Dept./Floor/Suite/Room

City Honolulu State HI ZIP 96819

2 Your Internal Billing Reference

3 To

Recipient's Name Phone 907 562 2343

Company SGS Environmental Services

Recipient's Address 200 W. Potter Dr. Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City Anchorage State AK ZIP 99518

4a Express Package Service *Packages up to 150 lbs.*

1 ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

5 ☒ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

6 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

3 ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate. *To most locations.

4b Express Freight Service *Packages over 150 lbs.*

7 ☐ FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

8 ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 ☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation. **To most locations.

5 Packaging

6 ☐ FedEx Envelope* 2 ☐ FedEx Pak* (Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak) 3 ☐ FedEx Box 4 ☐ FedEx Tube 1 ☒ Other

* Declared value limit $500.

6 Special Handling Include FedEx address in Section 3.

3 ☐ SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☐ HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.

☐ HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

☒ No 4 ☐ Yes As per attached Shipper's Declaration ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ___ x ___ kg ☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

U.S. Dept. of Agriculture
Animal & Plant Health Insp. Serv.
Plant Protection & Quarantine
LIMITED PERMIT NO.
OAHU S-0006
Movement Authorized By
Federal Quarantine 330.300

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No. ☐

1 ☐ Sender — Acct. No. in Section 1 will be billed. 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

[redacted] / [redacted]

Total Packages 4 Total Weight 212 [redacted] Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *Fee applies.*

520

SGS Environmental Services
Alaska Division
Level II Laboratory Data Report

Project:	9121-003 Red Hill BFSF
Client:	The Environmental Company, Inc. (TEC)
SGS Work Order:	1086126

Released by:

Contents:

Note:
Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

CASE NARRATIVE

Print Date: 12/11/2008

Client Name: The Environmental Company, Inc. (TEC)
Project Name: 9121-003 Red Hill BFSF
Workorder No.: 1086126

Sample Comments

Refer to the sample receipt form for information on sample condition.

Lab Sample ID	Sample Type	Client Sample ID

There were no analytical anomalies associated with the data reported herein.

Laboratory Analytical Report

Client: **The Environmental Company, Inc.**
1001 Bishop Street Ste 1400
ASB Tower
Honolulu, HI 96813

Attn: **Jeff Hart**
T: (808)528-1445 F:(808)528-0768
jshart@tecinc.com

Project: **9121-003 Red Hill BFSF**

Workorder No.: **1086126**

Certification:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, other than the conditions noted on the sample data sheet(s) and/or the case narrative. This certification applies only to the tested parameters and the specific sample(s) received at the laboratory.

If you have any questions regarding this report, or if we can be of further assistance, please contact your SGS Project Manager.

Tamara Rentz
tamara.rentz@sgs.com
Project Manager

Print Date: 12/11/2008

Enclosed are the analytical results associated with this workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Assurance Plan (QAP), which outlines this program is available at your request.

The Laboratory certification numbers are AK971-05 (DW), UTS-005 (CS) and AK00971 (Micro) for ADEC and AK100001 for NELAP (RCRA methods: 1020A, 1311, 6010B, 7470A, 7471A, 9040B, 9045C, 9056, 9060, 8015B, 8021B, 8081A/8082, 8260B, 8270C).

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP, the National Environmental Laboratory Accreditation Program and, when applicable, other regulatory authorities.

If you have any questions regarding this report or if we can be of any assistance, please contact your SGS Project Manager at 907-562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

MDL	Method Detection Limit
PQL	Practical Quantitation Limit (reporting limit).
CL	Control Limit
U	Indicates the analyte was analyzed for but not detected.
F	Indicates value that is greater than or equal to the MDL.
J	The quantitation is an estimation.
ND	Indicates the analyte is not detected
B	Indicates the analyte is found in a blank associated with the sample.
*	The analyte has exceeded allowable regulatory or control limits.
D	The analyte concentration is the result of dilution.
GT	Greater Than
LT	Less Than
Q	QC parameter out of acceptance range.
M	A matrix effect was present.
E	The analyte result is above the calibrated range.
R	Rejected
DF	Analytical Dilution Factor
JL	The analyte was positively identified, but the quantitation is a low estimation.
<Surr>	Surrogate QC spiked standard
<Surr/IS>	Surrogate / Internal Standard QC spiked standard
QC	Quality Control
QA	Quality Assurance
MB	Method Blank
LCS (D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
BMS(D)	Site Specific Matrix Spike
RPD	Relative Percent Difference
ICV	Initial Calibration Verification
CCV	Continuous Calibration Verification
MSA	Method of Standard Addition

Notes: Soil samples are reported on a dry weight basis unless otherwise specified
All DRO/RRO analysese are integrated per SOP.

SAMPLE SUMMARY

Print Date: 12/11/2008 1:06 pm

Client Name: The Environmental Company, Inc. (TEC)
Project Name: 9121-003 Red Hill BFSF
Workorder No.: 1086126

Analytical Methods

Method Description	Analytical Method
Dissolved Metals by ICP-MS	SW6020

Sample ID Cross Reference

Lab Sample ID	Client Sample ID
1086126001	RHMW01-WG13

The Environmental Company, Inc. (TEC) Print Date: 12/11/2008 1:06 pm

Client Sample ID: **RHMW01-WG13**
SGS Ref. #: 1086126001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 11/03/08 13:35
Receipt Date/Time: 11/05/08 09:45

Dissolved Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Lead	0.966 J	1.00	0.310	ug/L	5	MMS5721	MXX21078	

Batch Information

Analytical Batch: MMS5721
Analytical Method: SW6020
Analysis Date/Time: 11/15/08 17:30
Dilution Factor: 5

Prep Batch: MXX21078
Prep Method: SW3010A
Prep Date/Time: 11/13/08 20:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1086126001-A
Analyst: BME

SGS Ref.#	871318 Method Blank	**Printed Date/Time**		12/11/2008 13:06
Client Name	The Environmental Company, Inc. (TEC)	**Prep**	**Batch**	MXX21078
Project Name/#	9121-003 Red Hill BFSF		**Method**	SW3010A
Matrix	Water (Surface, Eff., Ground)		**Date**	11/13/2008

QC results affect the following production samples:

1086126001

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS					
Lead	ND	1.00	0.310	ug/L	11/20/08
Batch MMS5732					
Method SW6020					
Instrument Perkin Elmer Sciex ICP-MS P4					

SGS Ref.#	871319	Lab Control Sample	**Printed Date/Time**	12/11/2008	13:06
			Prep Batch	MXX21078	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3010A	
Project Name/#	9121-003 Red Hill BFSF		**Date**	11/13/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1086126001

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Lead	LCS	1000	100	(80-120)			1000 ug/L	11/20/2008

Batch MMS5732
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P4

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1086126

.ocations Nationwide
Hawaii
nd Louisiana
ersey West Virginia
Carolina
www.us.sgs.com

CLIENT: TEC INC.
CONTACT: Jeff Hart PHONE NO: 303.273.0231
PROJECT: 9121-003 SITE/PWSID#: Red Hill BFSF
REPORTS TO: Jeff Hart email jshart@tecinc.com
cc wmcwhitman@tecinc.com
INVOICE TO: TEC INC QUOTE #:
P.O. NUMBER:

SGS Reference #:

page ____ of ____

Preserv. Used: HCL, HCl, HNO_3

SAMPLE TYPE: C = COMP, G = GRAB

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE	TPH-GRO (8015B)	TPH-DRO (8015B)	VOC's (8260B)	PAH's (8270C-SIMS)	Diss Pb (6020)							REMARKS
① A	RHMW01-WG13	11/3/08	1235	Water	1						X							Field Filtered

