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 May 13, 2009 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 Fleet and 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 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 has 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. US Navy Well 2254-01 is located approximately 3,000 feet down-gradient from the Facility USTs 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 UST system, a background groundwater monitoring well (RHMW04) up-gradient from the Facility 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, July 2005). In addition, a three-dimensional (3-D) groundwater model was developed to produce site-specific risk-based 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 determined that a non-aqueous plume (free product) of JP-5 would need to 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.

In April 2009, another groundwater monitoring well (RHMW05) was installed down-gradient from the Facility, within the lower access tunnel between RHMW01 and RHMW2254-01. It was installed to identify the extent of contaminant migration down-gradient before it reaches the infiltration gallery at RHMW2254-01 (see Figure 1).

During the summer and fall of 2008, HDOH updated their EALs, which resulted in significant changes to the action levels associated with methylnaphthalenes. The HDOH Drinking Water toxicity EAL for these compounds was 240 µg/L. This concentration assumed that methylnaphthalenes were not human carcinogens. Once evidence emerged and was accepted by the US Environmental Protection Agency (USEPA) that methylnaphthalenes are carcinogenic to humans, HDOH adopted more rigorous EALs of 4.7 µg/L for 1-methylnaphthalene and 24 µg/L for 2-methylnaphthalene (HDOH, 2008).

The HDOH 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 HDOH Drinking Water EAL for TPH-DRO was increased from 100 µg/L to 210 µg/L, although the Groundwater 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), which specified SSRBLs and various required actions based on the category status (i.e., categories 1 through 4) of each groundwater monitoring well. The main object of the Plan is to protect the groundwater quality of US Navy Well 2254-01, which provides potable water to the PHWS. This is accomplished by comparing petroleum concentrations in the Facility wells to established SSRBLs and taking appropriate action. A secondary, but important objective of the Plan is to identify leaking USTs by evaluating increasing concentration trends, or the presence of free product in one or more groundwater monitoring wells. This quarterly report compares observed water quality to these established categories and associated actions.

Current Results

On May 13, 2009, five groundwater samples (i.e., RHMW01, RHMW02, RHMW03, RHMW05 and RHMW2254-01), along with the required quality control samples (duplicate, matrix spike, spike duplicate, and trip blank) were collected for analysis. 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 dissolved lead.

TPH-DRO

TPH-DRO was detected at 373 micrograms per liter (µg/L) in RHMW01, 1,810 µg/L (i.e., the average of normal and duplicate samples) in RHMW02, and at 200 µg/L in RHMW05 (i.e., the recently installed monitoring well). TPH-DRO was not detected above the laboratory method detection limit (MDL) at RHMW03 and RHMW2254-01. The HDOH Drinking Water EAL and SSRBL for TPH-DRO are 210 µg/L and 4,500 µg/L, respectively.

TPH-GRO
For TPH-GRO the HDOH Drinking Water EAL is 100 µg/L. In samples RHMW01, RHMW02, RHMW02D (i.e., the duplicate sample collected), RHMW03, RHMW05, and RHMW2254-01 estimated values (i.e., values below the laboratory reporting limit, but above the MDL) were observed at the following respective levels: 16.6 µg/L, 39.1 µg/L, 36.7 µg/L, 14.8 µg/L, 13.2 µg/L, and 19.1 µg/L. The estimated value of 19.1 µg/L of TPH-GRO detected in RHMW2254-01, is below the HDOH Drinking Water EAL of 100 µg/L and was just above the estimated value observed in the previous sampling round (i.e., 14 µg/L).

Other Parameters above HDOH Drinking Water EALs
At RHMW02, average concentrations between the normal and duplicate samples were determined to be above the HDOH Drinking Water EAL for 1-methylnaphthalene (i.e., analyzed to be 21.25 µg/L vs. the HDOH Drinking Water EAL of 4.7 µg/L).

Other Results
It is noteworthy that 2-methylnaphthalene was detected in RHMW2254-01 at the estimated concentration of 0.018 µg/L during the May 2009 sampling event which is significantly below the HDOH Drinking Water EAL of 24 µg/L.

Trend Analysis
RHMW01
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 May 2009, TPH-DRO was lower in concentration (i.e., 373 µg/L) than in February 2009 (i.e., 387 µg/L) and October 2008 (i.e., 459 µg/L). Prior to a peak observed in October 2008, TPH-DRO concentrations had decreased for three consecutive sampling rounds.

RHMW02
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 (estimated solubility limit of 4,500 µg/L) over that same period. In May 2009 however, the average TPH-DRO concentration (i.e., average of normal and duplicate samples of 1,810 µg/L) was below 50 percent of the SSRBL for the first time since September 2005. The average TPH-DRO concentration from the February 2009 sampling event was 2,840 µg/L, and the October 2008 average TPH-DRO concentration of 5,420 µg/L was above the SSRBL.

The average of three parameters (i.e., naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene) have been at or exceeding the EALs since September 2005. In October 2008, the average of these parameters decreased in concentrations following increasing trends over three previous rounds (since January 2008). During the May 2009 sampling event, the average of all three parameters continued the decreasing trend. Only the 1-methylnaphthalene average (i.e., 21.25 µg/L) was observed above the HDOH Drinking Water EAL (i.e., 4.7 µg/L). There are no SSRBLs established for these parameters.

RHMW03

At RHMW03, concentrations of TPH-DRO have fluctuated around the HDOH Drinking Water EAL since September 2005 and have been significantly lower than corresponding values observed at RHMW01 and RHMW02. During the May 2009 sampling event, TPH-DRO was not detected above the MDL, continuing a decreasing trend that has existed since October 2008. Prior to a peak observed in October 2008 of 244 μg/L, TPH-DRO had been increasing in concentration since April 2008.

Current Groundwater Status

Based on the monitoring event that occurred in May 2009, no free product was observed at RHMW01, RHMW02, or RHMW03.

RHMW05

Based upon the May 2009 sampling event, the first for this newly installed well, RHMW05 avoids being placed in Category 1 status. This is because although the TPH-DRO estimated concentration of 200 μg/L is above the MDL, but below the HDOH Drinking Water EAL of 210 μg/L, no contamination trend (i.e., two or more consecutive sampling rounds) has yet to be observed.

Category 1 Status Locations

US Navy Well 2254-01(measured at RHMW2254-01)

Following the May 2009 sampling event, the US Navy Well 2254-01 is now in a provisional Category 1 status because over the course of the past two sampling events (i.e., February and May 2009) TPH-GRO has been detected above the MDL, but below the HDOH Drinking Water EAL of 100 μg/L with relatively stable concentrations (i.e., an estimated value of 14 μg/L in February and 19.1 μg/L in May).

The laboratory Practical Quantification Limit (PQL) or Reporting Limit (RL) for TPH-GRO is 100 ug/l. The RHMW2254-01 May 2009 sample result was assigned an estimated "J" value of 19.1 ug/l; which is five times below the laboratory PQL or RL. However, the associated laboratory method blank also gave an estimated "J" value of 14.9 ug/l. The pattern observed in the RHMW2254-01 sample chromatogram matches the pattern in the laboratory method blank. Based on evaluation of these data, it appears that the MDL for the TPH-GRO of 10 ug/l may be set too low. Standard laboratory procedures would typically set the MDL at approximately 1/3 of the PQL or 30 ug/l and not at 10 ug/l or 3 times lower than that level.

The TPH-GRO method measures the area of peaks over an integration range. Thus, any slight changes in the baseline could be counted as TPH-GRO. This is different than methods that target a single peak (e.g., benzene) where the baseline is much easier to define. Consequently, any changes in the condition of the instrument may produce slight baseline changes giving an indication that TPH-GRO is present. Since the residual TPH-GRO response over the integration range for RHMW2254-01 and the associated method blank both gave estimated positive values, the estimated value of 19.1 ug/l for RHMW2254-01 may represent a "false positive". Due to this uncertainty, a provisional Category 1 status has been assigned to the US Navy Well 2254-01. This provisional status will be reevaluated following the next quarterly sampling event.

Category 1 status for the US Navy Well 2254-01 requires:

1. Quarterly reports to be sent to HDOH;
2. Notification of the FISC chain of command within 1 day;
3. Reevaluate Tier 3 Risk Assessment and groundwater model results and develop a course of action proposal for HDOH; and
4. As appropriate, prepare for alternative water source.

RHMW03

Based upon the May 2009 sampling event, RHMW03 remains in Category 1 status, because over the course of the past two sampling events (i.e., February and May 2009) TPH-GRO has been detected above the MDL, but was below the HDOH Drinking Water EAL of 100 µg/L with relatively stable concentrations (i.e., an estimated value of 16.1 µg/L in February and 14.8 µg/L in May).

Category 1 response for RHMW03 requires:

1. Quarterly reports to be sent to HDOH.

Category 2 Status Locations

RHMW01

The May 2009 sampling event results in RHMW01 remaining in Category 2 status, since the TPH-DRO concentration of 373 µg/L is greater than the HDOH Drinking Water EAL (210 µg/L), but less than half the SSRBL of 4,500 µg/L (estimated solubility limit of JP-5).

RHMW02

The May 2009 sampling event results in RHMW02 being downgraded from Category 3 to Category 2 status since TPH-DRO [1,620 µg/L and 2,000 µg/L (duplicate)] is greater than the HDOH Drinking Water EAL (210 µg/L), but is less than one half the established SSRBL value of 4,500 µg/L (estimated solubility limit of JP-5).

Category 2 for RHMW01 and RHMW02 requires:

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

Category 3 or 4 Status Locations

There is no Category 3 or 4 status location.

Conclusions and Recommendations

There is no indication of an immediate threat of disruption to drinking water resources of the US Navy Well 2254-01 as a result in the May 2009 data, but the US Navy Well 2254-01 has been given a provisional Category 1 status for the first time since quarterly sampling has been conducted by TEC. Provisional Category 1 status has been assigned to the US Navy Well 2254-01 because over the course of the past two sampling events, (i.e., February and May 2009) TPH-GRO was reported at trace concentrations above the MDL, but was below the HDOH Drinking Water EAL of 100 µg/L with relatively stable concentrations (i.e., an estimated value of 14 µg/L

in February and 19.1 µg/L in May). However, it is noteworthy that the associated laboratory method blank also reported an estimated trace concentration of TPH-GRO (i.e., 14.9 µg/L) presenting some analytical uncertainty. This new provisional Category 1 status for US Navy Well 2254-01 requires that certain actions be taken (e.g., reevaluation of risks and the groundwater model). These actions are currently in the process of being implemented. Subsequent sampling events will determine if the trace concentrations of TPH-GRO detected in the last two sampling events represent a long-term trend. Given the May 2009 sampling data relative to the US Navy Well 2254-01, the status of this well be closely monitored and evaluated during subsequent planned sampling events.

With the exception of the US Navy Well 2254-01, May 2009 concentrations for the other monitoring wells have improved as compared to the results from the February 2009 sampling event. In fact, the May 2009 event has resulted in RHMW02 being downgraded from Category 3 to Category 2 status.

Quarterly groundwater sampling for TPH-DRO, TPH-GRO, VOCs, PAHs, and dissolved lead will continue at the Facility until such time that data indicates that a different monitoring plan is warranted. It is recommended that future quarterly analytical results be closely monitored at RHMW2254-01 to monitor and evaluate for the presence of trace quantities of TPH-GRO.

1.0 Introduction

This report presents the results of the 15th groundwater sampling event, conducted in May 2009 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 and Industrial 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 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 program 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 event was conducted by TEC under United States (US) Navy Contract Number N47408-04-D-8514, Task Order No. 54.

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);
12. Groundwater Monitoring Results, July 2008 (submitted October 2008);
13. Groundwater Monitoring Results, October and December 2008 (submitted February 2009); and
14. Groundwater Monitoring Results, February 2009 (submitted May 2009)

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 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 lower 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 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 (HDOH May 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 the HDOH Groundwater Gross Contamination EAL 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, July, and October 2008. Analytical results indicated the following:

- No chemicals were detected above HDOH Drinking Water EALs at US Navy Well 2254-01;
- Trace detections of 1-methylnaphthalene and naphthalene prompted a resample event in December at US Navy Well 2254-01, no chemicals were detected above the MDL;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW01 during all four sampling events;
- 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 during all four sampling events.

2009 – Groundwater Sampling: Groundwater samples were collected in February 2009. Analytical results indicated the following:

- No chemicals were detected above HDOH Drinking Water EALs at US Navy Well 2254-01;
- Trace TPH-GRO at US Navy Well 2254-01 was reported just above the laboratory MDL and significantly below the laboratory reporting limit and HDOH EAL;
- 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 240 μg/L. This concentration presumed that methylnaphthalenes were non-carcinogenic. Evidence that they are human carcinogens has now been accepted by the US Environmental Protection Agency (USEPA). As a result, 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 HDOH Drinking Water EAL for TPH-DRO was increased from 100 μg/L to 210 μg/L, although the HDOH Groundwater Gross Contamination EAL for TPH-DRO remains 100 μg/L.

1.6 RHMW05 Installation

In April 2009, a new groundwater monitoring well, RHMW05, was installed by TEC under US Navy Contract Number N47408-04-D-8514, Task Order No. 54. RHMW05 is located down-gradient from the Facility, within the lower access tunnel between RHMW01 and RHMW2254-01(located at the US Navy Well 2254-01). It was installed to identify the extent of contaminant migration down-gradient prior to contaminants reaching the infiltration gallery at the US Navy Well 2254-01.

2.0 Sample Collection and Analyses

Field activities relating to groundwater sample collection were conducted on May 13, 2009. Groundwater samples were collected from four 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, 2009). A total of eight samples were collected as follows:

- one environmental sample from RHMW2254-01 (i.e., located at the US Navy Well 2254-01), RHMW01, RHMW02, RHMW03, and RHMW05;
- one duplicate sample from RHMW02 (sampled as RHMWA01 and reported as RHMW02D); and
- one matrix spike and matrix spike duplicate from RHMW2254-01.

2.1 Monitoring Well Purging

Following monitoring well installation, well development of RHMW05 was conducted on April 27, 2009. During this process, more than ten well volumes of groundwater (i.e. 25 gallons total) were purged and intermittent mechanical surging was conducted using a stainless steel bailer. On May 6, 2009, nine additional gallons were purged from RHMW05 using a dedicated bailer. Prior to sampling on May 13, nine gallons more were purged from RHMW05 to allow for the collection of a representative groundwater sample. Field parameters were measured at regular intervals to ensure parameter stabilization during development and sampling activities.

All monitoring wells were purged prior to sampling. 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 collected and 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, except for RHMW05. RHMW05 was sampled using a dedicated bailer. 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 four 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 are reported in this document as RHMW02D. A summary of groundwater analytical results is included in Table 1. Complete analytical laboratory reports are provided in Appendix A.

3.1 May 2009 Sample Analytical Results

All groundwater samples were analyzed for TPH-DRO, TPH-GRO, VOCs, PAHs, and dissolved lead. The trip blank sample (i.e., a blank sample provided by the lab and transported with the sample bottles to detect the potential incursion of contaminants from outside sources) was

analyzed for TPH-GRO and VOCs. The results for each groundwater monitoring well are discussed below.

RHMW01
TPH-DRO at 373 µg/L exceeded the HDOH Drinking Water EAL of 210 µg/L. Trace concentrations of TPH-GRO, fluorene, naphthalene, and acenaphthalene were detected below HDOH EALs (Table 1). All other constituents were not detected.

RHMW02
Six petroleum constituents were detected at RHMW02: TPH-DRO, TPH-GRO, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, and phenanthrene. TPH-DRO was detected at RHMW02 in the normal and duplicate samples, at 1,620 µg/L and 2,000 µg/L, respectively. This result exceeded the HDOH EAL of 210 µg/L, but not the site-specific risk based level (SSRBL) of 4,500 µg/L. TPH-GRO was detected at a concentration below the HDOH Drinking Water EAL of 100 µg/L with an average estimated concentration of 37.9 µg/L (i.e., an average of the normal and duplicate sample).

Naphthalene was analyzed by USEPA Method 8270C SIM and USEPA Method 8260B. Only USEPA Method 8270C SIM detected naphthalene above the MDL, at an average concentration of 1.125 µg/L from the normal and duplicate sample, but below the HDOH Drinking Water EAL of 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 21.25 µg/L, greater than the HDOH Drinking Water EAL of 4.7 µg/L. The average result for 2-methylnaphthalene was 0.1215 µg/L, significantly less than the HDOH Drinking Water EAL of 24 µg/L and the HDOH Groundwater Gross Contamination EAL of 10 µg/L. The only other petroleum constituent detected was phenanthrene found at estimated concentrations significantly below HDOH Drinking Water EALs (Table 1).

Table 1. Analytical Results for Quarterly Groundwater Monitoring Release Response Report (May 13, 2009)
Red Hill Fuel Storage Facility, Pearl Harbor, Hawaii

Method	Chemical	HDOH Drinking Water EALs[1] for Human Toxicity UG/L	HDOH Groundwater Gross Contamination EALs[2] UG/L	RHMW01 UG/L May 13, 2009				RHMW02 UG/L May 13, 2009				RHMW02D UG/L May 13, 2009				RHMW03 UG/L May 13, 2009				RHMW05 UG/L May 13, 2009				RHMW2254 UG/L May 13, 2009			
				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	***373***	F	169	449	***1620***		167	444	***2000***		160	426	ND	U	161	430	***200***	F	161	430	ND	U	169	449
	TPH as GASOLINE RANGE ORGANICS	100	100	16.6	F	10	100	39.1	F	10	100	36.7	F	10	100	14.8	F	10	100	13.2	F	10	100	19.1	F	10	100
8270C SIM (PAHs)	1-METHYLNAPHTHALENE	4.7	10	ND	U	0.015	0.05	***17.9***		0.15	0.5	***24.6***		0.155	0.515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	2-METHYLNAPHTHALENE	24	10	ND	U	0.015	0.05	0.136		0.015	0.05	0.107		0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	0.018	F	0.0156	0.0521
	ACENAPHTHENE	370	20	0.0243	F	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	ACENAPHTHYLENE	240	2000	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	ANTHRACENE	1800	22	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	BENZO(a)ANTHRACENE	0.092	4.7	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	BENZO(a)PYRENE	0.2	0.81	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	BENZO(b)FLUORANTHENE	0.092	0.75	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	BENZO(g,h,i)PERYLENE	1500	0.13	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	BENZO(k)FLUORANTHENE	0.92	0.4	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	CHRYSENE	9.2	1	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	DIBENZ(a,h)ANTHRACENE	0.0092	0.52	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	FLUORANTHENE	1500	130	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	FLUORENE	240	950	0.0246	F	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	INDENO(1,2,3-c,d)PYRENE	0.092	0.095	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	NAPHTHALENE	17	21	0.182		0.031	0.1	1.17		0.031	0.1	1.08		0.032	0.103	ND	U	0.0313	0.101	ND	U	0.0326	0.105	ND	U	0.0323	0.104
	PHENANTHRENE	240	410	ND	U	0.015	0.05	0.0162	F	0.015	0.05	0.0171	F	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
	PYRENE	180	68	ND	U	0.015	0.05	ND	U	0.015	0.05	ND	U	0.0155	0.0515	ND	U	0.0152	0.0505	ND	U	0.0158	0.0526	ND	U	0.0156	0.0521
8260B (VOCs)	1,1,1,2-TETRACHLOROETHANE	0.52	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
	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
	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
	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
	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
	1,2,3-TRICHLOROPROPANE (TCP)	0.6	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
	1,2,4-TRICHLOROBENZENE	70	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
	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
	1,2-DIBROMOETHANE (EDB)	0.0065	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
	1,2-DICHLOROBENZENE	600	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
	1,2-DICHLOROETHANE	0.15	700	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
	1,2-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
	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
	1,3-DICHLOROPROPENE	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
	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
	ACETONE	22000	20000	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	ND	U	3.1	10	10.4		3.1	10	ND	U	3.1	10
	BENZENE	5	170	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
	BROMODICHLOROMETHANE	0.22	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
	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
	BROMOMETHANE	8.7	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
	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
	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
	CHLOROETHANE	8600	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
	CHLOROFORM	70	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
	CHLOROMETHANE	1.8	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
	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
	DIBROMOCHLOROMETHANE	0.16	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
	ETHYLBENZENE	700	30	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
	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
	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
	METHYL ETHYL KETONE (2-BUTANONE)	7100	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
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	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
	METHYLENE CHLORIDE	4.8	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
	NAPHTHALENE	17	21	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
	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
	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
	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
	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
	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
	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
6020	LEAD	15	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

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] Final Drinking Water Action Levels for Human Toxicity, Table D-3a, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, HDOH, 2009
[2] Groundwater Gross Contamination Action Levels, Table G-1, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, HDOH, 2009

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

RHMW03
One constituent was detected at RHMW03: TPH-GRO (Table 1). TPH-GRO was detected at an estimated 14.8 µg/L, significantly below the HDOH Drinking Water EALs of 100 µg/L. All other constituents were not detected above the MDL at RHMW03.

RHMW05
TPH-DRO was detected at a concentration of 200 µg/L. This concentration is just below the HDOH Drinking Water EAL of 210 µg/L, but greater than the HDOH Groundwater Gross Contamination EAL of 100 µg/L. Trace concentrations of TPH-GRO and acetone (a common laboratory solvent) were detected below HDOH EALs (Table 1). All other constituents were not detected.

US Navy Well 2254-01
TPH-GRO and 2-methylnaphthalene were reported just above the MDL at estimated concentrations of 19.1 µg/L and 0.018 µg/L, respectively. The HDOH Drinking Water EALs for TPH-GRO and 2-methylnaphthalene are 100 µg/L and 24 µg/L, respectively.

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 data) represent locations where the compounds being analyzed were not detected.

RHMW01
TPH-GRO has only previously been detected in April 2008 and February 2009 at estimated values below the HDOH Drinking Water EAL of 100 µg/L. In May 2009, TPH-GRO was detected at an estimated value of 16.6 µg/L. TPH-DRO has been detected above the HDOH Drinking Water EAL during all groundwater sampling events. The concentration of TPH-DRO observed in May 2009 (i.e., 373 µg/L) shows a decreasing trend over the last three consecutive sampling events, after an increase in October 2008 (i.e., 459 µg/L). Prior to the October 2008 sampling event, TPH-DRO concentrations had decreased for three consecutive sampling rounds.

RHMW02
TPH-GRO was detected in all but one of the sampling rounds since September 2005, and exceeded the HDOH Drinking Water EAL of 100 µg/L three times during 2006 and 2007. The maximum concentration detected has been 148 µg/L. TPH-GRO shows a decreasing trend with the lowest concentration since September 2005 detected in May 2009 (i.e., the average of normal and duplicate samples of 37.9 µg/L).

The concentration of TPH-DRO was relatively stable at RHMW02 until July 2008, ranging from 2,250 to 2,995 µg/L. However, during the July and October 2008 sampling events, these average concentrations increased (i.e., average between the normal and duplicate samples). Specifically, the July 2008 average concentration was 4,055 µg/L and the October 2008 average concentration was 5,420 µg/L. Both of these values were significantly above the HDOH Drinking Water EAL of 210 µg/L, with the October 2008 average also exceeding the SSRBL of 4,500 µg/L. TPH-

DRO at RHMW02 has shown a decreasing trend since October 2008. The average concentration of TPH-DRO observed during the May 2009 sampling event (i.e., 1,810 µg/L) was below 50 percent of the SSRBL for the first time since September 2005. The decrease in the May 2009 sampling event downgraded RHMW02 to a Category 2 status from the previous Category 3 status that followed the February 2009 sampling event.

1-Methylnaphthalene at RHMW02 remains above the HDOH Drinking Water EAL (i.e., 4.7 µg/L). However, naphthalene has decreased below the HDOH Drinking Water EAL (i.e., 17 µg/L). In general, PAH concentrations have been decreasing after a slightly increasing trend through July 2008.

RHMW03
TPH-GRO had never been detected prior to February 2009. In May 2009 there was a slight decrease from the February 2009 sampling event. TPH-GRO decreased from estimated values of 16.1 µg/L in February 2009 to 14.8 µg/L in May 2009, both estimated values significantly below the HDOH Drinking Water EAL of 100 µg/L.

TPH-DRO had shown a slightly increasing trend that peaked at 244 µg/L during the October 2008 sampling event. During the May 2009 sampling event TPH-DRO was not detected above the MDL, following a decreasing trend since October 2008. In the past, the concentrations of TPH-DRO have remained relatively stable, near the DOH Drinking Water EAL of 210 µg/L. Concentrations of petroleum-related compounds at RHMW03 have normally been lower than those detected at RHMW01 or RHMWO2.

RHMW05
Based upon the May 2009 sampling event, the first event for this newly installed well, TPH-DRO was detected at an estimated concentration of 200 µg/L, which is below the HDOH Drinking Water EAL of 210 µg/L. However, since this is the first sampling event for RHMW05, no contamination trend (i.e., two or more consecutive sampling rounds) has yet to be observed.

US Navy Well 2254-01
The US Navy Well 2254-01 has been given a provisional Category 1 status for the first time since quarterly sampling has been conducted by TEC. Category 1 status has been assigned to the US Navy Well 2254-01 because over the course of the past two sampling events, (i.e., February and May 2009) TPH-GRO has been reported at trace concentrations above the MDL, but was below the HDOH Drinking Water EAL of 100 µg/L with relatively stable concentrations (i.e., an estimated value of 14 µg/L in February and 19.1 µg/L in May). However, it is noteworthy that the associated laboratory method blank also contained estimated trace concentrations of TPH-GRO.

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 foot Heron Oil/Water Interface Meter. The static water levels were measured to a precision of ± 0.01 feet and fuel thickness was measured to a precision of ± 0.01 feet 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.

Measurements to determine the presence and thickness of fuel were conducted at RHMW01, RHMW02, and RHMW03 prior to the May 2009 sampling round. At the end of May a subsequent round of oil/water interface measurements was conducted. No free product was observed in any of these wells during either of the May 2009 events (see Table 2).

Table 2. Oil/Water Interface Measurements

	RHMW01		RHMW02		RHMW03	
Date	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
January 2009	19.28	0.00	19.22	0.00	19.27	0.00
February 2009	NT	NT	18.66	0.00	18.75	0.00
March 2009	18.59	0.00	18.57	0.00	18.67	0.00
May 2009*	18.69	0.00	18.64	0.00	18.72	0.00
May 2009	18.91	0.00	18.86	0.00	18.90	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
***** The measurements scheduled for April 2009 were conducted on May 6, 2009 due to RHMW05 drilling activities

3.4 Groundwater Status

Constituents of concern are defined as 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, RHMW03, and RHMW05
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 RHMW03 or RHMW05*	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
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

*RHMW05 was installed in April 2009 and has been subsequently been added to this Table.
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

Free Product Measurements
In response to the previous Category 3 status at RHMW02, free product measurements were collected in October 2008, November 2008, January 2009, February 2009, March 2009, and May 2009 at Red Hill tunnel monitoring wells (Table 2). To date, there is no evidence of fuel on groundwater at any of these wells based upon these measurements. These free product measurements are planned to continue on a monthly basis.

RHMW05
Based upon the May 2009 sampling event, the first event for this newly installed well, RHMW05 avoids being placed in Category 1 status. This is because although the TPH-DRO estimated concentration of 200 μg/L is above the MDL, but below the HDOH Drinking Water EAL of 210 μg/L, no contamination trend (i.e., two or more consecutive sampling rounds) has yet to be observed.

Category 1 Status Locations
US Navy Well 2254-01(measured at RHMW2254-01)
Following the May 2009 sampling event, the US Navy Well 2254-01 is now in a provisional Category 1 status because over the course of the past two sampling events (i.e., February and May 2009) TPH-GRO has been detected above the MDL, but below the HDOH Drinking Water EAL of 100 μg/L with relatively stable concentrations (i.e., an estimated value of 14 μg/L in February and 19.1 μg/L in May).

The laboratory Practical Quantification Limit (PQL) or Reporting Limit (RL) for TPH-GRO is 100 ug/l. The RHMW2254-01 May 2009 sample result was assigned an estimated "J" value of

19.1 ug/l; which is five times below the laboratory PQL or RL. However, the associated laboratory method blank also gave an estimated "J" value of 14.9 ug/l. The pattern observed in the RHMW2254-01 sample chromatogram matches the pattern in the laboratory method blank. Based on evaluation of these data, it appears that the MDL for the TPH-GRO of 10 ug/l may be set too low. Standard laboratory procedures would typically set the MDL at approximately 1/3 of the PQL or 30 ug/l and not at 10 ug/l or 3 times lower than that level.

The TPH-GRO method measures the area of peaks over an integration range. Thus, any slight changes in the baseline could be counted as TPH-GRO. This is different than methods that target a single peak (e.g., benzene) where the baseline is much easier to define. Consequently, any changes in the condition of the instrument may produce slight baseline changes giving an indication that TPH-GRO is present. Since the residual TPH-GRO response over the integration range for RHMW2254-01 and the associated method blank both gave estimated positive values, the estimated value of 19.1 ug/l for RHMW2254-01 may represent a "false positive". Due to this uncertainty, a provisional Category 1 status has been assigned to the US Navy Well 2254-01. This provisional status will be reevaluated following the next quarterly sampling event.

Category 1 status for the US Navy Well 2254-01 requires:

1. Quarterly reports to be sent to HDOH;
2. Notification of the FISC chain of command within 1 day;
3. Reevaluate Tier 3 Risk Assessment and groundwater model results and develop a course of action proposal for HDOH; and
4. As appropriate, prepare for alternative water source.

RHMW03

Based upon the May 2009 sampling event, RHMW03 remains in Category 1 status, because over the course of the past two sampling events (i.e., February and May 2009) TPH-GRO has been detected above the MDL, but was below the HDOH Drinking Water EAL of 100 μg/L with relatively stable concentrations (i.e., an estimated value of 16.1 μg/L in February and 14.8 μg/L in May).

Category 1 response for RHMW03 requires:

1. Quarterly reports to be sent to HDOH.

Category 2 Status Locations

RHMW01

Results from the May 2009 sampling event indicate that RHMW01 remains in Category 2 status, since the TPH-DRO concentration of 373 μg/L has been relatively stable and is greater than the HDOH Drinking Water EAL (210 μg/L), but less than half the SSRBL of 4,500 μg/L (estimated solubility limit of JP-5).

RHMW02

Results from the May 2009 sampling event indicate that RHMW02 is now downgraded from Category 3 to Category 2 status since TPH-DRO [1,620 μg/L and 2,000 μg/L (duplicate)] is

greater than the HDOH Drinking Water EAL (210 µg/L), but is less than one half the established SSRBL value of 4,500 µg/L (estimated solubility limit of JP-5).

Category 2 for RHMW01 and RHMW02 requires:

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

Category 3 or 4 Status Locations

There is no Category 3 or 4 status location.

4.0 Summary and Conclusions

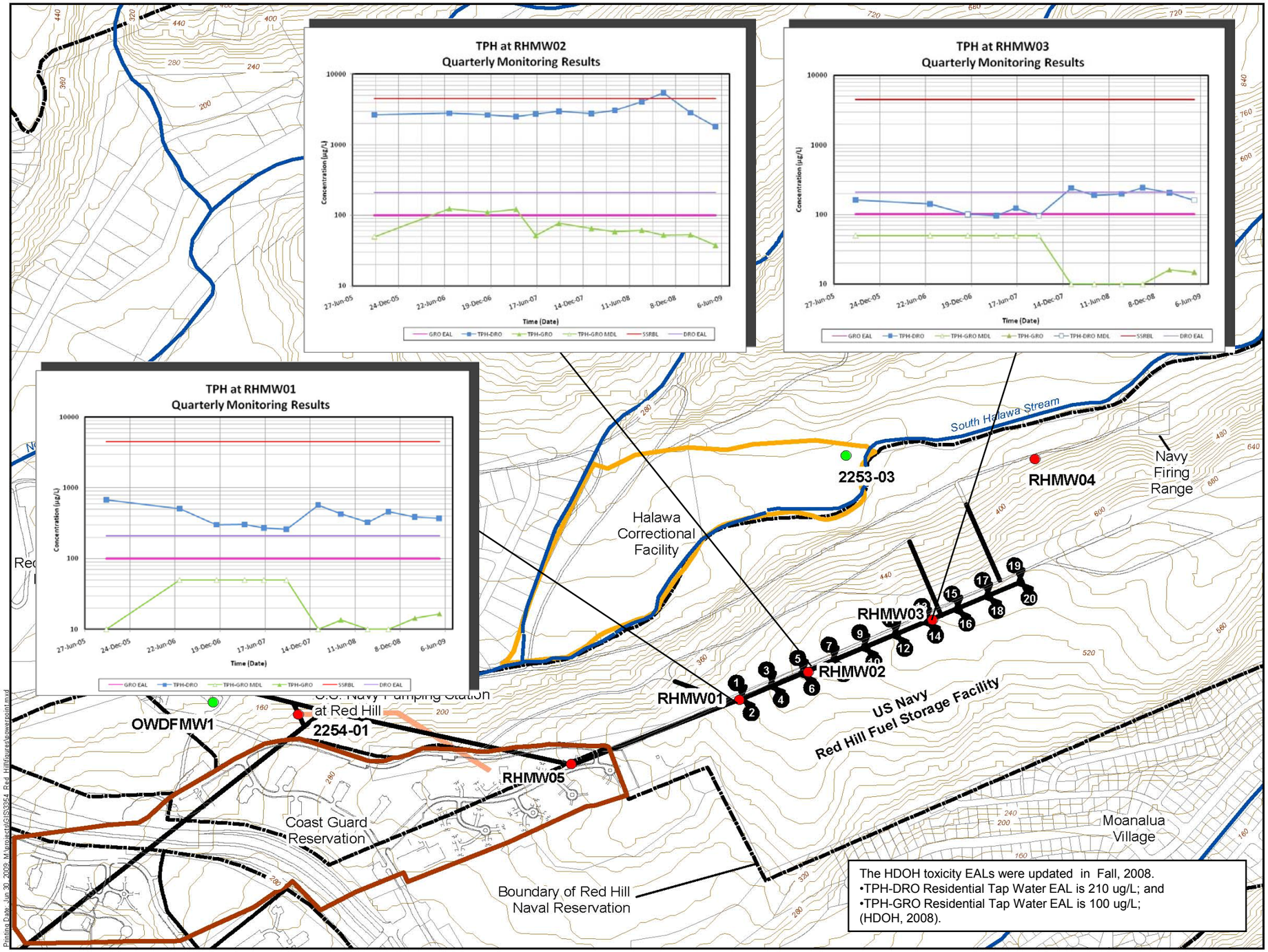
Summary

At RHMW02, the concentration of TPH-DRO exceeded the Drinking Water EAL of 210 µg/L and was less than one half of the established SSRBL value of 4,500 µg/L, which places RHMW02 in a Category 2 status. This represents a downgrade from Category 3 status, which was prompted by the February 2009 sampling results. Although TPH-GRO was again detected at RHMW2254-01, it was also detected in laboratory method blank sample. The estimated TPH-GRO concentration at RHMW2254-01 (i.e., 19.1 µg/L) was significantly below the HDOH Drinking Water EAL of 100 µg/L and just above the MDL of 10 µg/L.

Conclusions/Recommendations

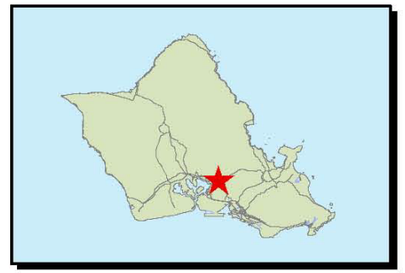
- Oil/water interface measurements were collected in October 2008, November 2008, January 2009, February 2009, March 2009, and May 2009 from Red Hill tunnel monitoring wells and no free product was measured (Table 2).
- The concentration of TPH-DRO measured at RHMW01 in May 2009 (373 µg/L) exceeded HDOH EALs, but was less than one half 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 PHWS.
- The concentration of TPH-DRO measured at the new monitoring well, RHMW05, in May 2009 (200 µg/L) was less than the HDOH Drinking Water EAL. RHMW05 is located between RHMW01 and the US Navy Well 2254-01.
- The US Navy Well 2254-01 is not imminently threatened at this time; however, conditions should be monitored closely to determine whether or not the estimated value at RHMW2254-01 of 19.1 µg/L of TPH-GRO from the May 2009 sampling event represents an analytical trend.
- The following activities will be implemented to continue to monitor and/or clarify the groundwater contamination situation at the Facility:
    1. 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;
    2. Continue monthly free product measurements at RHMW01, RHMW02, and RHMW03, and include RHMW05 in future measurements and provide monthly letter reports of the results;

3. Collect samples from nearby Halawa Deep Monitoring Well (2253-03), OWDF MW01, and RHMW04;
4. Conduct Massachusetts Department of Environmental Protection (MADEP) extractable petroleum hydrocarbon and volatile petroleum hydrocarbon analysis to better characterize the dissolved fuel plume;
5. Prepare for alternative water source at US Navy Well 2254-01, as necessary.
6. Continue quarterly groundwater sampling for TPH-DRO, TPH-GRO, VOCs, PAHs, and lead until such time that new data indicates that a different monitoring program is warranted. 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.
7. Closely monitor RHMW2254-01 to assess whether the detection of estimated trace quantities (i.e., 14 μg/L) of TPH-GRO from the February 2009 sampling event and 19.1 μg/L during the May 2009 event represent an analytical trend. In addition, due to the possibility of a "false positive" result reported for RHMW2254-01(see Section 3.4 discussion), the MDL for future analysis of TPH-GRO will be increased to 30 μg/L.