	Date	Time	Received By:
Collected/Relinquished By: (1) [signature]	11/4/08	0945	
Relinquished By: (2)			
Relinquished By: (3)			
Relinquished By: (4)	11/5/08	1110	Received For Laboratory By: [signature]

Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? YES NO
Temperature °C: 69d TB=1.4C=1.0
Special Deliverable Requirements: See Contract
Chain of Custody Seal: (Circle) INTACT (circled) BROKEN ABSENT
Requested Turnaround Time and-or Special Instructions:
See Contract

☐ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 3180 Peger Road **Fairbanks, AK 99701** Tel: (907) 474-8656 Fax: (907) 474-9685
☐ 255 Sand Island Access Rd., Unit 1B **Honolulu, HI 96819** Tel: (808) 224-6217 Fax: (808) 845-2287
☐ 151 James Drive West **St Rose, LA 70087** Tel: (504) 469-6401 Fax: (504) 463-3304
☐ 1258 Greenbrier Street **Charleston, WV 25311** Tel: (304) 346-0725 Fax: (304) 346-0761
☐ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557

SGS

1086126

SAMPLE RECEIPT FORM

SGS WO#:

Yes	No	NA		
___	✓	___	Are samples **RUSH**, priority or *w/in 72 hrs* of **hold time**?	**TAT (circle one):** (Standard) -or- Rush
___	___	✓	If yes, have you done *e-mail ALERT notification*?	**Received Date:** 11-5-08
___	✓	___	Are samples *within 24 hrs.* of **hold time** or **due date**?	**Received Time:** 1110
___	___	✓	If yes, have you also *spoken with* supervisor?	Is **date/time conversion** necessary? no
___	___	✓	Archiving bottles (if req'd): Are they properly marked?	# of hours to AK Local Time: ___
___	✓	___	Are there any **problems**? PM Notified? ___	**Thermometer ID:** 69A
✓	___	___	Were samples preserved correctly and pH verified?	
___	___	✓	If this is for PWS, provide **PWSID.** ___	
___	✓	___	Will courier charges apply?	
			Method of payment? ___	
___	___	___	Data package required? (Level: 1 / 2 / 3 / 4)	
			Notes: ___	
___	___	___	Is this a DoD project? (USACE, Navy, AFCEE)	

Cooler ID	Temp Blank	Cooler Temp
1	1.4 °C	1.0 °C
___	___ °C	___ °C
___	___ °C	___ °C
___	___ °C	___ °C
___	___ °C	___ °C

Note: Temperature readings include thermometer correction factors

Delivery method (circle all that apply): Client / Alert Courier / UPS / (FedEx) / USPS / DHL / AA Goldstreak / NAC / ERA / PenAir / Carlile/ Lynden / SGS / Other: ___

Airbill # 7911 8073 0793

Additional Sample Remarks: *(√if applicable)*

___ Extra Sample Volume?
___ Limited Sample Volume?
___ MeOH field preserved for volatiles?
✓ Field-filtered for dissolved P6
___ Lab-filtered for dissolved ___
___ Ref Lab required? ___
___ Foreign Soil?

This section must be filled out for DoD projects (USACE, Navy, AFCEE)

Yes	No		
___	✓	Is received temperature 4 ± 2°C?	Exceptions: SEE Above — Samples/Analyses Affected: ___
___	NA	If temperature(s) <0 °C, were containers ice-free? N/A	*Notify PM immediately of any ice in samples.*
✓	___	Was there an airbill?	*(Note # above in the right hand column)*
✓	___	Was cooler sealed with custody seals?	# / where: 2 FRONT & BACK TOP LID
✓	___	Were seal(s) intact upon arrival?	
✓	___	Was there a COC with cooler?	
✓	___	Was COC sealed in plastic bag & taped inside lid of cooler?	
✓	___	Was the COC filled out properly?	
✓	___	Did the COC indicate USACE / Navy / AFCEE project?	
✓	___	Did the COC and samples correspond?	
✓	___	Were all sample packed to prevent breakage?	Packing material: BUBBLE WRAP
✓	___	Were all samples unbroken and clearly labeled?	
✓	___	Were all samples sealed in separate plastic bags?	
___	NA	Were all VOCs free of headspace and/or MeOH preserved?	
✓	___	Were correct container / sample sizes submitted?	
✓	___	Is sample condition good?	
✓	___	Was copy of CoC, SRF, and custody seals given to PM to fax?	

This section must be filled if problems are found.

Yes	No	
___	___	Was client notified of problems?

Individual contacted: ___
Via: Phone / Fax / Email *(circle one)*
Date/Time: ___
Reason for contact: ___

Change Order Required? ___
SGS Contact: ___

Notes: ___

Completed by (sign): ___ **(print):** JAMES DOUGHTY

Login proof (check one): waived ___ required ___ performed by: ___

SGS

1086126

SAMPLE RECEIPT FORM (page 2)

SGS WO#:

#	Container ID	Matrix	Test	QC	TB	Container Volume: 1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz (250 mL)	4oz (125 mL)	Other	Container Type: AG	CG	HDPE	Nalgene	Cubie	Coli	Septa	Other	Preservative: None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	Other
1	A	1	Diss Pb				1										L								V					
Bottle Totals							1																							

Completed by: _____ Date: 11-5-08

Form # F004r16 revised 03/10/08

1086126

SGS Environmental

CUSTODY SEAL

Signature: [signature] Date/Time: 4/2 0745

ONE CUSTODY SEAL DESTROYED WHILE REMOVING TAPE JGO

1086126

From: Origin ID: HIKA (808)528-1445
BILL WHITMAN
TEC INC.
1001 BISHOP STREET, ASB TOWER
SUITE 1400
HONOLULU, HI 96813

FedEx Express

CLS# 168/21/24

Ship Date: 04NOV08
ActWgt: 5 LB
CAD: 1774997/INET8091
Account#: S *********

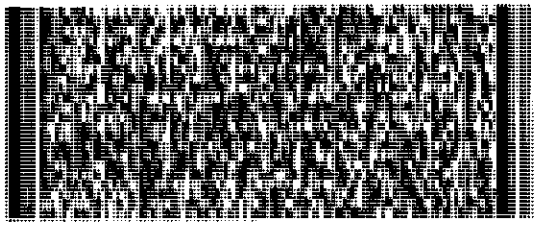
Delivery Address Bar Code

Ref # P# 9121
Invoice #
PO #
Dept #

SHIP TO: 9075622343 BILL THIRD PARTY

SAMPLE RECEIVING
SGS Environmental Services
200 W POTTER DR

ANCHORAGE, AK 995181605



TRK# 0201 7911 8073 0793

WED - 05NOV AM
PRIORITY OVERNIGHT

99518
AK-US
ANC

WU CYMA

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic valueof the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

SGS Environmental Services
Alaska Division
Level II Laboratory Data Report

Project:	9121-003 Red Hill BFSF
Client:	The Environmental Company, Inc. (TEC)
SGS Work Order:	1086721

Released by:

Contents:

Cover Page
Case Narrative
Final Report Pages
Quality Control Summary Forms
Chain of Custody/Sample Receipt Forms

Note:
Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

CASE NARRATIVE

Print Date: 12/22/2008

Client Name: The Environmental Company, Inc. (TEC)
Project Name: 9121-003 Red Hill BFSF
Workorder No.: 1086721

Sample Comments

Refer to the sample receipt form for information on sample condition.

Lab Sample ID	Sample Type	Client Sample ID
876591	MS	1086597003A(876590MS)
	8260B - MS recovery for several analytes does not meet QC goals (biased high). See LCS for accuracy.	
876592	MSD	1086597003A(876590MSD)
	8260B - MSD recovery for several analytes does not meet QC goals (biased high). See LCS for accuracy.	
876594	CCV	CCV for HBN 210083 [VMS/10317]
	8260B - ICV recovery for dichlorodifluoromethane and 1,1-dichloroethene does not meet QC goals (biased high). These analytes were not detected above the PQL in the associated samples.	