Legend

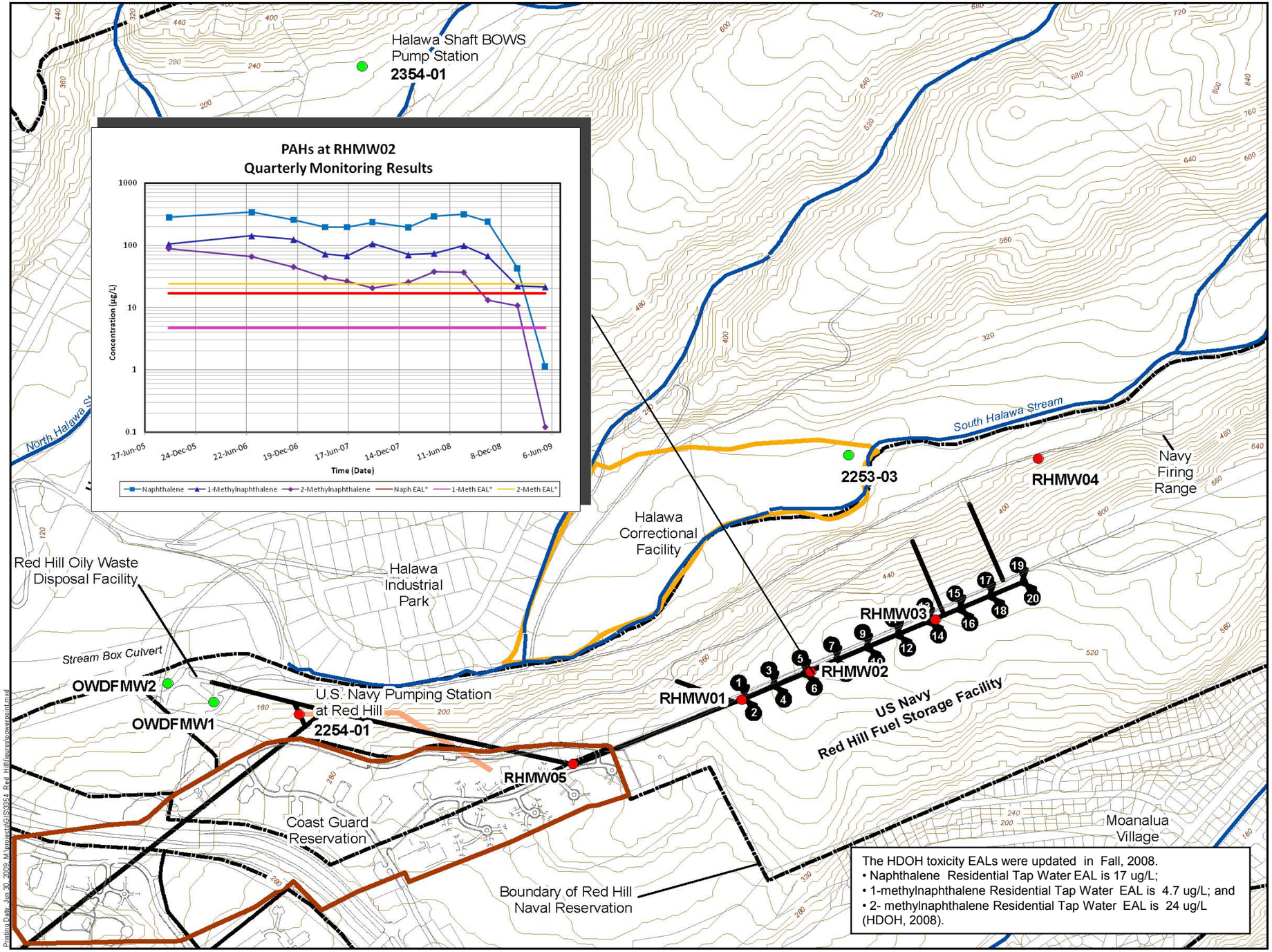
- Red Hill UST ID Number
- Parcel
- 40-foot Interval Contour Line
- Road
- Stream
- Red Hill Navy Installation Boundary
- Red Hill Tunnels
- 2254-01 Infiltration Gallery
- Halawa Correctional Facility Boundary
- Coast Guard Reservation



N

Meters
0 185 370
0 340 680 1,360
Feet

Figure 1
TPH Trends in Groundwater
Round 15 (May 13, 2009)
Red Hill Fuel Storage Facility
Oahu, Hawaii



Legend

- Red Hill UST ID Number
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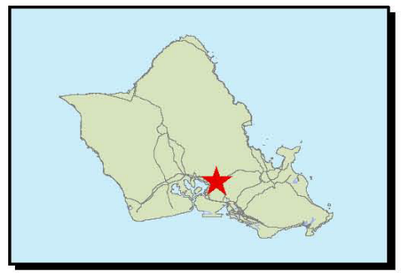

N

Meters
0 185 370
0 340 680 1,360
Feet

Figure 2
PAH Trends in Groundwater
Round 15 (May 13, 2009)
Red Hill Fuel Storage Facility
Oahu, Hawaii

5.0 References

AMEC. *Red Hill Bulk Fuel Storage Facility Investigation Report*, Prepared for NAVFAC Pacific, August 2002.

Dawson Group, Inc. *Fourth Quarter 2005 Groundwater Sampling Report, Red Hill Fuel Storage Facility, Hawaii.* February 2006.

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HDOH. *Evaluation of Environmental Hazards at Sites with Contaminated Soil and Groundwater*. Summer 2008 (updated October 2008).

The Environmental Company, Inc. and AMEC. *Red Hill Bulk Fuel Storage Facility Work Plan, Pearl Harbor, Hawaii.* June 2005.

TEC, Inc. *Red Hill Bulk Fuel Storage Facility, Final – Addendum Planning Documents, Pearl Harbor, Hawaii.* May 2006.

TEC, Inc. *Red Hill Bulk Fuel Storage Facility, Final Technical Report, Pearl Harbor, Hawaii.* August 2007.

TEC, Inc. *Red Hill Bulk Fuel Storage Facility, Final Groundwater Protection Plan, Pearl Harbor, Hawaii.* January 2008.

Appendix A
Laboratory Analytical Reports

SGS North America Inc.
Alaska Division
Level II Laboratory Data Report

Project:	Red Hills BFSF
Client:	The Environmental Company, Inc. (TEC)
SGS Work Order:	1092054

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 North America Inc.

Case Narrative

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

Project: 1092054 **Red Hills BFSF**

NPDL WO:

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

1092054005 PS **RHMW02-WG15**

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

1092054006 PS **RHMWA01-WG15**

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

1092054008 PS **RHMW05-WG15**

8270D SIM - Sample extracted and analyzed outside of hold time due to laboratory error.

1092054002 BMS **RHMW2254-WG15 MS**

8270D SIM - Surrogate recovery for terphenyl-d14 is outside of QC criteria (biased low). Sample was re-extracted and analyzed outside of the hold time. The results did confirm with passing QC. The original results are reported here.

896080 LCS **VXX/19405]**

8260B - LCS/LCSD RPD for several analytes do not meet QC criteria (biased high). Refer to MS/MSD RPD for precision.

896081 LCSD **VXX/19405**

8260B - LCS/LCSD RPD for several analytes do not meet QC criteria (biased high). Refer to MS/MSD RPD for precision.

896084 CCV **VMS/10497]**

8260B - ICV recovery for dichlorodifluoromethane, chloromethane and vinyl chloride does not meet QC criteria (biased high). These analytes were not detected above the PQL in the associated samples.

Report of Manual Integrations

Print Date: 6/8/2009 11:50 am

Laboratory ID	Client Sample ID	Analytical Batch	Method	Analyte	Reason
1092054005	RHMW02-WG15	XMS4898	8270D SIMS	Naphthalene	SP

Manual Integration Reason Code Descriptions

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

All DRO/RRO analysis are integrated per SOP.

SGS North America Inc. Alaska Division 200 West Potter Drive Anchorage Alaska 99518
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Member of SGS Group (Société Générale de Surveillance)

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: **Red Hills BFSF**

Workorder No.: **1092054**

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

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. All work is being provided under SGS general terms and conditions (http://www.sgs.com/terms_and_conditions.htm)

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 (Duplicate)
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 analyses are integrated per SOP.

SGS North America Inc. | Alaska Division 200 West Potter Drive Anchorage Alaska 99518
t (907) 562.2343 f (907) 561.5301 www.us.sgs.com
Member of SGS Group

SAMPLE SUMMARY

Print Date: 6/8/2009 11:50 am

Client Name: The Environmental Company, Inc. (TEC)
Project Name: Red Hills BFSF
Workorder No.: 1092054

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
1092054001	RHMW2254-WG15
1092054002	RHMW2254-WG15 MS
1092054003	RHMW2254-WG15 MSD
1092054004	RHMW03-WG15
1092054005	RHMW02-WG15
1092054006	RHMWA01-WG15
1092054007	RHMW01-WG15
1092054008	RHMW05-WG15
1092054009	TB01-WG15

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t (907) 562 2343 f (907) 561 5301 www.us.sgs.com

Client Sample ID: **RHMW2254-WG15**
SGS Ref. #: 1092054001
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 09:10
Receipt Date/Time: 05/15/09 11:20

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	MMS5916	MXX21701	

Batch Information

Analytical Batch: MMS5916
Analytical Method: SW6020
Analysis Date/Time: 05/25/09 01:50
Dilution Factor: 5

Prep Batch: MXX21701
Prep Method: SW3010A
Prep Date/Time: 05/22/09 17:30

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1092054001-G
Analyst: NRB

Client Sample ID: **RHMW2254-WG15**
SGS Ref. #: 1092054001
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 09:10
Receipt Date/Time: 05/15/09 11:20

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	19.1 J	100	10.0	ug/L	1	VFC9431	VXX19416	
4-Bromofluorobenzene <surr>	103	50-150		%	1	VFC9431	VXX19416	

Batch Information

Analytical Batch: VFC9431
Analytical Method: SW8015C
Analysis Date/Time: 05/26/09 17:18
Dilution Factor: 1

Prep Batch: VXX19416
Prep Method: SW5030B
Prep Date/Time: 05/26/09 09:17

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1092054001-B
Analyst: KPW

Client Sample ID: **RHMW2254-WG15**
SGS Ref. #: 1092054001
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 09:10
Receipt Date/Time: 05/15/09 11:20

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	ND	0.449	0.169	mg/L	1	XFC8556	XXX20835	
5a Androstane <surr>	86.1	50-150		%	1	XFC8556	XXX20835	

Batch Information

Analytical Batch: XFC8556
Analytical Method: SW8015C
Analysis Date/Time: 06/03/09 07:16
Dilution Factor: 1

Prep Batch: XXX20835
Prep Method: SW3520C
Prep Date/Time: 05/20/09 09:00

Initial Prep Wt./Vol.: 890 mL
Prep Extract Vol.: 1 mL
Container ID:1092054001-J
Analyst: KDC

Client Sample ID: **RHMW2254-WG15**
SGS Ref. #: 1092054001
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 09:10
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
Toluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Styrene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Acetone	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10497	VXX19405	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10497	VXX19405	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10497	VXX19405	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10497	VXX19405	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	

Client Sample ID: **RHMW2254-WG15**
SGS Ref. #: 1092054001
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 09:10
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10497	VXX19405	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10501	VXX19411	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane-D4 <surr>	115	73-120		%	1	VMS10497	VXX19405	
Toluene-d8 <surr>	98.8	80-120		%	1	VMS10497	VXX19405	
4-Bromofluorobenzene <surr>	101	76-120		%	1	VMS10497	VXX19405	

Client Sample ID: **RHMW2254-WG15**
SGS Ref. #: 1092054001
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 09:10
Receipt Date/Time: 05/15/09 11:20

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10497		Prep Batch: VXX19405				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/20/09 18:22		Prep Date/Time: 05/20/09 11:43				Container ID:1092054001-D		
Dilution Factor: 1						Analyst: DSH		
Analytical Batch: VMS10501		Prep Batch: VXX19411				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/24/09 23:20		Prep Date/Time: 05/24/09 17:14				Container ID:1092054001-E		
Dilution Factor: 1						Analyst: DSH		

Client Sample ID: **RHMW2254-WG15**
SGS Ref. #: 1092054001
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 09:10
Receipt Date/Time: 05/15/09 11:20

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	XMS4898	XXX20829	
Acenaphthene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Fluorene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Phenanthrene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Anthracene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Fluoranthene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Pyrene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Benzo(a)Anthracene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Chrysene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Benzo[b]Fluoranthene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Benzo[k]fluoranthene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Benzo[a]pyrene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Indeno[1,2,3-c,d] pyrene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Dibenzo[a,h]anthracene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Benzo[g,h,i]perylene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Naphthalene	ND	0.104	0.0323	ug/L	1	XMS4898	XXX20829	
1-Methylnaphthalene	ND	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
2-Methylnaphthalene	0.0180 J	0.0521	0.0156	ug/L	1	XMS4898	XXX20829	
Terphenyl-d14 <surr>	94.1	50-135		%	1	XMS4898	XXX20829	

Batch Information

Analytical Batch: XMS4898
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/22/09 17:37
Dilution Factor: 1

Prep Batch: XXX20829
Prep Method: SW3520C
Prep Date/Time: 05/19/09 09:45

Initial Prep Wt./Vol.: 960 mL
Prep Extract Vol.: 1 mL
Container ID:1092054001-H
Analyst: JDH

Client Sample ID: **RHMW03-WG15**
SGS Ref. #: 1092054004
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 11:00
Receipt Date/Time: 05/15/09 11:20

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	MMS5916	MXX21701	

Batch Information

Analytical Batch: MMS5916
Analytical Method: SW6020
Analysis Date/Time: 05/25/09 02:15
Dilution Factor: 5

Prep Batch: MXX21701
Prep Method: SW3010A
Prep Date/Time: 05/22/09 17:30

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1092054004-G
Analyst: NRB

Client Sample ID: **RHMW03-WG15**
SGS Ref. #: 1092054004
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 11:00
Receipt Date/Time: 05/15/09 11:20

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	14.8 J	100	10.0	ug/L	1	VFC9431	VXX19416	
4-Bromofluorobenzene <surr>	100	50-150		%	1	VFC9431	VXX19416	

Batch Information

Analytical Batch: VFC9431
Analytical Method: SW8015C
Analysis Date/Time: 05/26/09 17:36
Dilution Factor: 1

Prep Batch: VXX19416
Prep Method: SW5030B
Prep Date/Time: 05/26/09 09:17

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1092054004-B
Analyst: KPW

Client Sample ID: **RHMW03-WG15**
SGS Ref. #: 1092054004
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 11:00
Receipt Date/Time: 05/15/09 11:20

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	ND	0.430	0.161	mg/L	1	XFC8556	XXX20835	
5a Androstane <surr>	84.5	50-150		%	1	XFC8556	XXX20835	

Batch Information

Analytical Batch: XFC8556
Analytical Method: SW8015C
Analysis Date/Time: 06/03/09 07:53
Dilution Factor: 1

Prep Batch: XXX20835
Prep Method: SW3520C
Prep Date/Time: 05/20/09 09:00

Initial Prep Wt./Vol.: 930 mL
Prep Extract Vol.: 1 mL
Container ID:1092054004-J
Analyst: KDC

Client Sample ID: **RHMW03-WG15**
SGS Ref. #: 1092054004
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 11:00
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
Toluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Styrene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Acetone	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10497	VXX19405	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10497	VXX19405	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10497	VXX19405	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10497	VXX19405	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	

Client Sample ID: **RHMW03-WG15**
SGS Ref. #: 1092054004
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 11:00
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10497	VXX19405	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10501	VXX19411	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane-D4 <surr>	111	73-120		%	1	VMS10497	VXX19405	
Toluene-d8 <surr>	98.1	80-120		%	1	VMS10497	VXX19405	
4-Bromofluorobenzene <surr>	99	76-120		%	1	VMS10497	VXX19405	

Client Sample ID: **RHMW03-WG15**
SGS Ref. #: 1092054004
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 11:00
Receipt Date/Time: 05/15/09 11:20

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10497		Prep Batch: VXX19405				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/20/09 18:56		Prep Date/Time: 05/20/09 11:43				Container ID:1092054004-D		
Dilution Factor: 1						Analyst: DSH		
Analytical Batch: VMS10501		Prep Batch: VXX19411				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/24/09 23:54		Prep Date/Time: 05/24/09 17:14				Container ID:1092054004-E		
Dilution Factor: 1						Analyst: DSH		

Client Sample ID: **RHMW03-WG15**
SGS Ref. #: 1092054004
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 11:00
Receipt Date/Time: 05/15/09 11:20

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Acenaphthene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Fluorene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Phenanthrene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Anthracene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Fluoranthene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Pyrene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Benzo(a)Anthracene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Chrysene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Benzo[b]Fluoranthene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Benzo[k]fluoranthene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Benzo[a]pyrene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Indeno[1,2,3-c,d] pyrene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Dibenzo[a,h]anthracene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Benzo[g,h,i]perylene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Naphthalene	ND	0.101	0.0313	ug/L	1	XMS4898	XXX20829	
1-Methylnaphthalene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
2-Methylnaphthalene	ND	0.0505	0.0152	ug/L	1	XMS4898	XXX20829	
Terphenyl-d14 <surr>	91	50-135		%	1	XMS4898	XXX20829	

Batch Information

Analytical Batch: XMS4898
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/22/09 19:15
Dilution Factor: 1

Prep Batch: XXX20829
Prep Method: SW3520C
Prep Date/Time: 05/19/09 09:45

Initial Prep Wt./Vol.: 990 mL
Prep Extract Vol.: 1 mL
Container ID:1092054004-H
Analyst: JDH

Client Sample ID: **RHMW02-WG15**
SGS Ref. #: 1092054005
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:50
Receipt Date/Time: 05/15/09 11:20

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	MMS5916	MXX21701	

Batch Information

Analytical Batch: MMS5916
Analytical Method: SW6020
Analysis Date/Time: 05/25/09 02:17
Dilution Factor: 5

Prep Batch: MXX21701
Prep Method: SW3010A
Prep Date/Time: 05/22/09 17:30

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1092054005-G
Analyst: NRB

Client Sample ID: **RHMW02-WG15**
SGS Ref. #: 1092054005
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:50
Receipt Date/Time: 05/15/09 11:20

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	39.1 J	100	10.0	ug/L	1	VFC9431	VXX19416	
4-Bromofluorobenzene <surr>	124	50-150		%	1	VFC9431	VXX19416	

Batch Information

Analytical Batch: VFC9431
Analytical Method: SW8015C
Analysis Date/Time: 05/26/09 19:10
Dilution Factor: 1

Prep Batch: VXX19416
Prep Method: SW5030B
Prep Date/Time: 05/26/09 09:17

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1092054005-B
Analyst: KPW

Client Sample ID: **RHMW02-WG15**
SGS Ref. #: 1092054005
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:50
Receipt Date/Time: 05/15/09 11:20

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	1.62	0.444	0.167	mg/L	1	XFC8556	XXX20835	
5a Androstane <surr>	85.1	50-150		%	1	XFC8556	XXX20835	

Batch Information

Analytical Batch: XFC8556
Analytical Method: SW8015C
Analysis Date/Time: 06/03/09 08:21
Dilution Factor: 1

Prep Batch: XXX20835
Prep Method: SW3520C
Prep Date/Time: 05/20/09 09:00

Initial Prep Wt./Vol.: 900 mL
Prep Extract Vol.: 1 mL
Container ID:1092054005-J
Analyst: KDC

Client Sample ID: **RHMW02-WG15**
SGS Ref. #: 1092054005
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:50
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
Toluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
n-Butylbenzene	2.19	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
n-Propylbenzene	2.24	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Styrene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Acetone	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10497	VXX19405	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10497	VXX19405	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10497	VXX19405	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10497	VXX19405	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	

Client Sample ID: **RHMW02-WG15**
SGS Ref. #: 1092054005
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:50
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
sec-Butylbenzene	6.26	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10497	VXX19405	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
o-Xylene	0.310 J	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
tert-Butylbenzene	1.05	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10501	VXX19411	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Isopropylbenzene (Cumene)	5.08	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane-D4 <surr>	113	73-120		%	1	VMS10497	VXX19405	
Toluene-d8 <surr>	96.8	80-120		%	1	VMS10497	VXX19405	
4-Bromofluorobenzene <surr>	103	76-120		%	1	VMS10497	VXX19405	

Client Sample ID: **RHMW02-WG15**
SGS Ref. #: 1092054005
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:50
Receipt Date/Time: 05/15/09 11:20

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10497		Prep Batch: VXX19405				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/20/09 19:30		Prep Date/Time: 05/20/09 11:43				Container ID:1092054005-D		
Dilution Factor: 1						Analyst: DSH		
Analytical Batch: VMS10501		Prep Batch: VXX19411				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/25/09 00:28		Prep Date/Time: 05/24/09 17:14				Container ID:1092054005-E		
Dilution Factor: 1						Analyst: DSH		

Client Sample ID: **RHMW02-WG15**
SGS Ref. #: 1092054005
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:50
Receipt Date/Time: 05/15/09 11:20

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	XMS4898	XXX20829	
Acenaphthene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Fluorene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Phenanthrene	0.0162 J	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Pyrene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Chrysene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Naphthalene	1.17	0.100	0.0310	ug/L	1	XMS4898	XXX20829	
1-Methylnaphthalene	17.9	0.500	0.150	ug/L	10	XMS4901	XXX20829	
2-Methylnaphthalene	0.136	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Terphenyl-d14 <surr>	86.5	50-135		%	1	XMS4898	XXX20829	

Batch Information

Analytical Batch: XMS4898
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/22/09 19:48
Dilution Factor: 1
Prep Batch: XXX20829
Prep Method: SW3520C
Prep Date/Time: 05/19/09 09:45
Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1092054005-H
Analyst: JDH

Analytical Batch: XMS4901
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/23/09 14:32
Dilution Factor: 10
Prep Batch: XXX20829
Prep Method: SW3520C
Prep Date/Time: 05/19/09 09:45
Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1092054005-H
Analyst: JDH

Client Sample ID: **RHMWA01-WG15**
SGS Ref. #: 1092054006
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:05
Receipt Date/Time: 05/15/09 11:20

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	MMS5916	MXX21701	

Batch Information

Analytical Batch: MMS5916
Analytical Method: SW6020
Analysis Date/Time: 05/25/09 02:19
Dilution Factor: 5

Prep Batch: MXX21701
Prep Method: SW3010A
Prep Date/Time: 05/22/09 17:30

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1092054006-G
Analyst: NRB

Client Sample ID: **RHMWA01-WG15**
SGS Ref. #: 1092054006
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:05
Receipt Date/Time: 05/15/09 11:20

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	36.7 J	100	10.0	ug/L	1	VFC9431	VXX19416	
4-Bromofluorobenzene <surr>	121	50-150		%	1	VFC9431	VXX19416	

Batch Information

Analytical Batch: VFC9431
Analytical Method: SW8015C
Analysis Date/Time: 05/26/09 19:29
Dilution Factor: 1

Prep Batch: VXX19416
Prep Method: SW5030B
Prep Date/Time: 05/26/09 09:17

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1092054006-B
Analyst: KPW

Client Sample ID: **RHMWA01-WG15**
SGS Ref. #: 1092054006
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:05
Receipt Date/Time: 05/15/09 11:20

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	2.00	0.426	0.160	mg/L	1	XFC8556	XXX20835	
5a Androstane <surr>	96.2	50-150		%	1	XFC8556	XXX20835	

Batch Information

Analytical Batch: XFC8556
Analytical Method: SW8015C
Analysis Date/Time: 06/03/09 08:31
Dilution Factor: 1

Prep Batch: XXX20835
Prep Method: SW3520C
Prep Date/Time: 05/20/09 09:00

Initial Prep Wt./Vol.: 940 mL
Prep Extract Vol.: 1 mL
Container ID:1092054006-J
Analyst: KDC

Client Sample ID: **RHMWA01-WG15**
SGS Ref. #: 1092054006
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:05
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
Toluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
n-Butylbenzene	2.06	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
n-Propylbenzene	2.16	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Styrene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Acetone	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10497	VXX19405	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10497	VXX19405	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10497	VXX19405	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10497	VXX19405	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	

Client Sample ID: **RHMWA01-WG15**
SGS Ref. #: 1092054006
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:05
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
sec-Butylbenzene	5.84	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10497	VXX19405	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
tert-Butylbenzene	0.970 J	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10501	VXX19411	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Isopropylbenzene (Cumene)	4.86	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane-D4 <surr>	115	73-120		%	1	VMS10497	VXX19405	
Toluene-d8 <surr>	97.9	80-120		%	1	VMS10497	VXX19405	
4-Bromofluorobenzene <surr>	103	76-120		%	1	VMS10497	VXX19405	

Client Sample ID: **RHMWA01-WG15**
SGS Ref. #: 1092054006
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:05
Receipt Date/Time: 05/15/09 11:20

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10497		Prep Batch: VXX19405				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/20/09 20:04		Prep Date/Time: 05/20/09 11:43				Container ID:1092054006-D		
Dilution Factor: 1						Analyst: DSH		
Analytical Batch: VMS10501		Prep Batch: VXX19411				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/25/09 01:02		Prep Date/Time: 05/24/09 17:14				Container ID:1092054006-E		
Dilution Factor: 1						Analyst: DSH		

Client Sample ID: **RHMWA01-WG15**
SGS Ref. #: 1092054006
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 12:05
Receipt Date/Time: 05/15/09 11:20

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	XMS4898	XXX20829	
Acenaphthene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Fluorene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Phenanthrene	0.0171 J	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Anthracene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Fluoranthene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Pyrene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Benzo(a)Anthracene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Chrysene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Benzo[b]Fluoranthene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Benzo[k]fluoranthene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Benzo[a]pyrene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Indeno[1,2,3-c,d] pyrene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Dibenzo[a,h]anthracene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Benzo[g,h,i]perylene	ND	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Naphthalene	1.08	0.103	0.0320	ug/L	1	XMS4898	XXX20829	
1-Methylnaphthalene	24.6	0.515	0.155	ug/L	10	XMS4901	XXX20829	
2-Methylnaphthalene	0.107	0.0515	0.0155	ug/L	1	XMS4898	XXX20829	
Terphenyl-d14 <surr>	86.4	50-135		%	1	XMS4898	XXX20829	

Batch Information

Analytical Batch: XMS4898
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/22/09 20:20
Dilution Factor: 1
Prep Batch: XXX20829
Prep Method: SW3520C
Prep Date/Time: 05/19/09 09:45
Initial Prep Wt./Vol.: 970 mL
Prep Extract Vol.: 1 mL
Container ID:1092054006-H
Analyst: JDH

Analytical Batch: XMS4901
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/23/09 15:05
Dilution Factor: 10
Prep Batch: XXX20829
Prep Method: SW3520C
Prep Date/Time: 05/19/09 09:45
Initial Prep Wt./Vol.: 970 mL
Prep Extract Vol.: 1 mL
Container ID:1092054006-H
Analyst: JDH

Client Sample ID: **RHMW01-WG15**
SGS Ref. #: 1092054007
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 15:05
Receipt Date/Time: 05/15/09 11:20

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	MMS5916	MXX21701	

Batch Information

Analytical Batch: MMS5916
Analytical Method: SW6020
Analysis Date/Time: 05/25/09 02:21
Dilution Factor: 5

Prep Batch: MXX21701
Prep Method: SW3010A
Prep Date/Time: 05/22/09 17:30

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1092054007-G
Analyst: NRB

Client Sample ID: **RHMW01-WG15**
SGS Ref. #: 1092054007
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 15:05
Receipt Date/Time: 05/15/09 11:20

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	16.6 J	100	10.0	ug/L	1	VFC9431	VXX19416	
4-Bromofluorobenzene <surr>	106	50-150		%	1	VFC9431	VXX19416	

Batch Information

Analytical Batch: VFC9431
Analytical Method: SW8015C
Analysis Date/Time: 05/26/09 19:48
Dilution Factor: 1

Prep Batch: VXX19416
Prep Method: SW5030B
Prep Date/Time: 05/26/09 09:17

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1092054007-B
Analyst: KPW

Client Sample ID: **RHMW01-WG15**
SGS Ref. #: 1092054007
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 15:05
Receipt Date/Time: 05/15/09 11:20

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	0.373 J	0.449	0.169	mg/L	1	XFC8556	XXX20835	
5a Androstane <surr>	99	50-150		%	1	XFC8556	XXX20835	

Batch Information

Analytical Batch: XFC8556
Analytical Method: SW8015C
Analysis Date/Time: 06/03/09 08:40
Dilution Factor: 1

Prep Batch: XXX20835
Prep Method: SW3520C
Prep Date/Time: 05/20/09 09:00

Initial Prep Wt./Vol.: 890 mL
Prep Extract Vol.: 1 mL
Container ID:1092054007-J
Analyst: KDC

Client Sample ID: **RHMW01-WG15**
SGS Ref. #: 1092054007
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 15:05
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
Toluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Styrene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Acetone	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10497	VXX19405	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10497	VXX19405	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10497	VXX19405	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10497	VXX19405	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	

Client Sample ID: **RHMW01-WG15**
SGS Ref. #: 1092054007
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 15:05
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10497	VXX19405	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10501	VXX19411	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane-D4 <surr>	115	73-120		%	1	VMS10497	VXX19405	
Toluene-d8 <surr>	99	80-120		%	1	VMS10497	VXX19405	
4-Bromofluorobenzene <surr>	99.2	76-120		%	1	VMS10497	VXX19405	

Client Sample ID: **RHMW01-WG15**
SGS Ref. #: 1092054007
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 15:05
Receipt Date/Time: 05/15/09 11:20

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10497		Prep Batch: VXX19405				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/20/09 20:38		Prep Date/Time: 05/20/09 11:43				Container ID:1092054007-D		
Dilution Factor: 1						Analyst: DSH		
Analytical Batch: VMS10501		Prep Batch: VXX19411				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/25/09 01:36		Prep Date/Time: 05/24/09 17:14				Container ID:1092054007-E		
Dilution Factor: 1						Analyst: DSH		

Client Sample ID: **RHMW01-WG15**
SGS Ref. #: 1092054007
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 15:05
Receipt Date/Time: 05/15/09 11:20

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	XMS4898	XXX20829	
Acenaphthene	0.0243 J	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Fluorene	0.0246 J	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Phenanthrene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Pyrene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Chrysene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Naphthalene	0.182	0.100	0.0310	ug/L	1	XMS4898	XXX20829	
1-Methylnaphthalene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	1	XMS4898	XXX20829	
Terphenyl-d14 <surr>	72.1	50-135		%	1	XMS4898	XXX20829	

Batch Information

Analytical Batch: XMS4898
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/22/09 20:53
Dilution Factor: 1

Prep Batch: XXX20829
Prep Method: SW3520C
Prep Date/Time: 05/19/09 09:45

Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1092054007-H
Analyst: JDH

Client Sample ID: **RHMW05-WG15**
SGS Ref. #: 1092054008
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 07:40
Receipt Date/Time: 05/15/09 11:20

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	MMS5916	MXX21701	

Batch Information

Analytical Batch: MMS5916
Analytical Method: SW6020
Analysis Date/Time: 05/25/09 02:23
Dilution Factor: 5

Prep Batch: MXX21701
Prep Method: SW3010A
Prep Date/Time: 05/22/09 17:30

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1092054008-G
Analyst: NRB

Client Sample ID: **RHMW05-WG15**
SGS Ref. #: 1092054008
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 07:40
Receipt Date/Time: 05/15/09 11:20

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	13.2 J	100	10.0	ug/L	1	VFC9431	VXX19416	
4-Bromofluorobenzene <surr>	105	50-150		%	1	VFC9431	VXX19416	

Batch Information

Analytical Batch: VFC9431
Analytical Method: SW8015C
Analysis Date/Time: 05/26/09 20:06
Dilution Factor: 1

Prep Batch: VXX19416
Prep Method: SW5030B
Prep Date/Time: 05/26/09 09:17

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1092054008-B
Analyst: KPW

Client Sample ID: **RHMW05-WG15**
SGS Ref. #: 1092054008
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 07:40
Receipt Date/Time: 05/15/09 11:20

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	0.200 J	0.430	0.161	mg/L	1	XFC8556	XXX20835	
5a Androstane <surr>	86.1	50-150		%	1	XFC8556	XXX20835	

Batch Information

Analytical Batch: XFC8556
Analytical Method: SW8015C
Analysis Date/Time: 06/03/09 08:49
Dilution Factor: 1

Prep Batch: XXX20835
Prep Method: SW3520C
Prep Date/Time: 05/20/09 09:00

Initial Prep Wt./Vol.: 930 mL
Prep Extract Vol.: 1 mL
Container ID:1092054008-J
Analyst: KDC

Client Sample ID: **RHMW05-WG15**
SGS Ref. #: 1092054008
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 07:40
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
Toluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Styrene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Acetone	10.4	10.0	3.10	ug/L	1	VMS10497	VXX19405	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10497	VXX19405	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10497	VXX19405	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10497	VXX19405	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10497	VXX19405	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	

Client Sample ID: **RHMW05-WG15**
SGS Ref. #: 1092054008
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 07:40
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10497	VXX19405	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10501	VXX19411	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane-D4 <surr>	109	73-120		%	1	VMS10497	VXX19405	
Toluene-d8 <surr>	99.1	80-120		%	1	VMS10497	VXX19405	
4-Bromofluorobenzene <surr>	102	76-120		%	1	VMS10497	VXX19405	

Client Sample ID: **RHMW05-WG15**
SGS Ref. #: 1092054008
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 07:40
Receipt Date/Time: 05/15/09 11:20

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10497		Prep Batch: VXX19405				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/20/09 21:12		Prep Date/Time: 05/20/09 11:43				Container ID:1092054008-D		
Dilution Factor: 1						Analyst: DSH		
Analytical Batch: VMS10501		Prep Batch: VXX19411				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/25/09 02:10		Prep Date/Time: 05/24/09 17:14				Container ID:1092054008-E		
Dilution Factor: 1						Analyst: DSH		

Client Sample ID: **RHMW05-WG15**
SGS Ref. #: 1092054008
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 07:40
Receipt Date/Time: 05/15/09 11:20

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Acenaphthene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Fluorene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Phenanthrene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Anthracene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Fluoranthene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Pyrene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Benzo(a)Anthracene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Chrysene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Benzo[b]Fluoranthene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Benzo[k]fluoranthene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Benzo[a]pyrene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Indeno[1,2,3-c,d] pyrene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Dibenzo[a,h]anthracene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Benzo[g,h,i]perylene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Naphthalene	ND	0.105	0.0326	ug/L	1	XMS4906	XXX20855	
1-Methylnaphthalene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
2-Methylnaphthalene	ND	0.0526	0.0158	ug/L	1	XMS4906	XXX20855	
Terphenyl-d14 <surr>	73.3	50-135		%	1	XMS4906	XXX20855	

Batch Information

Analytical Batch: XMS4906
Analytical Method: 8270D SIMS
Analysis Date/Time: 05/28/09 09:12
Dilution Factor: 1

Prep Batch: XXX20855
Prep Method: SW3520C
Prep Date/Time: 05/26/09 10:30

Initial Prep Wt./Vol.: 950 mL
Prep Extract Vol.: 1 mL
Container ID:1092054008-I
Analyst: JDH

Client Sample ID: **TB01-WG15**
SGS Ref. #: 1092054009
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 08:05
Receipt Date/Time: 05/15/09 11:20

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	11.5 J	100	10.0	ug/L	1	VFC9438	VXX19432	
4-Bromofluorobenzene <surr>	102	50-150		%	1	VFC9438	VXX19432	

Batch Information

Analytical Batch: VFC9438
Analytical Method: SW8015C
Analysis Date/Time: 05/21/09 20:51
Dilution Factor: 1

Prep Batch: VXX19432
Prep Method: SW5030B
Prep Date/Time: 05/21/09 07:15

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1092054009-A
Analyst: KPW

Client Sample ID: **TB01-WG15**
SGS Ref. #: 1092054009
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 08:05
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
Toluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
n-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chlorobenzene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
4-Isopropyltoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
n-Propylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Styrene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromomethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Acetone	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	1	VMS10497	VXX19405	
Tetrachloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dibromochloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,3-Dichloropropane	ND	0.400	0.120	ug/L	1	VMS10497	VXX19405	
1,2-Dibromoethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Carbon tetrachloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
Chloroform	ND	1.00	0.300	ug/L	1	VMS10497	VXX19405	
Bromobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Chloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromomethane	ND	3.00	0.940	ug/L	1	VMS10497	VXX19405	
Bromochloromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Vinyl chloride	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	