Laboratory Analytical Report

Client: **The Environmental Company, Inc.**
1001 Bishop Street Ste 1400
ASB Tower
Honolulu, HI 96813

Attn: **Jeff Hart**
T: (808)528-1445 F:(808)528-0768
jshart@tecinc.com

Project: **9121-003 Red Hill BFSF**

Workorder No.: **1086721**

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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, other than the conditions noted on the sample data sheet(s) and/or the case narrative. This certification applies only to the tested parameters and the specific sample(s) received at the laboratory.

If you have any questions regarding this report, or if we can be of further assistance, please contact your SGS Project Manager.

Tamara Rentz
tamara.rentz@sgs.com
Project Manager

Print Date: 12/22/2008

Enclosed are the analytical results associated with this workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Assurance Plan (QAP), which outlines this program is available at your request.

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BMS(D)	Site Specific Matrix Spike
RPD	Relative Percent Difference
ICV	Initial Calibration Verification
CCV	Continuous Calibration Verification
MSA	Method of Standard Addition

Notes: Soil samples are reported on a dry weight basis unless otherwise specified
All DRO/RRO analysese are integrated per SOP.

SAMPLE SUMMARY

Print Date: 12/22/2008 11:45 am

Client Name: The Environmental Company, Inc. (TEC)
Project Name: 9121-003 Red Hill BFSF
Workorder No.: 1086721

Analytical Methods

Method Description	Analytical Method
AFCEE 3.1 8260 (W)	SW8260B

Sample ID Cross Reference

Lab Sample ID	Client Sample ID
1086721001	RHMW2254-WG13B
1086721002	RHMWA01-WG13B
1086721003	TB01-WG13B

Client Sample ID: **RHMW2254-WG13B**
SGS Ref. #: 1086721001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 12/16/08 10:05
Receipt Date/Time: 12/17/08 11:55

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	ND	0.400	0.120	ug/L	1	VMS10317	VXX19107	
Toluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Styrene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Acetone	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10317	VXX19107	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10317	VXX19107	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10317	VXX19107	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10317	VXX19107	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	

Client Sample ID: **RHMW2254-WG13B**
SGS Ref. #: 1086721001
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 12/16/08 10:05
Receipt Date/Time: 12/17/08 11:55

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10317	VXX19107	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichloroethane-D4 <surr>	99.2	73-120		%	1	VMS10317	VXX19107	
Toluene-d8 <surr>	99.6	80-120		%	1	VMS10317	VXX19107	
4-Bromofluorobenzene <surr>	100	76-120		%	1	VMS10317	VXX19107	

Batch Information

Analytical Batch: VMS10317
Analytical Method: SW8260B
Analysis Date/Time: 12/19/08 02:19
Dilution Factor: 1

Prep Batch: VXX19107
Prep Method: SW5030B
Prep Date/Time: 12/18/08 14:04

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1086721001-A
Analyst: DSH

Client Sample ID: **RHMWA01-WG13B**
SGS Ref. #: 1086721002
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 12/16/08 12:05
Receipt Date/Time: 12/17/08 11:55

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	ND	0.400	0.120	ug/L	1	VMS10317	VXX19107	
Toluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Styrene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Acetone	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10317	VXX19107	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10317	VXX19107	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10317	VXX19107	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10317	VXX19107	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	

Client Sample ID: **RHMWA01-WG13B**
SGS Ref. #: 1086721002
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 12/16/08 12:05
Receipt Date/Time: 12/17/08 11:55

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10317	VXX19107	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichloroethane-D4 <surr>	95.9	73-120		%	1	VMS10317	VXX19107	
Toluene-d8 <surr>	102	80-120		%	1	VMS10317	VXX19107	
4-Bromofluorobenzene <surr>	99.6	76-120		%	1	VMS10317	VXX19107	

Batch Information

Analytical Batch: VMS10317
Analytical Method: SW8260B
Analysis Date/Time: 12/19/08 02:52
Dilution Factor: 1

Prep Batch: VXX19107
Prep Method: SW5030B
Prep Date/Time: 12/18/08 14:04

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1086721002-A
Analyst: DSH

Client Sample ID: **TB01-WG13B**
SGS Ref. #: 1086721003
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 12/16/08 08:05
Receipt Date/Time: 12/17/08 11:55

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	ND	0.400	0.120	ug/L	1	VMS10317	VXX19107	
Toluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Styrene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Acetone	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10317	VXX19107	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10317	VXX19107	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10317	VXX19107	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10317	VXX19107	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	

The Environmental Company, Inc. (TEC) Print Date: 12/22/2008 11:45 am

Client Sample ID: **TB01-WG13B**
SGS Ref. #: 1086721003
Project ID: 9121-003 Red Hill BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 12/16/08 08:05
Receipt Date/Time: 12/17/08 11:55

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10317	VXX19107	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10317	VXX19107	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10317	VXX19107	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10317	VXX19107	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10317	VXX19107	
1,2-Dichloroethane-D4 <surr>	114	73-120		%	1	VMS10317	VXX19107	
Toluene-d8 <surr>	99.2	80-120		%	1	VMS10317	VXX19107	
4-Bromofluorobenzene <surr>	103	76-120		%	1	VMS10317	VXX19107	

Batch Information

Analytical Batch: VMS10317
Analytical Method: SW8260B
Analysis Date/Time: 12/18/08 20:43
Dilution Factor: 1

Prep Batch: VXX19107
Prep Method: SW5030B
Prep Date/Time: 12/18/08 14:04

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1086721003-A
Analyst: DSH

SGS Ref.#	876587 Method Blank	**Printed Date/Time**	12/22/2008 11:45
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX19107
Project Name/#	9121-003 Red Hill BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	12/18/2008

QC results affect the following production samples:

1086721001, 1086721002, 1086721003

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Benzene	ND	0.400	0.120	ug/L	12/18/08
Toluene	ND	1.00	0.310	ug/L	12/18/08
Ethylbenzene	ND	1.00	0.310	ug/L	12/18/08
n-Butylbenzene	ND	1.00	0.310	ug/L	12/18/08
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	12/18/08
1,2-Dichloroethane	ND	0.500	0.150	ug/L	12/18/08
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	12/18/08
4-Chlorotoluene	ND	1.00	0.310	ug/L	12/18/08
Chlorobenzene	ND	0.500	0.150	ug/L	12/18/08
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	12/18/08
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	12/18/08
4-Isopropyltoluene	ND	1.00	0.310	ug/L	12/18/08
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	12/18/08
n-Propylbenzene	ND	1.00	0.310	ug/L	12/18/08
Styrene	ND	1.00	0.310	ug/L	12/18/08
Dibromomethane	ND	1.00	0.310	ug/L	12/18/08
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	12/18/08
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	12/18/08
Acetone	ND	10.0	3.10	ug/L	12/18/08
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	12/18/08
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	12/18/08
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	12/18/08
Tetrachloroethene	ND	1.00	0.310	ug/L	12/18/08
Dibromochloromethane	ND	0.500	0.150	ug/L	12/18/08
1,3-Dichloropropane	ND	0.400	0.120	ug/L	12/18/08
1,2-Dibromoethane	ND	1.00	0.310	ug/L	12/18/08
Carbon tetrachloride	ND	1.00	0.310	ug/L	12/18/08
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	12/18/08
Chloroform	ND	1.00	0.300	ug/L	12/18/08
Bromobenzene	ND	1.00	0.310	ug/L	12/18/08
Chloromethane	ND	1.00	0.310	ug/L	12/18/08
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	12/18/08
Bromomethane	ND	3.00	0.940	ug/L	12/18/08
Bromochloromethane	ND	1.00	0.310	ug/L	12/18/08
Vinyl chloride	ND	1.00	0.310	ug/L	12/18/08
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	12/18/08