Client Sample ID: **TB01-WG15**
SGS Ref. #: 1092054009
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 08:05
Receipt Date/Time: 05/15/09 11:20

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	VMS10497	VXX19405	
sec-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromodichloromethane	ND	0.500	0.150	ug/L	1	VMS10497	VXX19405	
1,1-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Butanone (MEK)	ND	10.0	3.10	ug/L	1	VMS10497	VXX19405	
Methylene chloride	ND	5.00	1.00	ug/L	1	VMS10497	VXX19405	
Trichlorofluoromethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
Naphthalene	ND	2.00	0.620	ug/L	1	VMS10497	VXX19405	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Bromoform	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1-Chlorohexane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
tert-Butylbenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10501	VXX19411	
1,1-Dichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2-Chlorotoluene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Trichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
2,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Hexachlorobutadiene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloropropane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1-Dichloropropene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	1	VMS10497	VXX19405	
1,2-Dichloroethane-D4 <surr>	111	73-120		%	1	VMS10497	VXX19405	
Toluene-d8 <surr>	96.6	80-120		%	1	VMS10497	VXX19405	
4-Bromofluorobenzene <surr>	98	76-120		%	1	VMS10497	VXX19405	

Client Sample ID: **TB01-WG15**
SGS Ref. #: 1092054009
Project ID: Red Hills BFSF
Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 05/13/09 08:05
Receipt Date/Time: 05/15/09 11:20

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Batch Information								
Analytical Batch: VMS10497		Prep Batch: VXX19405				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/20/09 17:48		Prep Date/Time: 05/20/09 11:43				Container ID:1092054009-B		
Dilution Factor: 1						Analyst: DSH		
Analytical Batch: VMS10501		Prep Batch: VXX19411				Initial Prep Wt./Vol.: 5 mL		
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL		
Analysis Date/Time: 05/24/09 22:47		Prep Date/Time: 05/24/09 17:14				Container ID:1092054009-C		
Dilution Factor: 1						Analyst: DSH		

SGS Ref.#	895548 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	XXX20829
Project Name/#	Red Hills BFSF	**Method**	SW3520C
Matrix	Water (Surface, Eff., Ground)	**Date**	05/19/2009

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
Acenaphthylene	ND	0.0500	0.0150	ug/L	05/22/09
Acenaphthene	ND	0.0500	0.0150	ug/L	05/22/09
Fluorene	ND	0.0500	0.0150	ug/L	05/22/09
Phenanthrene	ND	0.0500	0.0150	ug/L	05/22/09
Anthracene	ND	0.0500	0.0150	ug/L	05/22/09
Fluoranthene	ND	0.0500	0.0150	ug/L	05/22/09
Pyrene	ND	0.0500	0.0150	ug/L	05/22/09
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	05/22/09
Chrysene	ND	0.0500	0.0150	ug/L	05/22/09
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	05/22/09
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	05/22/09
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	05/22/09
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	05/22/09
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	05/22/09
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	05/22/09
Naphthalene	ND	0.100	0.0310	ug/L	05/22/09
1-Methylnaphthalene	ND	0.0500	0.0150	ug/L	05/22/09
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	05/22/09
Surrogates					
Terphenyl-d14 <surr>	96	50-135		%	05/22/09

Batch XMS4898
Method 8270D SIMS
Instrument HP 6890/5973 MS SVOA

SGS Ref.#	895711 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	XXX20835
Project Name/#	Red Hills BFSF	**Method**	SW3520C
Matrix	Water (Surface, Eff., Ground)	**Date**	05/20/2009

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Semivolatile Organic Fuels Department					
Diesel Range Organics	ND	0.400	0.150	mg/L	06/03/09
Surrogates					
5a Androstane <surr>	84	60-120		%	06/03/09

Batch XFC8556
Method SW8015C
Instrument HP 6890 Series II FID SV D R

SGS Ref.#	896079 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX19405
Project Name/#	Red Hills BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	05/20/2009

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008, 1092054009

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date

Volatile Gas Chromatography/Mass Spectroscopy

SGS Ref.#	896079 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX19405
Project Name/#	Red Hills BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	05/20/2009

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
Benzene	ND	0.400	0.120	ug/L	05/20/09
Toluene	ND	1.00	0.310	ug/L	05/20/09
Ethylbenzene	ND	1.00	0.310	ug/L	05/20/09
n-Butylbenzene	ND	1.00	0.310	ug/L	05/20/09
1,4-Dichlorobenzene	ND	0.500	0.150	ug/L	05/20/09
1,2-Dichloroethane	ND	0.500	0.150	ug/L	05/20/09
1,3,5-Trimethylbenzene	ND	1.00	0.310	ug/L	05/20/09
4-Chlorotoluene	ND	1.00	0.310	ug/L	05/20/09
Chlorobenzene	ND	0.500	0.150	ug/L	05/20/09
4-Methyl-2-pentanone (MIBK)	ND	10.0	3.10	ug/L	05/20/09
cis-1,2-Dichloroethene	ND	1.00	0.310	ug/L	05/20/09
4-Isopropyltoluene	ND	1.00	0.310	ug/L	05/20/09
cis-1,3-Dichloropropene	ND	0.500	0.150	ug/L	05/20/09
n-Propylbenzene	ND	1.00	0.310	ug/L	05/20/09
Styrene	ND	1.00	0.310	ug/L	05/20/09
Dibromomethane	ND	1.00	0.310	ug/L	05/20/09
trans-1,3-Dichloropropene	ND	1.00	0.310	ug/L	05/20/09
1,2,4-Trichlorobenzene	ND	1.00	0.310	ug/L	05/20/09
Acetone	ND	10.0	3.10	ug/L	05/20/09
1,1,2,2-Tetrachloroethane	ND	0.500	0.150	ug/L	05/20/09
1,2-Dibromo-3-chloropropane	ND	2.00	0.620	ug/L	05/20/09
Methyl-t-butyl ether	ND	5.00	1.50	ug/L	05/20/09
Tetrachloroethene	ND	1.00	0.310	ug/L	05/20/09
Dibromochloromethane	ND	0.500	0.150	ug/L	05/20/09
1,3-Dichloropropane	ND	0.400	0.120	ug/L	05/20/09
1,2-Dibromoethane	ND	1.00	0.310	ug/L	05/20/09
Carbon tetrachloride	ND	1.00	0.310	ug/L	05/20/09
1,1,1,2-Tetrachloroethane	ND	0.500	0.150	ug/L	05/20/09
Chloroform	ND	1.00	0.300	ug/L	05/20/09
Bromobenzene	ND	1.00	0.310	ug/L	05/20/09
Chloromethane	ND	1.00	0.310	ug/L	05/20/09
1,2,3-Trichloropropane	ND	1.00	0.310	ug/L	05/20/09
Bromomethane	ND	3.00	0.940	ug/L	05/20/09
Bromochloromethane	ND	1.00	0.310	ug/L	05/20/09
Vinyl chloride	ND	1.00	0.310	ug/L	05/20/09
Dichlorodifluoromethane	ND	1.00	0.310	ug/L	05/20/09
Chloroethane	ND	1.00	0.310	ug/L	05/20/09
sec-Butylbenzene	ND	1.00	0.310	ug/L	05/20/09
Bromodichloromethane	ND	0.500	0.150	ug/L	05/20/09

SGS Ref.#	896079 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX19405
Project Name/#	Red Hills BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	05/20/2009

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
1,1-Dichloroethene	ND	1.00	0.310	ug/L	05/20/09
2-Butanone (MEK)	ND	10.0	3.10	ug/L	05/20/09
Methylene chloride	ND	5.00	1.00	ug/L	05/20/09
Trichlorofluoromethane	ND	1.00	0.310	ug/L	05/20/09
P & M -Xylene	ND	2.00	0.620	ug/L	05/20/09
Naphthalene	ND	2.00	0.620	ug/L	05/20/09
o-Xylene	ND	1.00	0.310	ug/L	05/20/09
Bromoform	ND	1.00	0.310	ug/L	05/20/09
1-Chlorohexane	ND	1.00	0.310	ug/L	05/20/09
1,2,4-Trimethylbenzene	ND	1.00	0.310	ug/L	05/20/09
tert-Butylbenzene	ND	1.00	0.310	ug/L	05/20/09
1,1-Dichloroethane	ND	1.00	0.310	ug/L	05/20/09
2-Chlorotoluene	ND	1.00	0.310	ug/L	05/20/09
Trichloroethene	ND	1.00	0.310	ug/L	05/20/09
trans-1,2-Dichloroethene	ND	1.00	0.310	ug/L	05/20/09
1,2-Dichlorobenzene	ND	1.00	0.310	ug/L	05/20/09
2,2-Dichloropropane	ND	1.00	0.310	ug/L	05/20/09
Hexachlorobutadiene	ND	1.00	0.310	ug/L	05/20/09
Isopropylbenzene (Cumene)	ND	1.00	0.310	ug/L	05/20/09
1,2-Dichloropropane	ND	1.00	0.310	ug/L	05/20/09
1,1-Dichloropropene	ND	1.00	0.310	ug/L	05/20/09
1,1,2-Trichloroethane	ND	1.00	0.310	ug/L	05/20/09
1,3-Dichlorobenzene	ND	1.00	0.310	ug/L	05/20/09
1,2,3-Trichlorobenzene	ND	1.00	0.310	ug/L	05/20/09
Surrogates					
1,2-Dichloroethane-D4 <surr>	112	73-120		%	05/20/09
Toluene-d8 <surr>	96.5	80-120		%	05/20/09
4-Bromofluorobenzene <surr>	99.4	76-120		%	05/20/09

Batch VMS10497
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	896435 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	MXX21701
Project Name/#	Red Hills BFSF	**Method**	SW3010A
Matrix	Water (Surface, Eff., Ground)	**Date**	05/22/2009

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS					
Lead	ND	1.00	0.310	ug/L	05/25/09
Batch MMS5916					
Method SW6020					
Instrument Perkin Elmer Sciex ICP-MS P3					

SGS Ref.#	896525 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX19411
Project Name/#	Red Hills BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	05/24/2009

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008, 1092054009

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
1,1,1-Trichloroethane	ND	1.00	0.310	ug/L	05/24/09
Surrogates					
1,2-Dichloroethane-D4 <surr>	110	73-120		%	05/24/09
Toluene-d8 <surr>	99.7	80-120		%	05/24/09
4-Bromofluorobenzene <surr>	99.5	76-120		%	05/24/09

Batch VMS10501
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	896553 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	XXX20855
Project Name/#	Red Hills BFSF	**Method**	SW3520C
Matrix	Water (Surface, Eff., Ground)	**Date**	05/26/2009

QC results affect the following production samples:

1092054008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
Acenaphthylene	ND	0.0500	0.0150	ug/L	05/28/09
Acenaphthene	ND	0.0500	0.0150	ug/L	05/28/09
Fluorene	ND	0.0500	0.0150	ug/L	05/28/09
Phenanthrene	ND	0.0500	0.0150	ug/L	05/28/09
Anthracene	ND	0.0500	0.0150	ug/L	05/28/09
Fluoranthene	ND	0.0500	0.0150	ug/L	05/28/09
Pyrene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	05/28/09
Chrysene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	05/28/09
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	05/28/09
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	05/28/09
Naphthalene	ND	0.100	0.0310	ug/L	05/28/09
1-Methylnaphthalene	ND	0.0500	0.0150	ug/L	05/28/09
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	05/28/09
Surrogates					
Terphenyl-d14 <surr>	85.2	50-135		%	05/28/09

Batch XMS4906
Method 8270D SIMS
Instrument HP 6890/5973 MS SVOA

SGS Ref.#	896687	Method Blank	**Printed Date/Time**		06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)		**Prep**	**Batch**	VXX19416
Project Name/#	Red Hills BFSF			**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)			**Date**	05/26/2009

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Fuels Department					
Gasoline Range Organics	14.9 J	100	10.0	ug/L	05/26/09
Surrogates					
4-Bromofluorobenzene <surr>	102	50-150		%	05/26/09

Batch VFC9431
Method SW8015C
Instrument HP 5890 Series II PID+HECD VBA

SGS Ref.#	896796 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	XXX20862
Project Name/#	Red Hills BFSF	**Method**	SW3520C
Matrix	Water (Surface, Eff., Ground)	**Date**	05/27/2009

QC results affect the following production samples:

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
Acenaphthylene	ND	0.0500	0.0150	ug/L	05/28/09
Acenaphthene	ND	0.0500	0.0150	ug/L	05/28/09
Fluorene	ND	0.0500	0.0150	ug/L	05/28/09
Phenanthrene	ND	0.0500	0.0150	ug/L	05/28/09
Anthracene	ND	0.0500	0.0150	ug/L	05/28/09
Fluoranthene	ND	0.0500	0.0150	ug/L	05/28/09
Pyrene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	05/28/09
Chrysene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	05/28/09
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	05/28/09
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	05/28/09
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	05/28/09
Naphthalene	ND	0.100	0.0310	ug/L	05/28/09
1-Methylnaphthalene	ND	0.0500	0.0150	ug/L	05/28/09
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	05/28/09
Surrogates					
Terphenyl-d14 <surr>	84.4	50-135		%	05/28/09

Batch XMS4906
Method 8270D SIMS
Instrument HP 6890/5973 MS SVOA

SGS Ref.#	897585 Method Blank	**Printed Date/Time**	06/08/2009 11:50
Client Name	The Environmental Company, Inc. (TEC)	**Prep Batch**	VXX19432
Project Name/#	Red Hills BFSF	**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)	**Date**	05/21/2009

QC results affect the following production samples:

1092054009

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Fuels Department					
Gasoline Range Organics	14.5 J	100	10.0	ug/L	05/21/09
Surrogates					
4-Bromofluorobenzene <surr>	102	50-150		%	05/21/09

Batch VFC9438
Method SW8015C
Instrument HP 5890 Series II PID+HECD VBA

SGS Ref.#	895549 Lab Control Sample	**Printed Date/Time**		06/08/2009	11:50
		Prep	**Batch**	XXX20829	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/19/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS								
Acenaphthylene	LCS	0.394	79	(50-105)			0.5 ug/L	05/22/2009
Acenaphthene	LCS	0.387	77	(45-110)			0.5 ug/L	05/22/2009
Fluorene	LCS	0.404	81	(50-110)			0.5 ug/L	05/22/2009
Phenanthrene	LCS	0.400	80	(50-115)			0.5 ug/L	05/22/2009
Anthracene	LCS	0.408	82	(55-110)			0.5 ug/L	05/22/2009
Fluoranthene	LCS	0.483	97	(55-125)			0.5 ug/L	05/22/2009
Pyrene	LCS	0.466	93	(50-130)			0.5 ug/L	05/22/2009
Benzo(a)Anthracene	LCS	0.465	93	(55-120)			0.5 ug/L	05/22/2009
Chrysene	LCS	0.451	90	(55-120)			0.5 ug/L	05/22/2009
Benzo[b]Fluoranthene	LCS	0.454	91	(46-130)			0.5 ug/L	05/22/2009
Benzo[k]fluoranthene	LCS	0.448	90	(60-125)			0.5 ug/L	05/22/2009
Benzo[a]pyrene	LCS	0.464	93	(55-120)			0.5 ug/L	05/22/2009
Indeno[1,2,3-c,d] pyrene	LCS	0.455	91	(45-125)			0.5 ug/L	05/22/2009
Dibenzo[a,h]anthracene	LCS	0.468	94	(41-140)			0.5 ug/L	05/22/2009
Benzo[g,h,i]perylene	LCS	0.439	88	(46-125)			0.5 ug/L	05/22/2009
Naphthalene	LCS	0.367	73	(42-100)			0.5 ug/L	05/22/2009
1-Methylnaphthalene	LCS	0.391	78	(46-115)			0.5 ug/L	05/22/2009
2-Methylnaphthalene	LCS	0.358	72	(45-105)			0.5 ug/L	05/22/2009
Surrogates								
Terphenyl-d14 <surr>	LCS		97	(50-135)				05/22/2009

SGS Ref.#	895549 Lab Control Sample		**Printed Date/Time**	06/08/2009	11:50
			Prep Batch	XXX20829	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/19/2009	
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	XMS4898
Method	8270D SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	895713	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
			Prep Batch	XXX20835	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/20/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic Fuels Department								
Diesel Range Organics	LCS	4.35	87	(75-125)			5 mg/L	06/03/2009
Surrogates								
5a Androstane <surr>	LCS		97	(60-120)				06/03/2009

Batch XFC8556
Method SW8015C
Instrument HP 6890 Series II FID SV D R

SGS Ref.#	896080	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896081	Lab Control Sample Duplicate	**Prep Batch**	VXX19405	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/20/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008, 1092054009

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

Volatile Gas Chromatography/Mass Spectroscopy

SGS Ref.#	896080	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896081	Lab Control Sample Duplicate	**Prep Batch**	VXX19405	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/20/2009	
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								
Benzene	LCS	29.9	100	(80-120)			30 ug/L	05/20/2009
	LCSD	26.8	89		11	(< 20)	30 ug/L	05/20/2009
Toluene	LCS	31.0	103	(77-120)			30 ug/L	05/20/2009
	LCSD	27.9	93		11	(< 20)	30 ug/L	05/20/2009
Ethylbenzene	LCS	31.6	105	(80-120)			30 ug/L	05/20/2009
	LCSD	29.3	98		7	(< 20)	30 ug/L	05/20/2009
n-Butylbenzene	LCS	32.0	107	(80-124)			30 ug/L	05/20/2009
	LCSD	30.0	100		6	(< 20)	30 ug/L	05/20/2009
1,4-Dichlorobenzene	LCS	32.2	107	(80-120)			30 ug/L	05/20/2009
	LCSD	30.3	101		6	(< 20)	30 ug/L	05/20/2009
1,2-Dichloroethane	LCS	33.5	112	(80-129)			30 ug/L	05/20/2009
	LCSD	27.9	93		18	(< 20)	30 ug/L	05/20/2009
1,3,5-Trimethylbenzene	LCS	31.6	105	(80-128)			30 ug/L	05/20/2009
	LCSD	29.3	98		7	(< 20)	30 ug/L	05/20/2009
4-Chlorotoluene	LCS	32.5	108	(79-128)			30 ug/L	05/20/2009
	LCSD	29.8	99		9	(< 20)	30 ug/L	05/20/2009
Chlorobenzene	LCS	31.6	105	(80-120)			30 ug/L	05/20/2009
	LCSD	29.0	97		9	(< 20)	30 ug/L	05/20/2009
4-Methyl-2-pentanone (MIBK)	LCS	99.5	111	(69-134)			90 ug/L	05/20/2009
	LCSD	99.5	111		0	(< 20)	90 ug/L	05/20/2009
cis-1,2-Dichloroethene	LCS	33.8	113	(80-125)			30 ug/L	05/20/2009
	LCSD	29.9	100		12	(< 20)	30 ug/L	05/20/2009
4-Isopropyltoluene	LCS	32.4	108	(80-125)			30 ug/L	05/20/2009
	LCSD	30.2	101		7	(< 20)	30 ug/L	05/20/2009
cis-1,3-Dichloropropene	LCS	30.2	101	(80-120)			30 ug/L	05/20/2009
	LCSD	25.0	83		19	(< 20)	30 ug/L	05/20/2009
n-Propylbenzene	LCS	32.2	107	(80-129)			30 ug/L	05/20/2009
	LCSD	29.6	99		8	(< 20)	30 ug/L	05/20/2009

SGS Ref.#	896080	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896081	Lab Control Sample Duplicate	**Prep Batch**	VXX19405	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/20/2009	
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									
Styrene	LCS	32.6	109	(80-120)				30 ug/L	05/20/2009
	LCSD	30.7	102		6		(< 20)	30 ug/L	05/20/2009
Dibromomethane	LCS	32.2	107	(80-120)				30 ug/L	05/20/2009
	LCSD	28.3	94		13		(< 20)	30 ug/L	05/20/2009
trans-1,3-Dichloropropene	LCS	33.5	112	(80-124)				30 ug/L	05/20/2009
	LCSD	27.9	93		18		(< 20)	30 ug/L	05/20/2009
1,2,4-Trichlorobenzene	LCS	32.2	107	(80-120)				30 ug/L	05/20/2009
	LCSD	31.6	105		2		(< 20)	30 ug/L	05/20/2009
Acetone	LCS	95.1	106	(50-135)				90 ug/L	05/20/2009
	LCSD	90.9	101		5		(< 20)	90 ug/L	05/20/2009
1,1,2,2-Tetrachloroethane	LCS	31.6	105	(76-123)				30 ug/L	05/20/2009
	LCSD	29.5	98		7		(< 20)	30 ug/L	05/20/2009
1,2-Dibromo-3-chloropropane	LCS	33.6	112	(73-130)				30 ug/L	05/20/2009
	LCSD	32.7	109		3		(< 20)	30 ug/L	05/20/2009
Methyl-t-butyl ether	LCS	51.5	115	(80-120)				45 ug/L	05/20/2009
	LCSD	42.4	94		20		(< 20)	45 ug/L	05/20/2009
Tetrachloroethene	LCS	32.5	108	(79-122)				30 ug/L	05/20/2009
	LCSD	28.4	95		14		(< 20)	30 ug/L	05/20/2009
Dibromochloromethane	LCS	34.9	116	(80-120)				30 ug/L	05/20/2009
	LCSD	28.5	95		20	*	(< 20)	30 ug/L	05/20/2009
1,3-Dichloropropane	LCS	33.3	111	(80-121)				30 ug/L	05/20/2009
	LCSD	27.9	93		18		(< 20)	30 ug/L	05/20/2009
1,2-Dibromoethane	LCS	31.7	106	(80-120)				30 ug/L	05/20/2009
	LCSD	27.3	91		15		(< 20)	30 ug/L	05/20/2009
Carbon tetrachloride	LCS	32.6	109	(80-126)				30 ug/L	05/20/2009
	LCSD	25.2	84		25	*	(< 20)	30 ug/L	05/20/2009
1,1,1,2-Tetrachloroethane	LCS	34.1	114	(80-120)				30 ug/L	05/20/2009

SGS Ref.#	896080	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896081	Lab Control Sample Duplicate	**Prep Batch**	VXX19405	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/20/2009	
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	29.0	97		16		(< 20)	30 ug/L	05/20/2009
Chloroform	LCS	31.5	105	(80-124)				30 ug/L	05/20/2009
	LCSD	27.3	91		14		(< 20)	30 ug/L	05/20/2009
Bromobenzene	LCS	31.2	104	(80-120)				30 ug/L	05/20/2009
	LCSD	29.4	98		6		(< 20)	30 ug/L	05/20/2009
Chloromethane	LCS	27.4	91	(67-125)				30 ug/L	05/20/2009
	LCSD	26.9	90		2		(< 20)	30 ug/L	05/20/2009
1,2,3-Trichloropropane	LCS	29.9	100	(80-120)				30 ug/L	05/20/2009
	LCSD	28.7	96		4		(< 20)	30 ug/L	05/20/2009
Bromomethane	LCS	29.4	98	(30-140)				30 ug/L	05/20/2009
	LCSD	30.5	102		4		(< 20)	30 ug/L	05/20/2009
Bromochloromethane	LCS	32.5	108	(77-129)				30 ug/L	05/20/2009
	LCSD	30.9	103		5		(< 20)	30 ug/L	05/20/2009
Vinyl chloride	LCS	31.2	104	(72-145)				30 ug/L	05/20/2009
	LCSD	30.8	103		1		(< 20)	30 ug/L	05/20/2009
Dichlorodifluoromethane	LCS	32.3	108	(62-153)				30 ug/L	05/20/2009
	LCSD	30.3	101		6		(< 20)	30 ug/L	05/20/2009
Chloroethane	LCS	34.6	115	(67-133)				30 ug/L	05/20/2009
	LCSD	29.8	99		15		(< 20)	30 ug/L	05/20/2009
sec-Butylbenzene	LCS	31.6	105	(80-120)				30 ug/L	05/20/2009
	LCSD	29.3	98		7		(< 20)	30 ug/L	05/20/2009
Bromodichloromethane	LCS	32.6	109	(80-120)				30 ug/L	05/20/2009
	LCSD	25.4	85		25	*	(< 20)	30 ug/L	05/20/2009
1,1-Dichloroethene	LCS	32.7	109	(76-130)				30 ug/L	05/20/2009
	LCSD	29.6	99		10		(< 20)	30 ug/L	05/20/2009
2-Butanone (MEK)	LCS	98.7	110	(66-136)				90 ug/L	05/20/2009
	LCSD	87.1	97		13		(< 20)	90 ug/L	05/20/2009

SGS Ref.#	896080	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896081	Lab Control Sample Duplicate	**Prep Batch**	VXX19405	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/20/2009	
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								
Methylene chloride	LCS	32.1	107	(63-131)			30 ug/L	05/20/2009
	LCSD	31.3	104		3	(< 20)	30 ug/L	05/20/2009
Trichlorofluoromethane	LCS	34.3	114	(68-145)			30 ug/L	05/20/2009
	LCSD	31.3	104		9	(< 20)	30 ug/L	05/20/2009
P & M -Xylene	LCS	63.7	106	(80-120)			60 ug/L	05/20/2009
	LCSD	58.2	97		9	(< 20)	60 ug/L	05/20/2009
Naphthalene	LCS	29.4	98	(75-120)			30 ug/L	05/20/2009
	LCSD	29.7	99		1	(< 20)	30 ug/L	05/20/2009
o-Xylene	LCS	32.5	108	(80-120)			30 ug/L	05/20/2009
	LCSD	30.5	102		6	(< 20)	30 ug/L	05/20/2009
Bromoform	LCS	29.9	100	(80-120)			30 ug/L	05/20/2009
	LCSD	27.0	90		10	(< 20)	30 ug/L	05/20/2009
1-Chlorohexane	LCS	50.2	111	(70-125)			45 ug/L	05/20/2009
	LCSD	45.0	100		11	(< 20)	45 ug/L	05/20/2009
1,2,4-Trimethylbenzene	LCS	32.0	107	(80-125)			30 ug/L	05/20/2009
	LCSD	29.8	99		7	(< 20)	30 ug/L	05/20/2009
tert-Butylbenzene	LCS	33.0	110	(80-122)			30 ug/L	05/20/2009
	LCSD	30.7	102		7	(< 20)	30 ug/L	05/20/2009
1,1-Dichloroethane	LCS	34.8	116	(80-120)			30 ug/L	05/20/2009
	LCSD	32.0	107		8	(< 20)	30 ug/L	05/20/2009
2-Chlorotoluene	LCS	31.0	103	(80-125)			30 ug/L	05/20/2009
	LCSD	31.7	106		2	(< 20)	30 ug/L	05/20/2009
Trichloroethene	LCS	32.3	108	(80-125)			30 ug/L	05/20/2009
	LCSD	27.3	91		17	(< 20)	30 ug/L	05/20/2009
trans-1,2-Dichloroethene	LCS	32.2	107	(79-132)			30 ug/L	05/20/2009
	LCSD	27.2	91		17	(< 20)	30 ug/L	05/20/2009
1,2-Dichlorobenzene	LCS	31.3	104	(80-120)			30 ug/L	05/20/2009
	LCSD	30.0	100		4	(< 20)	30 ug/L	05/20/2009

SGS Ref.#	896080	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896081	Lab Control Sample Duplicate	**Prep Batch**	VXX19405	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/20/2009	
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									
2,2-Dichloropropane	LCS	35.6	119	(80-132)				30 ug/L	05/20/2009
	LCSD	27.6	92		25	*	(< 20)	30 ug/L	05/20/2009
Hexachlorobutadiene	LCS	33.0	110	(77-125)				30 ug/L	05/20/2009
	LCSD	31.3	104		5		(< 20)	30 ug/L	05/20/2009
Isopropylbenzene (Cumene)	LCS	33.3	111	(80-121)				30 ug/L	05/20/2009
	LCSD	30.7	102		8		(< 20)	30 ug/L	05/20/2009
1,2-Dichloropropane	LCS	33.1	110	(80-121)				30 ug/L	05/20/2009
	LCSD	28.2	94		16		(< 20)	30 ug/L	05/20/2009
1,1-Dichloropropene	LCS	31.4	105	(80-122)				30 ug/L	05/20/2009
	LCSD	26.0	87		19		(< 20)	30 ug/L	05/20/2009
1,1,2-Trichloroethane	LCS	31.9	106	(77-120)				30 ug/L	05/20/2009
	LCSD	26.4	88		19		(< 20)	30 ug/L	05/20/2009
1,3-Dichlorobenzene	LCS	32.0	107	(80-120)				30 ug/L	05/20/2009
	LCSD	30.0	100		7		(< 20)	30 ug/L	05/20/2009
1,2,3-Trichlorobenzene	LCS	32.4	108	(77-120)				30 ug/L	05/20/2009
	LCSD	31.3	104		3		(< 20)	30 ug/L	05/20/2009
Surrogates									
1,2-Dichloroethane-D4 <surr>	LCS		107	(73-120)					05/20/2009
	LCSD		93		14				05/20/2009
Toluene-d8 <surr>	LCS		99	(80-120)					05/20/2009
	LCSD		96		3				05/20/2009
4-Bromofluorobenzene <surr>	LCS		99	(76-120)					05/20/2009
	LCSD		99		0				05/20/2009

Batch VMS10497
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	896436	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
			Prep Batch	MXX21701	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3010A	
Project Name/#	Red Hills BFSF		**Date**	05/22/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Lead	LCS	907	91	(80-120)			1000 ug/L	05/25/2009

Batch MMS5916
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	896526	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896527	Lab Control Sample Duplicate	**Prep Batch**	VXX19411	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/24/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008, 1092054009

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
1,1,1-Trichloroethane	LCS	35.0	117	(80-122)			30 ug/L	05/24/2009
	LCSD	33.4	111		5	(< 20)	30 ug/L	05/24/2009
Surrogates								
1,2-Dichloroethane-D4 <surr>	LCS		102	(73-120)				05/24/2009
	LCSD		103		1			05/24/2009
Toluene-d8 <surr>	LCS		100	(80-120)				05/24/2009
	LCSD		100		0			05/24/2009
4-Bromofluorobenzene <surr>	LCS		99	(76-120)				05/24/2009
	LCSD		99		0			05/24/2009

Batch VMS10501
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

SGS Ref.#	896554	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896555	Lab Control Sample Duplicate	**Prep Batch**	XXX20855	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/26/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054008

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

Polynuclear Aromatics GC/MS

SGS Ref.#	896554	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896555	Lab Control Sample Duplicate	**Prep Batch**	XXX20855	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/26/2009	
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	0.348	70	(50-105)			0.5 ug/L	05/28/2009
	LCSD	0.340	68		2	(< 30)	0.5 ug/L	05/28/2009
Acenaphthene	LCS	0.360	72	(45-110)			0.5 ug/L	05/28/2009
	LCSD	0.350	70		3	(< 30)	0.5 ug/L	05/28/2009
Fluorene	LCS	0.382	76	(50-110)			0.5 ug/L	05/28/2009
	LCSD	0.376	75		2	(< 30)	0.5 ug/L	05/28/2009
Phenanthrene	LCS	0.364	73	(50-115)			0.5 ug/L	05/28/2009
	LCSD	0.364	73		0	(< 30)	0.5 ug/L	05/28/2009
Anthracene	LCS	0.413	83	(55-110)			0.5 ug/L	05/28/2009
	LCSD	0.408	82		1	(< 30)	0.5 ug/L	05/28/2009
Fluoranthene	LCS	0.452	90	(55-125)			0.5 ug/L	05/28/2009
	LCSD	0.439	88		3	(< 30)	0.5 ug/L	05/28/2009
Pyrene	LCS	0.435	87	(50-130)			0.5 ug/L	05/28/2009
	LCSD	0.422	84		3	(< 30)	0.5 ug/L	05/28/2009
Benzo(a)Anthracene	LCS	0.452	90	(55-120)			0.5 ug/L	05/28/2009
	LCSD	0.437	87		3	(< 30)	0.5 ug/L	05/28/2009
Chrysene	LCS	0.466	93	(55-120)			0.5 ug/L	05/28/2009
	LCSD	0.455	91		2	(< 30)	0.5 ug/L	05/28/2009
Benzo[b]Fluoranthene	LCS	0.421	84	(46-130)			0.5 ug/L	05/28/2009
	LCSD	0.416	83		1	(< 30)	0.5 ug/L	05/28/2009
Benzo[k]fluoranthene	LCS	0.511	102	(60-125)			0.5 ug/L	05/28/2009
	LCSD	0.485	97		5	(< 30)	0.5 ug/L	05/28/2009
Benzo[a]pyrene	LCS	0.479	96	(55-120)			0.5 ug/L	05/28/2009
	LCSD	0.461	92		4	(< 30)	0.5 ug/L	05/28/2009
Indeno[1,2,3-c,d] pyrene	LCS	0.471	94	(45-125)			0.5 ug/L	05/28/2009
	LCSD	0.452	90		4	(< 30)	0.5 ug/L	05/28/2009
Dibenzo[a,h]anthracene	LCS	0.475	95	(41-140)			0.5 ug/L	05/28/2009
	LCSD	0.457	91		4	(< 30)	0.5 ug/L	05/28/2009

SGS Ref.#	896554	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	896555	Lab Control Sample Duplicate	**Prep Batch**	XXX20855	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/26/2009	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS								
Benzo[g,h,i]perylene	LCS	0.464	93	(46-125)			0.5 ug/L	05/28/2009
	LCSD	0.438	88		6	(< 30)	0.5 ug/L	05/28/2009
Naphthalene	LCS	0.328	66	(42-100)			0.5 ug/L	05/28/2009
	LCSD	0.324	65		2	(< 30)	0.5 ug/L	05/28/2009
1-Methylnaphthalene	LCS	0.326	65	(46-115)			0.5 ug/L	05/28/2009
	LCSD	0.316	63		3	(< 30)	0.5 ug/L	05/28/2009
2-Methylnaphthalene	LCS	0.264	53	(45-105)			0.5 ug/L	05/28/2009
	LCSD	0.263	53		0	(< 30)	0.5 ug/L	05/28/2009
Surrogates								
Terphenyl-d14 <surr>	LCS		77	(50-135)				05/28/2009
	LCSD		79		3			05/28/2009

Batch	XMS4906
Method	8270D SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	896689	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
			Prep Batch	VXX19416	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/26/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054001, 1092054004, 1092054005, 1092054006, 1092054007, 1092054008

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Fuels Department								
Gasoline Range Organics	LCS	215	108	(79-108)			200 ug/L	05/26/2009
Surrogates								
4-Bromofluorobenzene <surr>	LCS		102	(50-150)				05/26/2009

Batch VFC9431
Method SW8015C
Instrument HP 5890 Series II PID+HECD VBA

SGS Ref.#	896797	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
			Prep Batch	XXX20862	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/27/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

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

Polynuclear Aromatics GC/MS

SGS Ref.#	896797 Lab Control Sample	**Printed Date/Time**		06/08/2009	11:50
		Prep	**Batch**	XXX20862	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/27/2009	
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	0.316	63	(50-105)			0.5 ug/L	05/28/2009
Acenaphthene	LCS	0.327	65	(45-110)			0.5 ug/L	05/28/2009
Fluorene	LCS	0.349	70	(50-110)			0.5 ug/L	05/28/2009
Phenanthrene	LCS	0.350	70	(50-115)			0.5 ug/L	05/28/2009
Anthracene	LCS	0.390	78	(55-110)			0.5 ug/L	05/28/2009
Fluoranthene	LCS	0.416	83	(55-125)			0.5 ug/L	05/28/2009
Pyrene	LCS	0.406	81	(50-130)			0.5 ug/L	05/28/2009
Benzo(a)Anthracene	LCS	0.419	84	(55-120)			0.5 ug/L	05/28/2009
Chrysene	LCS	0.442	88	(55-120)			0.5 ug/L	05/28/2009
Benzo[b]Fluoranthene	LCS	0.389	78	(46-130)			0.5 ug/L	05/28/2009
Benzo[k]fluoranthene	LCS	0.440	88	(60-125)			0.5 ug/L	05/28/2009
Benzo[a]pyrene	LCS	0.443	89	(55-120)			0.5 ug/L	05/28/2009
Indeno[1,2,3-c,d] pyrene	LCS	0.421	84	(45-125)			0.5 ug/L	05/28/2009
Dibenzo[a,h]anthracene	LCS	0.417	83	(41-140)			0.5 ug/L	05/28/2009
Benzo[g,h,i]perylene	LCS	0.407	81	(46-125)			0.5 ug/L	05/28/2009
Naphthalene	LCS	0.314	63	(42-100)			0.5 ug/L	05/28/2009
1-Methylnaphthalene	LCS	0.301	60	(46-115)			0.5 ug/L	05/28/2009
2-Methylnaphthalene	LCS	0.244	49	(45-105)			0.5 ug/L	05/28/2009
Surrogates								
Terphenyl-d14 <surr>	LCS		84	(50-135)				05/28/2009

SGS Ref.#	896797 Lab Control Sample	**Printed Date/Time**		06/08/2009	11:50
		Prep	**Batch**	XXX20862	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW3520C	
Project Name/#	Red Hills BFSF		**Date**	05/27/2009	
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	XMS4906
Method	8270D SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	897586	Lab Control Sample	**Printed Date/Time**	06/08/2009	11:50
	897587	Lab Control Sample Duplicate	**Prep Batch**	VXX19432	
Client Name	The Environmental Company, Inc. (TEC)		**Method**	SW5030B	
Project Name/#	Red Hills BFSF		**Date**	05/21/2009	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1092054009

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Fuels Department								
Gasoline Range Organics	LCS	203	101	(79-108)			200 ug/L	05/21/2009
	LCSD	199	99		2	(< 20)	200 ug/L	05/22/2009
Surrogates								
4-Bromofluorobenzene <surr>	LCS		103	(50-150)				05/21/2009
	LCSD		109		5			05/22/2009

Batch VFC9438
Method SW8015C
Instrument HP 5890 Series II PID+HECD VBA

SGS Ref.#	1092054002	Billable Matrix Spike	**Printed Date/Time**	06/08/2009 11:50
	1092054003	Billable Matrix Spike Dup.	**Prep Batch**	MXX21701
			Method	3010 H20 Digest for Metals ICI
			Date	05/22/2009
Original	1092054001			
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	977	98	(80-120)			1000	ug/L	05/25/2009
	BMSD		991	99		1	(< 15)	1000	ug/L	05/25/2009
Batch	MMS5916									
Method	SW6020									
Instrument	Perkin Elmer Sciex ICP-MS P3									
Volatile Fuels Department										
Gasoline Range Organics	BMS	19.1 J	485	103	(79-108)			450	ug/L	05/26/2009
	BMSD		464	99		4	(< 20)	450	ug/L	05/26/2009
Surrogates										
4-Bromofluorobenzene <surr>	BMS		54.5	109	(50-150)					05/26/2009
	BMSD		54.3	109		0				05/26/2009
Batch	VFC9431									
Method	SW8015C									
Instrument	HP 5890 Series II PID+HECD VBA									
Semivolatile Organic Fuels Department										
Diesel Range Organics	BMS	ND	5.11	90	(75-125)			5.68	mg/L	06/03/2009
	BMSD		4.95	88		3	(< 30)	5.62	mg/L	06/03/2009
Surrogates										
5a Androstane <surr>	BMS		.112	98	(50-150)					06/03/2009
	BMSD		0.111	99		0				06/03/2009
Batch	XFC8556									
Method	SW8015C									
Instrument	HP 6890 Series II FID SV D R									
Volatile Gas Chromatography/Mass Spectroscopy										

SGS Ref.#	1092054002	Billable Matrix Spike	**Printed Date/Time**		06/08/2009 11:50
	1092054003	Billable Matrix Spike Dup.	**Prep**	**Batch**	VXX19405
				Method	Volatiles Extraction AFCEE 3.1
				Date	05/20/2009
Original	1092054001				
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	28	93	(80-120)			30.0 ug/L	05/20/2009
	BMSD		28.6	95		2	(< 20)	30.0 ug/L	05/20/2009
Toluene	BMS	ND	28.2	94	(77-120)			30.0 ug/L	05/20/2009
	BMSD		29.2	97		4	(< 20)	30.0 ug/L	05/20/2009
Ethylbenzene	BMS	ND	29.7	99	(80-120)			30.0 ug/L	05/20/2009
	BMSD		30.1	100		1	(< 20)	30.0 ug/L	05/20/2009
n-Butylbenzene	BMS	ND	30.6	102	(80-124)			30.0 ug/L	05/20/2009
	BMSD		31.5	105		3	(< 20)	30.0 ug/L	05/20/2009
1,4-Dichlorobenzene	BMS	ND	30.3	101	(80-120)			30.0 ug/L	05/20/2009
	BMSD		31.8	106		5	(< 20)	30.0 ug/L	05/20/2009
1,2-Dichloroethane	BMS	ND	29.2	97	(80-129)			30.0 ug/L	05/20/2009
	BMSD		27.7	93		5	(< 20)	30.0 ug/L	05/20/2009
1,3,5-Trimethylbenzene	BMS	ND	29.9	100	(80-128)			30.0 ug/L	05/20/2009
	BMSD		30.4	101		2	(< 20)	30.0 ug/L	05/20/2009
4-Chlorotoluene	BMS	ND	30.5	102	(79-128)			30.0 ug/L	05/20/2009
	BMSD		31.3	104		3	(< 20)	30.0 ug/L	05/20/2009
Chlorobenzene	BMS	ND	29.3	98	(80-120)			30.0 ug/L	05/20/2009
	BMSD		30.3	101		3	(< 20)	30.0 ug/L	05/20/2009
4-Methyl-2-pentanone (MIBK)	BMS	ND	93.5	104	(69-134)			90.0 ug/L	05/20/2009
	BMSD		97.0	108		4	(< 20)	90.0 ug/L	05/20/2009
cis-1,2-Dichloroethene	BMS	ND	30.6	102	(80-125)			30.0 ug/L	05/20/2009
	BMSD		30.4	101		1	(< 20)	30.0 ug/L	05/20/2009
4-Isopropyltoluene	BMS	ND	30.7	102	(80-125)			30.0 ug/L	05/20/2009
	BMSD		32.0	107		4	(< 20)	30.0 ug/L	05/20/2009
cis-1,3-Dichloropropene	BMS	ND	27.9	93	(80-120)			30.0 ug/L	05/20/2009
	BMSD		28.1	94		1	(< 20)	30.0 ug/L	05/20/2009
n-Propylbenzene	BMS	ND	30.3	101	(80-129)			30.0 ug/L	05/20/2009
	BMSD		30.9	103		2	(< 20)	30.0 ug/L	05/20/2009
Styrene	BMS	ND	30.3	101	(80-120)			30.0 ug/L	05/20/2009
	BMSD		30.4	101		0	(< 20)	30.0 ug/L	05/20/2009
Dibromomethane	BMS	ND	28.3	94	(80-120)			30.0 ug/L	05/20/2009
	BMSD		28.1	94		0	(< 20)	30.0 ug/L	05/20/2009
trans-1,3-Dichloropropene	BMS	ND	29.8	99	(80-124)			30.0 ug/L	05/20/2009
	BMSD		29.6	99		1	(< 20)	30.0 ug/L	05/20/2009
1,2,4-Trichlorobenzene	BMS	ND	31.1	104	(80-120)			30.0 ug/L	05/20/2009
	BMSD		32.5	108		5	(< 20)	30.0 ug/L	05/20/2009
Acetone	BMS	ND	86.3	96	(50-135)			90.0 ug/L	05/20/2009
	BMSD		89.4	99		3	(< 20)	90.0 ug/L	05/20/2009
1,1,2,2-Tetrachloroethane	BMS	ND	29.7	99	(76-123)			30.0 ug/L	05/20/2009
	BMSD		30.3	101		2	(< 20)	30.0 ug/L	05/20/2009

SGS Ref.#	1092054002	Billable Matrix Spike	**Printed Date/Time**		06/08/2009 11:50
	1092054003	Billable Matrix Spike Dup.	**Prep**	**Batch**	VXX19405
				Method	Volatiles Extraction AFCEE 3.1
				Date	05/20/2009
Original	1092054001				
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	31.1	104	(73-130)			30.0 ug/L	05/20/2009
	BMSD		32.4	108		4	(< 20)	30.0 ug/L	05/20/2009
Methyl-t-butyl ether	BMS	ND	44.9	100	(80-120)			45.0 ug/L	05/20/2009
	BMSD		45.6	101		2	(< 20)	45.0 ug/L	05/20/2009
Tetrachloroethene	BMS	ND	29.9	100	(79-122)			30.0 ug/L	05/20/2009
	BMSD		30.8	103		3	(< 20)	30.0 ug/L	05/20/2009
Dibromochloromethane	BMS	ND	31	103	(80-120)			30.0 ug/L	05/20/2009
	BMSD		31.4	105		1	(< 20)	30.0 ug/L	05/20/2009
1,3-Dichloropropane	BMS	ND	29.6	99	(80-121)			30.0 ug/L	05/20/2009
	BMSD		29.7	99		0	(< 20)	30.0 ug/L	05/20/2009
1,2-Dibromoethane	BMS	ND	28.5	95	(80-120)			30.0 ug/L	05/20/2009
	BMSD		29.0	97		2	(< 20)	30.0 ug/L	05/20/2009
Carbon tetrachloride	BMS	ND	28.6	95	(80-126)			30.0 ug/L	05/20/2009
	BMSD		27.7	92		3	(< 20)	30.0 ug/L	05/20/2009
1,1,1,2-Tetrachloroethane	BMS	ND	30.9	103	(80-120)			30.0 ug/L	05/20/2009
	BMSD		31.7	106		2	(< 20)	30.0 ug/L	05/20/2009
Chloroform	BMS	ND	27.6	92	(80-124)			30.0 ug/L	05/20/2009
	BMSD		27.9	93		1	(< 20)	30.0 ug/L	05/20/2009
Bromobenzene	BMS	ND	29.7	99	(80-120)			30.0 ug/L	05/20/2009
	BMSD		31.1	104		5	(< 20)	30.0 ug/L	05/20/2009
Chloromethane	BMS	ND	26.4	88	(67-125)			30.0 ug/L	05/20/2009
	BMSD		26.1	87		1	(< 20)	30.0 ug/L	05/20/2009
1,2,3-Trichloropropane	BMS	ND	28.2	94	(80-120)			30.0 ug/L	05/20/2009
	BMSD		29.6	99		5	(< 20)	30.0 ug/L	05/20/2009
Bromomethane	BMS	ND	31.6	105	(30-140)			30.0 ug/L	05/20/2009
	BMSD		31.9	106		1	(< 20)	30.0 ug/L	05/20/2009
Bromochloromethane	BMS	ND	30.7	102	(77-129)			30.0 ug/L	05/20/2009
	BMSD		31.7	106		3	(< 20)	30.0 ug/L	05/20/2009
Vinyl chloride	BMS	ND	30.7	102	(72-145)			30.0 ug/L	05/20/2009
	BMSD		30.0	100		3	(< 20)	30.0 ug/L	05/20/2009
Dichlorodifluoromethane	BMS	ND	29.1	97	(62-153)			30.0 ug/L	05/20/2009
	BMSD		29.3	98		1	(< 20)	30.0 ug/L	05/20/2009
Chloroethane	BMS	ND	29.9	100	(67-133)			30.0 ug/L	05/20/2009
	BMSD		31.3	104		4	(< 20)	30.0 ug/L	05/20/2009
sec-Butylbenzene	BMS	ND	30.2	101	(80-120)			30.0 ug/L	05/20/2009
	BMSD		31.0	103		3	(< 20)	30.0 ug/L	05/20/2009
Bromodichloromethane	BMS	ND	28.2	94	(80-120)			30.0 ug/L	05/20/2009
	BMSD		27.7	92		2	(< 20)	30.0 ug/L	05/20/2009
1,1-Dichloroethene	BMS	ND	30.7	102	(76-130)			30.0 ug/L	05/20/2009
	BMSD		31.0	103		1	(< 20)	30.0 ug/L	05/20/2009

SGS Ref.#	1092054002	Billable Matrix Spike	**Printed Date/Time**		06/08/2009 11:50
	1092054003	Billable Matrix Spike Dup.	**Prep**	**Batch**	VXX19405
				Method	Volatiles Extraction AFCEE 3.1
				Date	05/20/2009
Original	1092054001				
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	90	100	(66-136)			90.0 ug/L	05/20/2009
	BMSD		86.6	96		4	(< 20)	90.0 ug/L	05/20/2009
Methylene chloride	BMS	ND	30.3	101	(63-131)			30.0 ug/L	05/20/2009
	BMSD		31.4	105		3	(< 20)	30.0 ug/L	05/20/2009
Trichlorofluoromethane	BMS	ND	31.6	105	(68-145)			30.0 ug/L	05/20/2009
	BMSD		30.7	102		3	(< 20)	30.0 ug/L	05/20/2009
P & M -Xylene	BMS	ND	59.2	99	(80-120)			60.0 ug/L	05/20/2009
	BMSD		60.5	101		2	(< 20)	60.0 ug/L	05/20/2009
Naphthalene	BMS	ND	28.7	96	(75-120)			30.0 ug/L	05/20/2009
	BMSD		30.0	100		5	(< 20)	30.0 ug/L	05/20/2009
o-Xylene	BMS	ND	30.4	101	(80-120)			30.0 ug/L	05/20/2009
	BMSD		31.1	104		2	(< 20)	30.0 ug/L	05/20/2009
Bromoform	BMS	ND	27.7	92	(80-120)			30.0 ug/L	05/20/2009
	BMSD		28.1	94		2	(< 20)	30.0 ug/L	05/20/2009
1-Chlorohexane	BMS	ND	46.5	103	(70-125)			45.0 ug/L	05/20/2009
	BMSD		47.0	104		1	(< 20)	45.0 ug/L	05/20/2009
1,2,4-Trimethylbenzene	BMS	ND	30	100	(80-125)			30.0 ug/L	05/20/2009
	BMSD		31.0	103		3	(< 20)	30.0 ug/L	05/20/2009
tert-Butylbenzene	BMS	ND	31.6	105	(80-122)			30.0 ug/L	05/20/2009
	BMSD		31.3	104		1	(< 20)	30.0 ug/L	05/20/2009
1,1,1-Trichloroethane	BMS	ND	34.5	115	(80-122)			30.0 ug/L	05/24/2009
	BMSD		32.7	109		6	(< 20)	30.0 ug/L	05/24/2009
1,1-Dichloroethane	BMS	ND	32.4	108	(80-120)			30.0 ug/L	05/20/2009
	BMSD		32.4	108		0	(< 20)	30.0 ug/L	05/20/2009
2-Chlorotoluene	BMS	ND	28.8	96	(80-125)			30.0 ug/L	05/20/2009
	BMSD		30.0	100		4	(< 20)	30.0 ug/L	05/20/2009
Trichloroethene	BMS	ND	30.2	101	(80-125)			30.0 ug/L	05/20/2009
	BMSD		29.9	100		1	(< 20)	30.0 ug/L	05/20/2009
trans-1,2-Dichloroethene	BMS	ND	28.4	95	(79-132)			30.0 ug/L	05/20/2009
	BMSD		28.1	94		1	(< 20)	30.0 ug/L	05/20/2009
1,2-Dichlorobenzene	BMS	ND	29.5	98	(80-120)			30.0 ug/L	05/20/2009
	BMSD		31.1	104		5	(< 20)	30.0 ug/L	05/20/2009
2,2-Dichloropropane	BMS	ND	31.6	105	(80-132)			30.0 ug/L	05/20/2009
	BMSD		30.9	103		2	(< 20)	30.0 ug/L	05/20/2009
Hexachlorobutadiene	BMS	ND	32.2	107	(77-125)			30.0 ug/L	05/20/2009
	BMSD		33.5	112		4	(< 20)	30.0 ug/L	05/20/2009
Isopropylbenzene (Cumene)	BMS	ND	31.2	104	(80-121)			30.0 ug/L	05/20/2009
	BMSD		31.9	106		2	(< 20)	30.0 ug/L	05/20/2009
1,2-Dichloropropane	BMS	ND	30.5	102	(80-121)			30.0 ug/L	05/20/2009
	BMSD		30.8	103		1	(< 20)	30.0 ug/L	05/20/2009

SGS Ref.#	1092054002	Billable Matrix Spike	**Printed Date/Time**	06/08/2009 11:50
	1092054003	Billable Matrix Spike Dup.	**Prep Batch**	VXX19405
			Method	Volatiles Extraction AFCEE 3.1
			Date	05/20/2009
Original	1092054001			
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	29.1	97	(80-122)			30.0	ug/L	05/20/2009
	BMSD		28.5	95		2	(< 20)	30.0	ug/L	05/20/2009
1,1,2-Trichloroethane	BMS	ND	28.3	94	(77-120)			30.0	ug/L	05/20/2009
	BMSD		28.7	96		1	(< 20)	30.0	ug/L	05/20/2009
1,3-Dichlorobenzene	BMS	ND	30	100	(80-120)			30.0	ug/L	05/20/2009
	BMSD		31.3	104		4	(< 20)	30.0	ug/L	05/20/2009
1,2,3-Trichlorobenzene	BMS	ND	30.3	101	(77-120)			30.0	ug/L	05/20/2009
	BMSD		31.9	106		5	(< 20)	30.0	ug/L	05/20/2009
Surrogates										
1,2-Dichloroethane-D4 <surr>	BMS		28.3	94	(73-120)					05/20/2009
	BMSD		28.0	93		1				05/20/2009
Toluene-d8 <surr>	BMS		29	97	(80-120)					05/20/2009
	BMSD		29.2	97		1				05/20/2009
4-Bromofluorobenzene <surr>	BMS		29.7	99	(76-120)					05/20/2009
	BMSD		29.8	99		0				05/20/2009

Batch VMS10497
Method SW8260B
Instrument HP 5890 Series II MS3 VNA

Polynuclear Aromatics GC/MS

SGS Ref.#	1092054002	Billable Matrix Spike	**Printed Date/Time**		06/08/2009 11:50
	1092054003	Billable Matrix Spike Dup.	**Prep**	**Batch**	XXX20829
				Method	3520 Liquid/Liquid Ext for 827
				Date	05/19/2009
Original	1092054001				
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	.375	73	(50-105)			0.510 ug/L	05/22/2009
	BMSD		0.357	70		5	(< 30)	0.510 ug/L	05/22/2009
Acenaphthene	BMS	ND	.374	73	(45-110)			0.510 ug/L	05/22/2009
	BMSD		0.351	69		6	(< 30)	0.510 ug/L	05/22/2009
Fluorene	BMS	ND	.385	76	(50-110)			0.510 ug/L	05/22/2009
	BMSD		0.366	72		5	(< 30)	0.510 ug/L	05/22/2009
Phenanthrene	BMS	ND	.393	77	(50-115)			0.510 ug/L	05/22/2009
	BMSD		0.358	70		9	(< 30)	0.510 ug/L	05/22/2009
Anthracene	BMS	ND	.387	76	(55-110)			0.510 ug/L	05/22/2009
	BMSD		0.370	73		4	(< 30)	0.510 ug/L	05/22/2009
Fluoranthene	BMS	ND	.473	93	(55-125)			0.510 ug/L	05/22/2009
	BMSD		0.460	90		3	(< 30)	0.510 ug/L	05/22/2009
Pyrene	BMS	ND	.454	89	(50-130)			0.510 ug/L	05/22/2009
	BMSD		0.437	86		4	(< 30)	0.510 ug/L	05/22/2009
Benzo(a)Anthracene	BMS	ND	.454	89	(55-120)			0.510 ug/L	05/22/2009
	BMSD		0.456	89		0	(< 30)	0.510 ug/L	05/22/2009
Chrysene	BMS	ND	.454	89	(55-120)			0.510 ug/L	05/22/2009
	BMSD		0.448	88		2	(< 30)	0.510 ug/L	05/22/2009
Benzo[b]Fluoranthene	BMS	ND	.441	87	(46-130)			0.510 ug/L	05/22/2009
	BMSD		0.462	91		5	(< 30)	0.510 ug/L	05/22/2009
Benzo[k]fluoranthene	BMS	ND	.447	88	(60-125)			0.510 ug/L	05/22/2009
	BMSD		0.431	84		4	(< 30)	0.510 ug/L	05/22/2009
Benzo[a]pyrene	BMS	ND	.443	87	(55-120)			0.510 ug/L	05/22/2009
	BMSD		0.447	88		1	(< 30)	0.510 ug/L	05/22/2009
Indeno[1,2,3-c,d] pyrene	BMS	ND	.45	88	(45-125)			0.510 ug/L	05/22/2009
	BMSD		0.447	88		1	(< 30)	0.510 ug/L	05/22/2009
Dibenzo[a,h]anthracene	BMS	ND	.458	90	(41-140)			0.510 ug/L	05/22/2009
	BMSD		0.456	89		0	(< 30)	0.510 ug/L	05/22/2009
Benzo[g,h,i]perylene	BMS	ND	.431	85	(46-125)			0.510 ug/L	05/22/2009
	BMSD		0.435	85		1	(< 30)	0.510 ug/L	05/22/2009
Naphthalene	BMS	ND	.35	69	(42-100)			0.510 ug/L	05/22/2009
	BMSD		0.342	67		2	(< 30)	0.510 ug/L	05/22/2009
1-Methylnaphthalene	BMS	ND	.374	73	(46-115)			0.510 ug/L	05/22/2009
	BMSD		0.334	65		11	(< 30)	0.510 ug/L	05/22/2009
2-Methylnaphthalene	BMS	0.0180 J	.336	62	(45-105)			0.510 ug/L	05/22/2009
	BMSD		0.328	61		2	(< 30)	0.510 ug/L	05/22/2009
Surrogates									
Terphenyl-d14 <surr>	BMS		.211	41*	(50-135)				05/22/2009
	BMSD		0.428	84		68			05/22/2009

SGS Ref.#	1092054002	Billable Matrix Spike	**Printed Date/Time**		06/08/2009 11:50
	1092054003	Billable Matrix Spike Dup.	**Prep**	**Batch**	XXX20829
				Method	3520 Liquid/Liquid Ext for 827
				Date	05/19/2009
Original	1092054001				
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	XMS4898
Method	8270D SIMS
Instrument	HP 6890/5973 MS SVOA

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1092054

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

90 of 110

CLIENT: TEC INC.

CONTACT: **Rick Adkisson** PHONE NO: 808.528.1445

PROJECT: SITE/PWSID#: Red Hill BFSF

REPORTS TO: Rick Adkisson email rkadkisson@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 A-F 2 A-F 3 A-F	RHMW2254-WG15	5/13/2009	0910	Water	18			X		X			3x Volume sent in 3 coolers
2 4 A-F	RHMW03-WG15	5/13/2009	1100	Water	6			X		X			
3 5 A-F	RHMW02-WG15	5/13/2009	1250	Water	6			X		X			
MS 4 6 A-F	RHMWA01-WG15	5/13/2009	1205	Water	6			X		X			
5 7 A-F	RHMW01-WG15	5/13/2009	1505	Water	6			X		X			
8 A-F	RHMW05-WG15	5/13/2009	0740	Water	6			X		X			
9 A-C	TB01-WG15	5/13/2009	0805	Water	3					X			

Collected/Relinquished By: (1)	Date 5/13/09	Time 1700	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received For Laboratory By: 5/15/09 1120

Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? YES NO
Temperature °C: TB: 1.6 Ethorm 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) 845-2287
☐ 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

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1092054

Locations Nationwide
Hawaii
Louisiana
West Virginia
ww.us.sgs.com

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CLIENT:	TEC INC.	SGS Reference #:	page _____ of _____
CONTACT:	**Rick Adkisson**	PHONE NO:	808.528.1445
PROJECT:		SITE/PWSID#:	Red Hill BFSF
REPORTS TO:	Rick Adkisson	email	rkadkisson@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)	Diss Pb (6020) HNO_3	REMARKS
(1)G-L (2)+(3) G-L	**RHMW2254-WG15**	**5/13/2009**	**0910**	**Water**	**10**				**X**		**X**	**X**	3x Volume sent in 3 coolers

Collected/Relinquished By: (1)	Date: 5/13/09	Time: 1700	Received By:
Relinquished By: (2)	Date:	Time:	Received By:
Relinquished By: (3)	Date:	Time:	Received By:
Relinquished By: (4)	Date: 5/15/09	Time: 1120	Received For Laboratory By: 5/15/09 1120

Shipping Carrier:	Samples Received Cold? YES NO
Shipping Ticket No:	Temperature °C: TB: 2.9 Thermo #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) 845-2287
☐ 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

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1092054

Locations Nationwide

Alaska Hawaii
Maryland Louisiana
New Jersey West Virginia
North Carolina

www.us.sgs.com

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CLIENT:	TEC INC.	SGS Reference #:	page _____ of _____
CONTACT:	**Rick Adkisson**	PHONE NO: 808.528.1445	
PROJECT:		SITE/PWSID#: Red Hill BFSF	
REPORTS TO:	Rick Adkisson	email rkadkisson@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) HCl	PAH's (8270C-SIMS)	Diss Pb (6020) HNO_3	REMARKS
7 G-K	**RHMW01-WG15**	**5/13/2009**	**1505**	**Water**	**5**				**X**		**X**	**X**	
8 G-K	**RHMW03-WG15**	**5/13/2009**	**1100**	**Water**	**5**				**X**		**X**	**X**	

Collected/Relinquished By: (1)	Date 5/13/09	Time 1700	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received For Laboratory By: 5/15/09 1120

Shipping Carrier:	Samples Received Cold? YES NO
Shipping Ticket No:	Temperature °C: TB: 5.9 TRIP BLK #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) 845-2287
☐ 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

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1092054

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

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CLIENT: TEC INC.

CONTACT: **Rick Adkisson** PHONE NO: 808.528.1445

PROJECT: SITE/PWSID#: Red Hill BFSF

REPORTS TO: Rick Adkisson email rkadkisson@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
5G-AK	RHMW02-WG15	5/13/2009	1250	Water	5				X		X	X	
6G-K	RHMWA01-WG15	5/13/2009	1205	Water	5				X		X	X	

Collected/Relinquished By: (1)	Date 5/13/09	Time 1700	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received For Laboratory By: 5/15/09 1126

Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? YES NO
Temperature °C: COOLER: 2.1 Therm #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) 845-2287
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☐ 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

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1092054

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

94 of 101

CLIENT:	TEC INC.	SGS Reference #:	page ____ of ____
CONTACT:	**Rick Adkisson**	PHONE NO:	808.528.1445
PROJECT:		SITE/PWSID#:	Red Hill BFSF
REPORTS TO:	Rick Adkisson	email	rkadkisson@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)	Diss Pb (6020) HNO_3	REMARKS
(G-L)	**RHMW2254-WG15**	**5/13/2009**	**0910**	**Water**	**5**				**X**		**X**	**X**	3x Volume sent in 3 coolers
(G-K)	**RHMW05-WG15**	**5/13/2009**	**0740**	**Water**	**5**				**X**		**X**	**X**	

Collected/Relinquished By: (1)	Date: 5/13/09	Time: 1700	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received For Laboratory By: 5/15/09 1120

Shipping Carrier:
Shipping Ticket No:
Special Deliverable Requirements: **See Contract**

Samples Received Cold? YES NO
Temperature °C: TB: 5.2 Therm#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

1092054

SGS

SAMPLE RECEIPT FORM

SGS WO#:

Yes	No	NA		
___	✓	___	Are samples **RUSH**, priority or *w/in 72 hrs* of **hold time**?	
___	___	✓	If yes, have you done *e-mail ALERT notification*?	
___	✓	___	Are samples *within 24 hrs.* of **hold time** or **due date**?	
___	___	✓	If yes, have you also *spoken with* supervisor?	
___	___	✓	Archiving bottles: Are lids marked w/ red "X"?	
✓	___	___	Were samples collected with proper preservative?	
___	✓	___	**Any problems (ID, cond'n, HT, etc)? Explain:**	
___	___	✓	If this is for PWS, provide **PWSID:**_____	
___	✓	___	Payment received: $_____ by Check or Credit Card	
___	✓	___	Will courier charges apply?	
✓	___	___	Data package required? (Level: 1 / 2 / 3 / (4))	
✓	___	___	Is this a DoD project? (USACE, Navy, (AFCEE))	

TAT (circle one): (Standard) -or- Rush

Received Date: 5/15/09

Received Time: 1120

Cooler ID	Temperature	Measured w/ (Therm/IR ID#)
1	1.6 °C	#6
2	2.9 °C	
3	5.9 °C	
4	2.1 °C	
5	5.2 °C	

Note: Temperature readings include thermometer correction factors

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

Additional Sample Remarks: *(√ if applicable)*
_____Extra Sample Volume?
_____Limited Sample Volume?
_____Multi-Incremental Samples?
_____Lab-filtered for dissolved_____
_____Ref Lab required for_____
_____Foreign Soil?

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

Yes	No	
✓	___	Is received temperature ≤6°C?
✓	___	Were containers ice-free? *Notify PM immediately of any ice in samples.*
		If some cooler temperatures are non-compliant, see form FS-0029 (attached) for samples/analyses affected.
✓	___	Was there an airbill? *(If "yes," see attached.)*
✓	___	Was cooler sealed with custody seals & were they intact?
		#/ where: 2 on each on front on lock
✓	___	Was there a COC with cooler?
✓	___	Was COC sealed in plastic bag & taped inside lid of cooler?
✓	___	Was the COC filled out properly? Did labels correspond?
___	✓	Did the COC indicate USACE / Navy / AFCEE project?
		Samples were packed to prevent breakage with *(circle one)*:
		(Bubble Wrap) Vermiculite Other (specify): _____
✓	___	Were all samples sealed in separate plastic bags?
✓	___	Were all VOCs free of headspace and/or MeOH preserved?
✓	___	Were correct container / sample sizes submitted?
✓	___	Was the PM notified of arrival so they can send Sample Receipt Acknowledgement to client?

This section must be completed if problems are noted.

Was client notified of problems? Yes / No

By (SGS PM): _____

Individual contacted: _____

Via: Phone / Fax / E-mail *(circle one)*

Date/Time: _____

Reason for contact: _____

Change Order Required? Yes / No

Notes: *Sample (6) I was recieved in a broken jar and was poured into a new (34303-lot#) precleaned 1L Amber glass jar
An extra SRF was recieved (not filled out by lab, but by someone else)

Completed by (sign): _____ **(print):** Annie Adkins

Login proof: Self-check completed ✓ **Peer-reviewer's Initials**_____

SGS

Page 1 of 2 5/15/09

SAMPLE RECEIPT FORM (page 2)

SGS WO# 1092054

#	Container ID	Matrix	Test	QC	TB	Container Volume: 1 L	500 mL	250 mL or 8oz	125 mL or 4oz	60 mL	40 mL	Other (specify)	Container Type: AG	CG	HDPE	Nalgene	Coli	Septa	Other (specify)	Preservative: None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	NaOH+ZnAc	Other (specify)	* Notes
1	A-C	1	GRO								3		X					X			X								
	D-F	1	VOC								3		X					X			X								
	G	1	Dissolved Pb			1									X							X							
	H,I	1	PAH			2							X		X					X									
	J,K	1	TPH-DRO			2							X								X								
2	A-C	1	GRO	MS							3		X					X			X								
	D-F	1	VOC	MS							3		X					X			X								
	G	1	~~Dissolved Pb~~ Extra Volume	MS			1								X							X							
	H,I	1	PAH	MS		2							X		X					X									
	J,K	1	TPH-DRO	MS		2							X								X								
	L	1	~~Extra Volume~~ Dissolved Pb	MS		same jar as (1) G																								
3	A-C	1	GRO	MSD							3		X					X			X								
	D-F	1	VOC	MSD							3		X					X			X								
	G	1	Extra Volume	MSD			1								X							X							
	H,I	1	PAH	MSD		2							X							X									
Bottle Totals						10	3				15 18																		

* Note: Containers which require (additional) chemical preservation upon receipt must be documented per SOP#106.

Completed by: _____ Date: 5/15/09

SGS

Page 2 of 2
05/15/09

SAMPLE RECEIPT FORM (page 2)

SGS W

1092054

97 of 101

#	Container ID	Matrix	Test	QC	TB	Container Volume: 1 L	500 mL	250 mL or 8oz	125 mL or 4oz	60 mL	40 mL	Other (specify)	Container Type: AG	CG	HDPE	Nalgene	Coli	Septa	Other (specify)	Preservative: None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	NaOH+ZnAc	Other (specify)	* Notes
3	J,K	1	TPH-DRO	MS/MSD		2							X								X							
	L	1	Dissolved Pb	MS/MSD			Some jars (DG																					
4-8	A-C	1	GRO								15		X					X			X							
	DF	1	VOC								15		X					X			X							
	G	1	Dissolved Pb.				5								X							X						
	H,I	1	PAH			10							X							X								
	J,K	1	TPH-DRO			10							X								X							
9	A	1	GRO	X							1		X					X			X							
	B,C	1	VOC	X							1		X					X			X							
(ESP 5/15/09)	~~C~~	1	~~Extra Vol~~	X							1		X					X			X							
Bottle Totals						22	5				33																	

* Note: Containers which require (additional) chemical preservation upon receipt must be documented per SOP#106.

Completed by: _____ Date: 5/15/09

Form # F004r20 revised 05/05/2009

LOT# 34303

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

COOLER #2
TB-2.9
Therm #6

Slice in seal mod by [illegible] 5/15/09

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

COOLER #3
TB-5.9
Therm #6

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

COOLER #1
TB: 1.6
THERM #6

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

COOLER: #4
COOLER: 2.1
~~TB:~~
THERM #6

SGS Environmental **CUSTODY SEAL**

Signature: _____ Date/Time: 5-14-09

SGS Environmental

CUSTODY SEAL

Signature: _____ Date/Time: 5-14-09

COOLER# 5
TB: 5.2
Therm# 4

SGS Environmental

CUSTODY SEAL

Signature: _____ Date/Time: 5-14-09

SGS

SAMPLE RECEIPT FORM

SGS WO#: _____

Yes	No	NA		
___	X	___	Are samples **RUSH**, priority or *w/in 72 hrs* of **hold time**?	
___	___	X	If yes, have you done *e-mail ALERT notification*?	
___	X	___	Are samples *within 24 hrs.* of **hold time** or **due date**?	
___	___	X	If yes, have you also *spoken with* supervisor?	
___	X	___	Archiving bottles: Are lids marked w/ red "X"?	
X	___	___	Were samples collected with proper preservative?	
___	X	___	**Any problems (ID, cond'n, HT, etc)? Explain:**	
___	X	___	If this is for PWS, provide **PWSID:** _____	
___	___	X	Payment received: $_____ by Check or Credit Card	
___	X	___	Will courier charges apply?	
X	___	___	Data package required? (Level: 1 / 2 / 3 (4))	
			Notes: _____	
X	___	___	Is this a DoD project? (USACE, Navy, AFCEE)	

TAT (circle one): (Standard) -or- Rush

Received Date: 5/13/09

Received Time: 1700

Cooler ID	Temperature	Measured w/ (Therm/IR ID#)
#1	5 °C	
#2	4 °C	IR THERMO
#3	4 °C	IR THERMO
#4	3 °C	IR THERMO
#5	5 °C	IR THERMO

Note: Temperature readings include thermometer correction factors

Delivery method (circle all that apply):

(Client) / Alert Courier / Lynden / SGS
UPS / FedEx / USPS / DHL / Carlile
AkAir Goldstreak / NAC / ERA / PenAir
Other: _____

Additional Sample Remarks: *(√ if applicable)*

_____ Extra Sample Volume?
_____ Limited Sample Volume?
_____ Multi-Incremental Samples?
_____ Lab-filtered for dissolved_____
_____ Ref Lab required for_____
_____ Foreign Soil?

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

Yes	No	
X	___	Is received temperature ≤6°C?
X	___	Were containers ice-free? *Notify PM **immediately** of any ice in samples.* If some cooler temperatures are non-compliant, see form FS-0029 (attached) for samples/analyses affected.
___	X	Was there an airbill? *(If "yes," see attached.)*
___	NA	Was cooler sealed with custody seals & were they intact? # / where: _____
X	___	Was there a COC with cooler?
___	X	Was COC sealed in plastic bag & taped inside lid of cooler?
X	___	Was the COC filled out properly? Did labels correspond?
X	___	Did the COC indicate USACE / Navy / AFCEE project?
		Samples were packed to prevent breakage with *(circle one)*: (Bubble Wrap) Vermiculite Other (specify): _____
___	X	Were all samples sealed in separate plastic bags?
X	___	Were all VOCs free of headspace and/or MeOH preserved?
X	___	Were correct container / sample sizes submitted?
X	___	Was the PM notified of arrival so they can send Sample Receipt Acknowledgement to client?

This section must be completed if problems are noted.

Was client notified of problems? Yes / No

By (SGS PM): _____

Individual contacted: _____

Via: Phone / Fax / E-mail (*circle one*)

Date/Time: _____

Reason for contact: _____

Change Order Required? Yes / No

Notes: _____

Completed by (sign): _____ **(print):** JUSTIN IGNACIO

Login proof: Self-check completed_____ **Peer-reviewer's Initials**_____

FedEx Express® US Airbill

8692 7622 4692

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 5/14/09 Sender's FedEx Account Number

Sender's Name Phone 808 847 0007

Company ESN PACIFIC

Address 2020 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

Recipient's Address 200 W. Potter Dr.

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

Dept./Floor/Suite/Room

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.

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

31 ☐ **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. 6 ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

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

☐ Cargo Aircraft Only

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]

Total Packages 5 Total Weight 272 [redacted]

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

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

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