SGS Ref.#	876587 Method Blank	**Printed Date/Time**	12/22/2008 11:45
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX19107
Project Name/#	9121-003 Red Hill BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	12/18/2008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
Chloroethane	ND	1.00	0.310	ug/L	12/18/08
sec-Butylbenzene	ND	1.00	0.310	ug/L	12/18/08
Bromodichloromethane	ND	0.500	0.150	ug/L	12/18/08
1,1-Dichloroethene	ND	1.00	0.310	ug/L	12/18/08
2-Butanone (MEK)	ND	10.0	3.10	ug/L	12/18/08
Methylene chloride	ND	5.00	1.00	ug/L	12/18/08
Trichlorofluoromethane	ND	1.00	0.310	ug/L	12/18/08
P & M -Xylene	ND	2.00	0.620	ug/L	12/18/08
Naphthalene	ND	2.00	0.620	ug/L	12/18/08
o-Xylene	ND	1.00	0.310	ug/L	12/18/08
Bromoform	ND	1.00	0.310	ug/L	12/18/08
1-Chlorohexane	ND	1.00	0.310	ug/L	12/18/08
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	12/18/08
tert-Butylbenzene	ND	1.00	0.310	ug/L	12/18/08
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	12/18/08
1,1-Dichloroethane	ND	1.00	0.310	ug/L	12/18/08
2-Chlorotoluene	ND	1.00	0.310	ug/L	12/18/08
Trichloroethene	ND	1.00	0.310	ug/L	12/18/08
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	12/18/08
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	12/18/08
2,2-Dichloropropane	ND	1.00	0.310	ug/L	12/18/08
Hexachlorobutadiene	ND	1.00	0.310	ug/L	12/18/08
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	12/18/08
1,2-Dichloropropane	ND	1.00	0.310	ug/L	12/18/08
1,1-Dichloropropene	ND	1.00	0.310	ug/L	12/18/08
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	12/18/08
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	12/18/08
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	12/18/08
Surrogates					
1,2-Dichloroethane-D4 <surr>	114	73-120		%	12/18/08
Toluene-d8 <surr>	99.4	80-120		%	12/18/08
4-Bromofluorobenzene <surr>	103	76-120		%	12/18/08

Batch VMS10317
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	876588	Lab Control Sample	**Printed Date/Time**	12/22/2008	11:45
	876589	Lab Control Sample Duplicate	**Prep Batch**	VXX19107	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	12/18/2008	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1086721001, 1086721002, 1086721003

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
Benzene	LCS	32.9	110	(80-120)			30 ug/L	12/18/2008
	LCSD	33.1	110		1	(< 20)	30 ug/L	12/18/2008
Toluene	LCS	32.5	108	(77-120)			30 ug/L	12/18/2008
	LCSD	32.2	107		1	(< 20)	30 ug/L	12/18/2008
Ethylbenzene	LCS	32.7	109	(80-120)			30 ug/L	12/18/2008
	LCSD	32.7	109		0	(< 20)	30 ug/L	12/18/2008
n-Butylbenzene	LCS	33.4	111	(80-124)			30 ug/L	12/18/2008
	LCSD	33.1	110		1	(< 20)	30 ug/L	12/18/2008
1,4-Dichlorobenzene	LCS	32.6	109	(80-120)			30 ug/L	12/18/2008
	LCSD	32.2	107		1	(< 20)	30 ug/L	12/18/2008
1,2-Dichloroethane	LCS	32.6	109	(80-129)			30 ug/L	12/18/2008
	LCSD	32.4	108		1	(< 20)	30 ug/L	12/18/2008
1,3,5-Trimethylbenzene	LCS	33.3	111	(80-128)			30 ug/L	12/18/2008
	LCSD	32.8	109		2	(< 20)	30 ug/L	12/18/2008
4-Chlorotoluene	LCS	33.2	111	(79-128)			30 ug/L	12/18/2008
	LCSD	32.9	110		1	(< 20)	30 ug/L	12/18/2008
Chlorobenzene	LCS	30.6	102	(80-120)			30 ug/L	12/18/2008
	LCSD	30.5	102		0	(< 20)	30 ug/L	12/18/2008
4-Methyl-2-pentanone (MIBK)	LCS	93.0	103	(69-134)			90 ug/L	12/18/2008
	LCSD	98.2	109		5	(< 20)	90 ug/L	12/18/2008
cis-1,2-Dichloroethene	LCS	34.4	115	(80-125)			30 ug/L	12/18/2008
	LCSD	34.1	114		1	(< 20)	30 ug/L	12/18/2008
4-Isopropyltoluene	LCS	33.3	111	(80-125)			30 ug/L	12/18/2008
	LCSD	32.9	110		1	(< 20)	30 ug/L	12/18/2008
cis-1,3-Dichloropropene	LCS	29.5	98	(80-120)			30 ug/L	12/18/2008
	LCSD	30.1	100		2	(< 20)	30 ug/L	12/18/2008

SGS Ref.#	876588	Lab Control Sample	**Printed Date/Time**	12/22/2008	11:45
	876589	Lab Control Sample Duplicate	**Prep Batch**	VXX19107	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	12/18/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
n-Propylbenzene	LCS	33.1	110	(80-129)			30 ug/L	12/18/2008
	LCSD	32.6	109		2	(< 20)	30 ug/L	12/18/2008
Styrene	LCS	30.5	102	(80-120)			30 ug/L	12/18/2008
	LCSD	30.8	103		1	(< 20)	30 ug/L	12/18/2008
Dibromomethane	LCS	31.4	105	(80-120)			30 ug/L	12/18/2008
	LCSD	32.5	108		3	(< 20)	30 ug/L	12/18/2008
trans-1,3-Dichloropropene	LCS	32.5	108	(80-124)			30 ug/L	12/18/2008
	LCSD	33.1	110		2	(< 20)	30 ug/L	12/18/2008
1,2,4-Trichlorobenzene	LCS	30.7	102	(80-120)			30 ug/L	12/18/2008
	LCSD	30.3	101		1	(< 20)	30 ug/L	12/18/2008
Acetone	LCS	94.2	105	(50-135)			90 ug/L	12/18/2008
	LCSD	101	112		7	(< 20)	90 ug/L	12/18/2008
1,1,2,2-Tetrachloroethane	LCS	32.1	107	(76-123)			30 ug/L	12/18/2008
	LCSD	33.0	110		3	(< 20)	30 ug/L	12/18/2008
1,2-Dibromo-3-chloropropane	LCS	34.8	116	(73-130)			30 ug/L	12/18/2008
	LCSD	33.9	113		3	(< 20)	30 ug/L	12/18/2008
Methyl-t-butyl ether	LCS	49.6	110	(80-120)			45 ug/L	12/18/2008
	LCSD	49.9	111		1	(< 20)	45 ug/L	12/18/2008
Tetrachloroethene	LCS	31.2	104	(79-122)			30 ug/L	12/18/2008
	LCSD	31.2	104		0	(< 20)	30 ug/L	12/18/2008
Dibromochloromethane	LCS	33.0	110	(80-120)			30 ug/L	12/18/2008
	LCSD	33.5	112		2	(< 20)	30 ug/L	12/18/2008
1,3-Dichloropropane	LCS	33.1	110	(80-121)			30 ug/L	12/18/2008
	LCSD	33.4	111		1	(< 20)	30 ug/L	12/18/2008
1,2-Dibromoethane	LCS	32.5	108	(80-120)			30 ug/L	12/18/2008
	LCSD	32.9	110		1	(< 20)	30 ug/L	12/18/2008
Carbon tetrachloride	LCS	32.9	110	(80-126)			30 ug/L	12/18/2008
	LCSD	32.9	110		0	(< 20)	30 ug/L	12/18/2008

SGS Ref.#	876588	Lab Control Sample	**Printed Date/Time**	12/22/2008	11:45
	876589	Lab Control Sample Duplicate	**Prep Batch**	VXX19107	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	12/18/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
1,1,1,2-Tetrachloroethane	LCS	32.4	108	(80-120)			30 ug/L	12/18/2008
	LCSD	32.6	109		1	(< 20)	30 ug/L	12/18/2008
Chloroform	LCS	32.2	107	(80-124)			30 ug/L	12/18/2008
	LCSD	33.0	110		3	(< 20)	30 ug/L	12/18/2008
Bromobenzene	LCS	31.5	105	(80-120)			30 ug/L	12/18/2008
	LCSD	31.4	105		0	(< 20)	30 ug/L	12/18/2008
Chloromethane	LCS	32.7	109	(67-125)			30 ug/L	12/18/2008
	LCSD	31.8	106		3	(< 20)	30 ug/L	12/18/2008
1,2,3-Trichloropropane	LCS	31.9	106	(80-120)			30 ug/L	12/18/2008
	LCSD	32.9	110		3	(< 20)	30 ug/L	12/18/2008
Bromomethane	LCS	32.2	107	(30-140)			30 ug/L	12/18/2008
	LCSD	31.6	105		2	(< 20)	30 ug/L	12/18/2008
Bromochloromethane	LCS	32.2	107	(77-129)			30 ug/L	12/18/2008
	LCSD	32.4	108		1	(< 20)	30 ug/L	12/18/2008
Vinyl chloride	LCS	32.9	110	(72-145)			30 ug/L	12/18/2008
	LCSD	32.0	107		3	(< 20)	30 ug/L	12/18/2008
Dichlorodifluoromethane	LCS	32.6	109	(62-153)			30 ug/L	12/18/2008
	LCSD	31.8	106		3	(< 20)	30 ug/L	12/18/2008
Chloroethane	LCS	34.1	114	(67-133)			30 ug/L	12/18/2008
	LCSD	33.5	112		2	(< 20)	30 ug/L	12/18/2008
sec-Butylbenzene	LCS	33.6	112	(80-120)			30 ug/L	12/18/2008
	LCSD	33.2	111		1	(< 20)	30 ug/L	12/18/2008
Bromodichloromethane	LCS	31.1	104	(80-120)			30 ug/L	12/18/2008
	LCSD	31.4	105		1	(< 20)	30 ug/L	12/18/2008
1,1-Dichloroethene	LCS	34.2	114	(76-130)			30 ug/L	12/18/2008
	LCSD	34.4	115		1	(< 20)	30 ug/L	12/18/2008
2-Butanone (MEK)	LCS	93.1	103	(66-136)			90 ug/L	12/18/2008

SGS Ref.#	876588	Lab Control Sample	**Printed Date/Time**	12/22/2008	11:45
	876589	Lab Control Sample Duplicate	**Prep Batch**	VXX19107	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	12/18/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
	LCSD	102	114		9	(< 20)	90 ug/L	12/18/2008
Methylene chloride	LCS	33.1	110	(63-131)			30 ug/L	12/18/2008
	LCSD	31.4	105		5	(< 20)	30 ug/L	12/18/2008
Trichlorofluoromethane	LCS	35.4	118	(68-145)			30 ug/L	12/18/2008
	LCSD	34.2	114		3	(< 20)	30 ug/L	12/18/2008
P & M -Xylene	LCS	65.5	109	(80-120)			60 ug/L	12/18/2008
	LCSD	66.5	111		2	(< 20)	60 ug/L	12/18/2008
Naphthalene	LCS	30.8	103	(75-120)			30 ug/L	12/18/2008
	LCSD	29.8	99		3	(< 20)	30 ug/L	12/18/2008
o-Xylene	LCS	32.9	110	(80-120)			30 ug/L	12/18/2008
	LCSD	32.7	109		1	(< 20)	30 ug/L	12/18/2008
Bromoform	LCS	34.0	113	(80-120)			30 ug/L	12/18/2008
	LCSD	34.4	115		1	(< 20)	30 ug/L	12/18/2008
1-Chlorohexane	LCS	50.8	113	(70-125)			45 ug/L	12/18/2008
	LCSD	50.4	112		1	(< 20)	45 ug/L	12/18/2008
1,2,4-Trimethylbenzene	LCS	32.8	109	(80-125)			30 ug/L	12/18/2008
	LCSD	32.4	108		1	(< 20)	30 ug/L	12/18/2008
tert-Butylbenzene	LCS	34.5	115	(80-122)			30 ug/L	12/18/2008
	LCSD	34.1	114		1	(< 20)	30 ug/L	12/18/2008
1,1,1-Trichloroethane	LCS	31.0	103	(80-122)			30 ug/L	12/18/2008
	LCSD	31.3	104		1	(< 20)	30 ug/L	12/18/2008
1,1-Dichloroethane	LCS	33.3	111	(80-120)			30 ug/L	12/18/2008
	LCSD	32.9	110		1	(< 20)	30 ug/L	12/18/2008
2-Chlorotoluene	LCS	32.5	108	(80-125)			30 ug/L	12/18/2008
	LCSD	32.3	108		1	(< 20)	30 ug/L	12/18/2008
Trichloroethene	LCS	32.4	108	(80-125)			30 ug/L	12/18/2008
	LCSD	32.9	110		2	(< 20)	30 ug/L	12/18/2008

SGS Ref.#	876588	Lab Control Sample	**Printed Date/Time**	12/22/2008	11:45
	876589	Lab Control Sample Duplicate	**Prep Batch**	VXX19107	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	12/18/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
trans-1,2-Dichloroethene	LCS	32.4	108	(79-132)			30 ug/L	12/18/2008
	LCSD	32.2	107		1	(< 20)	30 ug/L	12/18/2008
1,2-Dichlorobenzene	LCS	31.6	105	(80-120)			30 ug/L	12/18/2008
	LCSD	31.6	105		0	(< 20)	30 ug/L	12/18/2008
2,2-Dichloropropane	LCS	34.5	115	(80-132)			30 ug/L	12/18/2008
	LCSD	33.8	113		2	(< 20)	30 ug/L	12/18/2008
Hexachlorobutadiene	LCS	32.2	107	(77-125)			30 ug/L	12/18/2008
	LCSD	31.7	106		1	(< 20)	30 ug/L	12/18/2008
Isopropylbenzene (Cumene)	LCS	34.3	114	(80-121)			30 ug/L	12/18/2008
	LCSD	34.1	114		1	(< 20)	30 ug/L	12/18/2008
1,2-Dichloropropane	LCS	32.0	107	(80-121)			30 ug/L	12/18/2008
	LCSD	32.7	109		2	(< 20)	30 ug/L	12/18/2008
1,1-Dichloropropene	LCS	32.4	108	(80-122)			30 ug/L	12/18/2008
	LCSD	32.3	108		0	(< 20)	30 ug/L	12/18/2008
1,1,2-Trichloroethane	LCS	32.3	108	(77-120)			30 ug/L	12/18/2008
	LCSD	32.5	108		0	(< 20)	30 ug/L	12/18/2008
1,3-Dichlorobenzene	LCS	32.1	107	(80-120)			30 ug/L	12/18/2008
	LCSD	32.0	107		0	(< 20)	30 ug/L	12/18/2008
1,2,3-Trichlorobenzene	LCS	31.0	103	(77-120)			30 ug/L	12/18/2008
	LCSD	30.6	102		1	(< 20)	30 ug/L	12/18/2008
Surrogates								
1,2-Dichloroethane-D4 <surr>	LCS		99	(73-120)				12/18/2008
	LCSD		100		2			12/18/2008
Toluene-d8 <surr>	LCS		99	(80-120)				12/18/2008
	LCSD		100		1			12/18/2008
4-Bromofluorobenzene <surr>	LCS		98	(76-120)				12/18/2008
	LCSD		98		0			12/18/2008

SGS Ref.#	876588	Lab Control Sample	**Printed Date/Time**	12/22/2008	11:45
	876589	Lab Control Sample Duplicate	**Prep Batch**	VXX19107	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	9121-003 Red Hill BFSF		**Date**	12/18/2008	
Matrix	Water (Surface, Eff., Ground)				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Volatile Gas Chromatography/Mass Spectroscopy

Batch	VMS10317
Method	SW8260B
Instrument	HP 5890 Series II MS3 VNA

SGS Ref.#	876591	Matrix Spike	**Printed Date/Time**	12/22/2008 11:45
	876592	Matrix Spike Duplicate	**Prep Batch**	VXX19107
			Method	Volatiles Extraction AFCEE 3.1
			Date	12/18/2008
Original	876590			
Matrix	Water (Surface, Eff., Ground)			

QC results affect the following production samples:

1086721001, 1086721002, 1086721003

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy											
Benzene	MS	ND	33	110		(80-120)			30.0	ug/L	12/18/2008
	MSD		34.2	114			4	(< 20)	30.0	ug/L	12/18/2008
Toluene	MS	ND	32.2	107		(77-120)			30.0	ug/L	12/18/2008
	MSD		33.4	111			4	(< 20)	30.0	ug/L	12/18/2008
Ethylbenzene	MS	ND	33.1	110		(80-120)			30.0	ug/L	12/18/2008
	MSD		34.1	114			3	(< 20)	30.0	ug/L	12/18/2008
n-Butylbenzene	MS	ND	35.1	117		(80-124)			30.0	ug/L	12/18/2008
	MSD		37.7	126*			7	(< 20)	30.0	ug/L	12/18/2008
1,4-Dichlorobenzene	MS	ND	33	110		(80-120)			30.0	ug/L	12/18/2008
	MSD		35.3	118			7	(< 20)	30.0	ug/L	12/18/2008
1,2-Dichloroethane	MS	ND	38	127		(80-129)			30.0	ug/L	12/18/2008
	MSD		34.5	115			10	(< 20)	30.0	ug/L	12/18/2008
1,3,5-Trimethylbenzene	MS	ND	33.8	113		(80-128)			30.0	ug/L	12/18/2008
	MSD		35.4	118			5	(< 20)	30.0	ug/L	12/18/2008
4-Chlorotoluene	MS	ND	33.7	112		(79-128)			30.0	ug/L	12/18/2008
	MSD		35.3	118			5	(< 20)	30.0	ug/L	12/18/2008
Chlorobenzene	MS	ND	30.5	102		(80-120)			30.0	ug/L	12/18/2008
	MSD		31.5	105			3	(< 20)	30.0	ug/L	12/18/2008
4-Methyl-2-pentanone (MIBK)	MS	ND	102	113		(69-134)			90.0	ug/L	12/18/2008
	MSD		103	115			1	(< 20)	90.0	ug/L	12/18/2008
cis-1,2-Dichloroethene	MS	ND	38.6	129*		(80-125)			30.0	ug/L	12/18/2008
	MSD		36.3	121			6	(< 20)	30.0	ug/L	12/18/2008
4-Isopropyltoluene	MS	ND	34.1	114		(80-125)			30.0	ug/L	12/18/2008
	MSD		36.4	121			7	(< 20)	30.0	ug/L	12/18/2008
cis-1,3-Dichloropropene	MS	ND	31.7	106		(80-120)			30.0	ug/L	12/18/2008
	MSD		31.9	106			1	(< 20)	30.0	ug/L	12/18/2008
n-Propylbenzene	MS	ND	33.8	113		(80-129)			30.0	ug/L	12/18/2008
	MSD		35.4	118			5	(< 20)	30.0	ug/L	12/18/2008
Styrene	MS	ND	31.2	104		(80-120)			30.0	ug/L	12/18/2008
	MSD		31.5	105			1	(< 20)	30.0	ug/L	12/18/2008
Dibromomethane	MS	ND	37.2	124*		(80-120)			30.0	ug/L	12/18/2008
	MSD		34.1	114			9	(< 20)	30.0	ug/L	12/18/2008
trans-1,3-Dichloropropene	MS	ND	33.6	112		(80-124)			30.0	ug/L	12/18/2008
	MSD		33.5	112			0	(< 20)	30.0	ug/L	12/18/2008
1,2,4-Trichlorobenzene	MS	ND	31.7	106		(80-120)			30.0	ug/L	12/18/2008
	MSD		34.1	114			7	(< 20)	30.0	ug/L	12/18/2008
Acetone	MS	ND	104	116		(50-135)			90.0	ug/L	12/18/2008

SGS Ref.#	876591	Matrix Spike	**Printed Date/Time**		12/22/2008 11:45
	876592	Matrix Spike Duplicate	**Prep**	**Batch**	VXX19107
				Method	Volatiles Extraction AFCEE 3.1
				Date	12/18/2008
Original	876590				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy									
	MSD		102	114		2	(< 20)	90.0 ug/L	12/18/2008
1,1,2,2-Tetrachloroethane	MS	ND	34.1	114	(76-123)			30.0 ug/L	12/18/2008
	MSD		34.8	116		2	(< 20)	30.0 ug/L	12/18/2008
1,2-Dibromo-3-chloropropane	MS	ND	35.2	117	(73-130)			30.0 ug/L	12/18/2008
	MSD		36.1	120		2	(< 20)	30.0 ug/L	12/18/2008
Methyl-t-butyl ether	MS	ND	55	122*	(80-120)			45.0 ug/L	12/18/2008
	MSD		53.2	118		3	(< 20)	45.0 ug/L	12/18/2008
Tetrachloroethene	MS	ND	32.4	108	(79-122)			30.0 ug/L	12/18/2008
	MSD		32.9	110		2	(< 20)	30.0 ug/L	12/18/2008
Dibromochloromethane	MS	ND	34.5	115	(80-120)			30.0 ug/L	12/18/2008
	MSD		33.4	111		3	(< 20)	30.0 ug/L	12/18/2008
1,3-Dichloropropane	MS	ND	35.1	117	(80-121)			30.0 ug/L	12/18/2008
	MSD		34.4	115		2	(< 20)	30.0 ug/L	12/18/2008
1,2-Dibromoethane	MS	ND	34.5	115	(80-120)			30.0 ug/L	12/18/2008
	MSD		33.8	113		2	(< 20)	30.0 ug/L	12/18/2008
Carbon tetrachloride	MS	ND	36.5	122	(80-126)			30.0 ug/L	12/18/2008
	MSD		35.1	117		4	(< 20)	30.0 ug/L	12/18/2008
1,1,1,2-Tetrachloroethane	MS	ND	33.1	110	(80-120)			30.0 ug/L	12/18/2008
	MSD		32.6	109		2	(< 20)	30.0 ug/L	12/18/2008
Chloroform	MS	ND	38.5	128*	(80-124)			30.0 ug/L	12/18/2008
	MSD		35.1	117		9	(< 20)	30.0 ug/L	12/18/2008
Bromobenzene	MS	ND	32.4	108	(80-120)			30.0 ug/L	12/18/2008
	MSD		33.6	112		4	(< 20)	30.0 ug/L	12/18/2008
Chloromethane	MS	ND	28.8	96	(67-125)			30.0 ug/L	12/18/2008
	MSD		31.3	104		8	(< 20)	30.0 ug/L	12/18/2008
1,2,3-Trichloropropane	MS	ND	32.7	109	(80-120)			30.0 ug/L	12/18/2008
	MSD		34.8	116		6	(< 20)	30.0 ug/L	12/18/2008
Bromomethane	MS	ND	32	107	(30-140)			30.0 ug/L	12/18/2008
	MSD		33.8	113		6	(< 20)	30.0 ug/L	12/18/2008
Bromochloromethane	MS	ND	34	113	(77-129)			30.0 ug/L	12/18/2008
	MSD		33.8	113		1	(< 20)	30.0 ug/L	12/18/2008
Vinyl chloride	MS	ND	31	103	(72-145)			30.0 ug/L	12/18/2008
	MSD		32.0	107		3	(< 20)	30.0 ug/L	12/18/2008
Dichlorodifluoromethane	MS	ND	33.3	111	(62-153)			30.0 ug/L	12/18/2008
	MSD		33.8	113		2	(< 20)	30.0 ug/L	12/18/2008
Chloroethane	MS	ND	49.8	166*	(67-133)			30.0 ug/L	12/18/2008
	MSD		51.3	171*		3	(< 20)	30.0 ug/L	12/18/2008
sec-Butylbenzene	MS	ND	34.1	114	(80-120)			30.0 ug/L	12/18/2008
	MSD		35.9	120		5	(< 20)	30.0 ug/L	12/18/2008
Bromodichloromethane	MS	ND	34.5	115	(80-120)			30.0 ug/L	12/18/2008

SGS Ref.#	876591	Matrix Spike	**Printed Date/Time**		12/22/2008 11:45
	876592	Matrix Spike Duplicate	**Prep**	**Batch**	VXX19107
				Method	Volatiles Extraction AFCEE 3.1
				Date	12/18/2008
Original	876590				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy									
	MSD		32.6	109		5	(< 20)	30.0 ug/L	12/18/2008
1,1-Dichloroethene	MS	ND	37.4	125	(76-130)			30.0 ug/L	12/18/2008
	MSD		35.8	119		5	(< 20)	30.0 ug/L	12/18/2008
2-Butanone (MEK)	MS	ND	105	117	(66-136)			90.0 ug/L	12/18/2008
	MSD		105	116		0	(< 20)	90.0 ug/L	12/18/2008
Methylene chloride	MS	ND	31.4	105	(63-131)			30.0 ug/L	12/18/2008
	MSD		32.3	108		3	(< 20)	30.0 ug/L	12/18/2008
Trichlorofluoromethane	MS	ND	38	127	(68-145)			30.0 ug/L	12/18/2008
	MSD		37.4	125		2	(< 20)	30.0 ug/L	12/18/2008
P & M -Xylene	MS	ND	66.4	111	(80-120)			60.0 ug/L	12/18/2008
	MSD		68.6	114		3	(< 20)	60.0 ug/L	12/18/2008
Naphthalene	MS	ND	31.3	104	(75-120)			30.0 ug/L	12/18/2008
	MSD		34.1	114		8	(< 20)	30.0 ug/L	12/18/2008
o-Xylene	MS	ND	32.9	110	(80-120)			30.0 ug/L	12/18/2008
	MSD		33.9	113		3	(< 20)	30.0 ug/L	12/18/2008
Bromoform	MS	ND	34.6	115	(80-120)			30.0 ug/L	12/18/2008
	MSD		34.2	114		1	(< 20)	30.0 ug/L	12/18/2008
1-Chlorohexane	MS	ND	53.6	119	(70-125)			45.0 ug/L	12/18/2008
	MSD		55.6	123		4	(< 20)	45.0 ug/L	12/18/2008
1,2,4-Trimethylbenzene	MS	ND	33.2	111	(80-125)			30.0 ug/L	12/18/2008
	MSD		34.8	116		5	(< 20)	30.0 ug/L	12/18/2008
tert-Butylbenzene	MS	ND	34.8	116	(80-122)			30.0 ug/L	12/18/2008
	MSD		36.8	123*		6	(< 20)	30.0 ug/L	12/18/2008
1,1,1-Trichloroethane	MS	ND	34.5	115	(80-122)			30.0 ug/L	12/18/2008
	MSD		33.0	110		5	(< 20)	30.0 ug/L	12/18/2008
1,1-Dichloroethane	MS	ND	37	123*	(80-120)			30.0 ug/L	12/18/2008
	MSD		34.8	116		6	(< 20)	30.0 ug/L	12/18/2008
2-Chlorotoluene	MS	ND	32.8	109	(80-125)			30.0 ug/L	12/18/2008
	MSD		34.8	116		6	(< 20)	30.0 ug/L	12/18/2008
Trichloroethene	MS	ND	33	110	(80-125)			30.0 ug/L	12/18/2008
	MSD		34.4	115		4	(< 20)	30.0 ug/L	12/18/2008
trans-1,2-Dichloroethene	MS	ND	38.4	128	(79-132)			30.0 ug/L	12/18/2008
	MSD		34.2	114		12	(< 20)	30.0 ug/L	12/18/2008
1,2-Dichlorobenzene	MS	ND	32.4	108	(80-120)			30.0 ug/L	12/18/2008
	MSD		33.9	113		4	(< 20)	30.0 ug/L	12/18/2008
2,2-Dichloropropane	MS	ND	39.7	132	(80-132)			30.0 ug/L	12/18/2008
	MSD		38.6	129		3	(< 20)	30.0 ug/L	12/18/2008
Hexachlorobutadiene	MS	ND	33.8	113	(77-125)			30.0 ug/L	12/18/2008
	MSD		35.9	120		6	(< 20)	30.0 ug/L	12/18/2008
Isopropylbenzene (Cumene)	MS	ND	34.8	116	(80-121)			30.0 ug/L	12/18/2008

SGS Ref.#	876591	Matrix Spike	**Printed Date/Time**		12/22/2008 11:45
	876592	Matrix Spike Duplicate	**Prep**	**Batch**	VXX19107
				Method	Volatiles Extraction AFCEE 3.1
				Date	12/18/2008

Original 876590

Matrix Water (Surface, Eff., Ground)

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy										
	MSD		35.5	118		2	(< 20)	30.0	ug/L	12/18/2008
1,2-Dichloropropane	MS	ND	33.3	111	(80-121)			30.0	ug/L	12/18/2008
	MSD		34.3	114		3	(< 20)	30.0	ug/L	12/18/2008
1,1-Dichloropropene	MS	ND	34.4	115	(80-122)			30.0	ug/L	12/18/2008
	MSD		34.8	116		1	(< 20)	30.0	ug/L	12/18/2008
1,1,2-Trichloroethane	MS	ND	33.7	112	(77-120)			30.0	ug/L	12/18/2008
	MSD		33.4	111		1	(< 20)	30.0	ug/L	12/18/2008
1,3-Dichlorobenzene	MS	ND	32.7	109	(80-120)			30.0	ug/L	12/18/2008
	MSD		34.6	115		6	(< 20)	30.0	ug/L	12/18/2008
1,2,3-Trichlorobenzene	MS	ND	31.2	104	(77-120)			30.0	ug/L	12/18/2008
	MSD		33.6	112		7	(< 20)	30.0	ug/L	12/18/2008
Surrogates										
1,2-Dichloroethane-D4 <surr>	MS		34.2	114	(73-120)					12/18/2008
	MSD		29.9	100		13				12/18/2008
Toluene-d8 <surr>	MS		29.7	99	(80-120)					12/18/2008
	MSD		29.3	98		2				12/18/2008
4-Bromofluorobenzene <surr>	MS		29.3	98	(76-120)					12/18/2008
	MSD		29.6	99		1				12/18/2008

Batch VMS10317

Method SW8260B

Instrument HP 5890 Series II MS3 VNA

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1086721

Locations Nationwide

Alaska Hawaii
Maryland Louisiana
New Jersey West Virginia
North Carolina

www.us.sgs.com

CLIENT: TEC INC.

CONTACT: **Jeff Hart** PHONE NO: 303.273.0231

PROJECT: **9121-003** SITE/PWSID#: Red Hill BFSF

REPORTS TO: Jeff Hart email jshart@tecinc.com
cc wmcwhitman@tecinc.com

INVOICE TO: TEC INC QUOTE #:
P.O. NUMBER:

SGS Reference #:

page _____ of _____

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	Preserv. Used	SAMPLE TYPE C = COMP G = GRAB	TPH-GRO (8015B) HCL	TPH-DRO (8015B) HCL	VOC's (8260B) HCl	PAH's (8270-SIM)	Diss Pb (6020) HNO_3	REMARKS
① A-C	RHMW2254-WG13B	12/16/08	1005	Water	3					X			
②	RHMWA01-WG13B	12/16/08	1205	Water	3					X			
③	TB01-WG13B	12/16/08	0805	Water	3					X			

Collected/Relinquished By: (1)	Date 12/16/08	Time 1300	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 12/17/08	Time 1155	Received For Laboratory By:

Shipping Carrier:
Shipping Ticket No:

Samples Received Cold? YES NO
Temperature °C: GYR TB = 2.3 C = 3.1

Special Deliverable Requirements:

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Requested Turnaround Time and-or Special Instructions:

☐ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 3180 Peger Road **Fairbanks, AK 99701** Tel: (907) 474-8656 Fax: (907) 474-9685
☐ 255 Sand Island Access Rd., Unit 1B **Honolulu, HI 96819** Tel: (808) 224-6217 Fax: (808) 845-2287
☐ 151 James Drive West **St Rose, LA 70087** Tel: (504) 469-6401 Fax: (504) 463-3304
☐ 1258 Greenbrier Street **Charleston, WV 25311** Tel: (304) 346-0725 Fax: (304) 346-0761
☐ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557

SGS

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SAMPLE RECEIPT FORM

SGS WO#: _____

Yes	No	NA		
___	✓	___	Are samples **RUSH**, priority or *w/in 72 hrs* of **hold time**?	**TAT (circle one):** (Standard) -or- Rush
___	___	✓	If yes, have you done *e-mail ALERT notification*?	**Received Date:** 12-17-08
___	✓	___	Are samples *within 24 hrs.* of **hold time** or **due date**?	**Received Time:** 1155
___	___	✓	If yes, have you also *spoken with* supervisor?	Is **date/time conversion** necessary? no
___	___	✓	Archiving bottles (if req'd): Are they properly marked?	# of hours to AK Local Time: _____
___	✓	___	Are there any **problems**? PM Notified? _____	**Thermometer ID:** 69d
✓	___	___	Were samples preserved correctly and ~~pH verified~~? _____ JGD	
___	___	✓	If this is for PWS, provide **PWSID.**_____	
___	✓	___	Will courier charges apply?	
			Method of payment? _____	
✓	___	___	Data package required? (Level: 1 / 2 / 3 / 4)	
			Notes: _____	
✓	___	___	Is this a DoD project? (USACE, Navy, AFCEE)	

Cooler ID	Temp Blank	Cooler Temp
1	2.3 °C	3.1 °C
	°C	°C
	°C	°C
	°C	°C
	°C	°C
	°C	°C

Note: Temperature readings include thermometer correction factors

Delivery method (circle all that apply): Client / Alert Courier / UPS / (FedEx) / USPS / DHL / AA Goldstreak / NAC / ERA / PenAir / Carlile/ Lynden / SGS / Other: _____

Airbill # 7961-9097-7035

Additional Sample Remarks: (✓*if applicable*)

_____ Extra Sample Volume?
_____ Limited Sample Volume?
_____ MeOH field preserved for volatiles?
_____ Field-filtered for dissolved_____
_____ Lab-filtered for dissolved_____
_____ Ref Lab required? _____
_____ Foreign Soil?

This section must be filled out for DoD projects (USACE, Navy, AFCEE)

Yes	No	
✓	___	Is received temperature 4 ± 2°C? Exceptions: _____ Samples/Analyses Affected: _____
___	N/A	If temperature(s) <0 °C, were containers ice-free? N/A *Notify PM immediately of any ice in samples.*
✓	___	Was there an airbill? *(Note # above in the right hand column)*
✓	___	Was cooler sealed with custody seals? # / where: 2 FRONT BACK TOP LID
✓	___	Were seal(s) intact upon arrival?
✓	___	Was there a COC with cooler?
✓	___	Was COC sealed in plastic bag & taped inside lid of cooler?
✓	___	Was the COC filled out properly?
___	✓	Did the COC indicate USACE / Navy / AFCEE project?
✓	___	Did the COC and samples correspond?
✓	___	Were all sample packed to prevent breakage? Packing material: BUBBLE WRAP FOAM BLOCK
✓	___	Were all samples unbroken and clearly labeled?
___	✓	Were all samples sealed in separate plastic bags?
✓	___	Were all VOCs free of headspace and/or MeOH preserved?
✓	___	Were correct container / sample sizes submitted?
✓	___	Is sample condition good?
✓	___	Was copy of CoC, SRF, and custody seals given to PM to fax?

This section must be filled if problems are found.

Yes	No	
___	___	Was client notified of problems?

Individual contacted: _____
Via: Phone / Fax / Email (*circle one*)
Date/Time: _____
Reason for contact: _____

Change Order Required? _____
SGS Contact: _____

Notes: _____

Completed by (sign): _____ **(print):** JAMES NOUGHTON

Login proof (check one): waived ____ required ____ performed by: _____

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SGS

SAMPLE RECEIPT FORM (page 2)

SGS WO#:

#	Container ID	Matrix	Test	QC	TB	Container Volume: 1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz (250 mL)	4oz (125 mL)	Other	Container Type: AG	CG	HDPE	Nalgene	Cubie	Coli	Septa	Other	Preservative: None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	Other
1,2	A-C	1	VOC								6				✓						✓			✓						
3	A-C	1	VOC		✓						3				✓						✓			✓						
Bottle Totals											9																			

Completed by: [signature] Date: 12-17-08

Form # F004r16 revised 03/10/08

From: Origin ID: HIKA (808) 528-1445
BILL WHITMAN
TEC INC.
1001 BISHOP STREET, ASB TOWER
SUITE 1400
HONOLULU, HI 96813

FedEx Express

JCLS111208/20/23

Ship Date: 16DEC08
ActWgt: 10.0 LB
CAD: 1774997/INET8091
Account#: S *********

Delivery Address Bar Code

Ref # P# 6627
Invoice #
PO #
Dept #

1086721

SHIP TO: (907) 562-2343 **BILL THIRD PARTY**

SAMPLE RECEIVING
SGS Environmental Services
200 W POTTER DR

ANCHORAGE, AK 99518

TRK# 0201 7961 9097 7035

WED - 17DEC AM
PRIORITY OVERNIGHT

99518
AK-US
ANC

WU CYMA

After printing this label:
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2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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SGS Environmental CUSTODY SEAL

SGS Environmental CUSTODY SEAL

Date/Time: