Quarterly Groundwater Monitoring Report Red Hill Fuel Storage Facility

Pearl Harbor, Oahu, Hawaii

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Table of Contents

Table (of Contents	i
Execut	tive Summary	1
1.0	Introduction	3
1.1	Project Objective	3
1.2	Previous Reports	3
1.3	Background	4
1.	.3.1 Site Description	
1.	.3.2 Facility Information	4
1.	.3.3 UST Information	4
1.4	Previous Environmental Investigations	
1.5	Regulatory Updates	
1.6	RHMW05 Installation	8
2.0	Sample Collection and Analyses	8
2.1	Monitoring Well Purging	8
2.2	Groundwater Sample Collection	
2.3	Groundwater Sample Analyses	9
3.1	April 2010 Sample Analytical Results	9
3.2	Groundwater Contaminant Trend	
3.3	Results of Oil/Water Interface Measurements	13
3.4	Groundwater Status	14
4.0	Summary and Conclusions	17
5.0	References	21
List of	f Tables	
Table	1 Analytical Results for Quarterly Groundwater Sampling Release Respon	se Report10
Table 2	2 Oil/Water Interface Measurements	13
Table :	3 Action Levels for Compounds of Concern	14
Table 4		
List of	f Figures	
Figure	TPH Trends in Groundwater, Round 19 (April 13, 2010)	19
Figure	PAH Trends in Groundwater, Round 19 (April 13, 2010)	20

List of Appendices

Appendix A – Laboratory Analytical Reports

Executive Summary

Introduction

There are 18 active and two inactive, 12.5 million gallon, field-constructed underground storage tanks (USTs) located at the Red Hill Fuel Storage Facility (the Facility). Previous environmental site investigations indicated a release has occurred and contaminated the groundwater underlying the Facility.

The United Stated (US) Navy implemented a groundwater monitoring program, which includes collecting groundwater samples quarterly from US Navy Well 2254-01 (RHMW2254-01) and four wells installed in the Facility lower access tunnel (RHMW01, RHMW02, RHMW03, and RHMW05). The US Navy Well 2254-01 is located approximately 3,000 feet downgradient from the Facility and provides approximately 24 percent of the potable water to the Pearl Harbor Water System (PHWS). The groundwater samples were analyzed for petroleum constituents and compared against State of Hawaii Department of Health (HDOH) Drinking Water Environmental Action Levels (EALs) (HDOH, 2008).

This groundwater monitoring report presents the analytical results and compares them to HDOH Drinking Water EALs for samples collected on April 13, 2010. Contaminant trends that have exceeded HDOH Drinking Water EALs are also provided in this report.

April 2010 Sampling Event Results

Laboratory analytical results from the April 2010 sampling event indicate Total Petroleum Hydrocarbons (TPH) as Diesel Range Organics (TPH-DRO), Polynuclear Aromatic Hydrocarbons (PAHs), and Volatile Organic Hydrocarbons (VOCs) are present in the groundwater beneath the Facility at concentrations that exceed HDOH Drinking Water EALs.

Specifically, TPH-DRO was detected in RHMW01 at 377F μ g/L [F indicates that the compound was identified, but the concentration was above the laboratory method detection limit (MDL) and below the reporting limit (RL), therefore is considered an estimate]. At RHMW02, TPH-DRO was detected at 2,215 μ g/L (i.e., the average of normal and duplicate samples). The HDOH Drinking Water EAL for TPH-DRO is 210 μ g/L. Also during the April 2010 sampling event, 1-methylnaphthalene was detected at RHMW02 above the HDOH Drinking Water EAL at an average concentration of 6.26 μ g/L (HDOH Drinking Water EAL is 4.7 μ g/L). Naphthalene was also detected at RHMW02 above the HDOH Drinking Water EAL at an average concentration of 21 μ g/L (HDOH Drinking Water EAL is 17 μ g/L).

Conversely, during the April 2010 sampling event at RHMW2254-01 and RHMW03, no compounds were detected above the laboratory MDLs. In addition, at RHMW05, only trace concentrations of 1-methylnaphthalene and Naphthalene were detected at concentrations significantly below the respective HDOH Drinking Water EALs.

TPH-DRO Contaminant Trends

Regarding TPH-DRO contaminant trends, since January 2008, TPH-DRO at RHMW01 has fluctuated between the historical range established from September 2005 through September

2007. At RHMW02, TPH-DRO concentrations were relatively stable prior to 2008, after which significant variations in the measured concentrations occurred. However, in April 2010 at RHMW02, TPH-DRO showed a decrease in concentration approaching the lower end of its historical range. Since February 2009, TPH-DRO at RHMW03 has not been detected above the MDL. At RHMW05, TPH-DRO had been increasing since it was first sampled in May 2009. However, in April 2010, TPH-DRO at RHMW05 was not detected above the laboratory MDL.

Other Contaminant Trends

Regarding other contaminant trends, the concentrations of three PAHs detected at RHMW02 are discussed. Since October 2008, the concentration of 2-methylnaphthalene has remained below the HDOH Drinking Water EAL. In addition, Naphthalene and 1-methylnaphthalene concentrations decreased to below the HDOH Drinking Water EALs in May 2009 and October 2009, respectively. However, concentrations for Naphthalene and 1-methylnaphthalene have since increased and remained just above their respective HDOH Drinking Water EALs through the April 2010 sampling event.

Summary

At RHMW01 and RHMW02, TPH-DRO concentrations have fluctuated, but remain within their historical ranges. At RHMW03 and RHMW2254-01 during April 2010, no compounds were detected above laboratory MDLs. At RHMW05, as of the April 2010 sampling, the TPH-DRO concentration drastically decreased to below the laboratory MDL. Finally, no light-non aqueous phased liquid (LNAPL), otherwise known as "free product", has been observed in any of the Facility groundwater monitoring wells since January 2008.

Based on the results of the April 2010 sampling event, continued quarterly groundwater monitoring is warranted so that overall groundwater quality trends may be observed and proactive action taken if the groundwater quality shows evidence of deterioration. In addition, monthly oil/water interface measurements and soil vapor monitoring should continue within the Facility. Although the US Navy Well 2254-01 is not imminently threatened at this time, monitoring should continue to assess contaminant migration from up-gradient locations.

1.0 Introduction

This report presents the results of the 19th groundwater sampling event, conducted in April 2010 at the Red Hill Fuel Storage Facility, Oahu, Hawaii (hereafter referred to as "the Facility"). The Facility consists of 18 active and two 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 updated in 2009], 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);

- 14. Groundwater Monitoring Results, February 2009 (submitted May 2009);
- 15. Groundwater Monitoring Results, May 2009 (submitted July 2009);
- 16. Groundwater Monitoring Results, July 2009 (submitted September 2009);
- 17. Groundwater Monitoring Results, October 2009 (submitted December 2009); and
- 18. Groundwater Monitoring Results, January, February, and March 2010 (submitted April 2010).

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 Red Hill, 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 downgradient 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 (PHWS), which serves approximately 52,200 military consumers (TEC, 2008).

1.3.2 Facility Information

The Facility consists of 18 active and two inactive USTs operated by Navy FISC Pearl Harbor. Each UST has a capacity of 12.5 million gallons. The bottom of the USTs 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 fabricated from steel and currently contain Jet Propulsion (JP)–5 fuel, JP-8, 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).

December 2005.

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 μ g/L to 15 μ g/L. The maximum total lead concentration in the samples was equal to the primary drinking water standard of 15 μ g/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

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 $5.6~\mu g/L$. 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, but was a component is fuels stored in other tanks during the history of the Facility. Lead may have been part of the Facility construction material (TEC, 2007). Previous sampling efforts showed elevated lead when analyzed as unfiltered samples. Subsequent efforts where the lead samples were filtered has resolved this issue.

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 north of UST tank 20 to provide contaminant chemistry data 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 RHMW2254-01) 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 provide action levels for more chemicals, and are 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.

An overall summary of Facility groundwater sampling data by year follows:

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 laboratory method detection limit (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. Additionally, the SSRBL of 4,500 μg/L for TPH-DRO was exceed in the October sampling event; and

• TPH-DRO exceeded HDOH Drinking Water EALs at RHMW03 during all four sampling events.

2009 – **Groundwater Sampling:** Groundwater samples were collected in February, May, July, and October 2009. Analytical results indicated the following:

- No chemicals have been detected above HDOH Drinking Water EALs at US Navy Well 2254-01;
- Trace TPH-GRO at US Navy Well 2254-01 was detected above the laboratory MDL and significantly below the laboratory reporting limit and HDOH Drinking Water EAL, in February and May 2009;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW01 during all four sampling events:
- TPH-GRO has not exceed HDOH Drinking Water EALs at RHMW02;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW02 during all four sampling events;
- Naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene exceeded HDOH Drinking Water EALs at RHMW02 in February 2009, however only 1-methylnaphthalene exceeded the HDOH Drinking Water EALs in May and July 2009 and only naphthalene exceeded the HDOH Drinking Water EAL in October 2009;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW03 in February, but not in May, July, or October; and
- TPH-DRO exceeded HDOH Drinking Water EAL at RHMW05 during the July and October 2009 sampling events.

2010 – **Groundwater Sampling:** Groundwater samples were collected in January 2010 (and TPH-DRO was resampled for at RHMW02 in February and March, 2010). Analytical results indicated the following:

- No chemicals have been detected above HDOH Drinking Water EALs at US Navy Well 2254-01;
- Trace naphthalene at US Navy Well 2254-01 was detected above the laboratory MDL and significantly below the laboratory reporting limit and HDOH Drinking Water EAL, in January;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW01;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW02 in January, February, and March, however, significant increases in January and February were attributed to tentatively identified compounds (TICs) apparently not associated with petroleum from the Facility;
- Naphthalene and 1-methylnaphthalene exceeded HDOH Drinking Water EALs in RHMW02 in January;
- TPH-DRO exceeded HDOH Drinking Water EALs at RHMW05 in January, however, the significant increase was attributed to TICs apparently not associated with petroleum from the Facility; and

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• TPH-DRO at RHMW03 has not been detected above the laboratory MDL.

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 μ g/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 μ g/L for 1-methylnaphthalene and 24 μ g/L for 2-methylnaphthalene, corresponding to a residential tap water scenario, and a 1 in a million cancer risk (HDOH, 2008).

Also, the drinking water EAL for naphthalene was increased from 6.2 μ g/L to 17 μ g/L (HDOH, 2008). Finally, the HDOH Drinking Water EAL for TPH-DRO was increased from 100 μ g/L to 210 μ g/L, although the HDOH Groundwater Gross Contamination EAL for TPH-DRO remains 100 μ g/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 within the lower access tunnel between RHMW01 and RHMW2254-01(located at the US Navy Well 2254-01). It was installed to identify any contamination migrating past RHMW01 prior to it reaching the US Navy Well 2254-01.

2.0 Sample Collection and Analyses

Field activities relating to groundwater sample collection were conducted on April 13, 2010. Groundwater samples were collected from four monitoring wells located inside the Facility lower access tunnel and one monitoring well located at the US 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

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

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2.2 Groundwater Sample Collection

Each monitoring well was sampled immediately following purging. All wells were sampled directly from their dedicated bladder pump system. Samples were placed into sampling containers with appropriate preservatives [i.e., hydrochloric acid (HCl) for volatile organic analysis, nitric acid (HNO₃) 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, 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 US Navy Pump Station. Duplicate sample results from monitoring well RHMW02 are reported in this document as RHMW02D. A summary of groundwater analytical results for TPH-DRO, TPH-GRO, VOCs, PAHs, and dissolved lead is included in Table 1. Complete analytical laboratory reports are provided in Appendix A.

3.1 April 2010 Sample Analytical Results

Groundwater samples were analyzed for TPH-DRO, TPH-GRO, VOCs, PAHs, and dissolved lead. Data qualifier "F" indicates the result is between the laboratory MDL and reporting limit (RL), therefore, should be considered an estimated value. The results for each groundwater monitoring well are discussed below.

RHMW01

TPH-DRO at 377F μ g/L exceeded the HDOH Drinking Water EALs of 210 μ g/L. Estimated trace concentrations of acenaphthene and flourene were detected at 0.045F μ g/L and 0.0455F μ g/L, respectfully (Table 1). These concentrations are significantly below the HDOH Drinking Water EALs for each constituent. No other constituents were detected above the laboratory MDL.

Table 1. Analytical Results for Quarterly Groundwater Monitoring Release Response Report (April 13, 2010)
Red Hill Fuel Storage Facility, Pearl Harbor, Hawaii

		HDOH Drinking Water	HDOH Groundwater		RHM					MW02				MW02D				IMW03				HMW05				/2254-01	
Method	Chemical	EALs ¹	Gross Contamination		UG					JG/L				UG/L				UG/L	_			UG/L	_			G/L	
		for Human Toxicity	EALs ²	Result	April 1: Q	3, 2010 MDL	RL	Result	April Q	13, 2010 MDL	RL	Result	•	13, 2010 MDL	RL	Result	Apri Q	l 13, 2010 MDL) RL	Result	Apri Q	il 13, 2010 MDL	0 RL	Result	April 1	13, 2010 MDL	RL
	TPH as DIESEL RANGE ORGANICS	UG/L 210	UG/L 100	377	F	163	435	2350	<u> </u>	160	426	2080	<u> </u>	161	430	ND	U	160	426	ND	U	150	400	ND	U	160	426
8015B (Petroleum)	TPH as GASOLINE RANGE ORGANICS	100	100	ND	Ü	30	100	39.3	F	30	100	39	F	30	100	ND	Ü	30	100	ND	Ü	30	100	ND	Ü	30	100
	1-METHYLNAPHTHALENE	4.7	10	ND	U 0	.0161	0.0538	6.61		0.161	0.538	5.9		0.165	0.549	ND	U	0.0161	0.0538	0.0335	F	0.0163	_	ND	U	0.0165	0.0549
	2-METHYLNAPHTHALENE	24	10	ND			0.0538	1.69		0.161	0.538	1.9		0.0165	0.0549	ND	U	0.0161	0.0538	ND	U	0.0163		ND	U	0.0165	0.0549
	ACENAPHTHENE	370	20	0.045	F 0	.0161	0.0538	0.426		0.0161	0.0538	0.429		0.0165	0.0549	ND	U	0.0161	0.0538	ND	U	0.0163	0.0543	ND	U	0.0165	0.0549
	ACENAPHTHYLENE	240	2000	ND			0.0538	ND		0.0161	0.0538	ND	U	0.0165	0.0549	ND	U	0.0161	0.0538	ND	U	0.0163		ND		0.0165	0.0549
	ANTHRACENE	1800	22	ND			0.0538	ND		0.0161	0.0538	ND	U	0.0165	0.0549	ND	U	0.0161	0.0538	ND	U			ND		0.0165	0.0549
	BENZO(a)ANTHRACENE	0.092	4.7	ND			0.0538	ND		0.0161	0.0538	ND	U	0.0165	0.0549	ND	U	0.0161	0.0538	ND	U	0.0163		ND		0.0165	0.0549
	BENZO(a)PYRENE BENZO(b)FLUORANTHENE	0.2	0.81	ND			0.0538 0.0538	ND		0.0161	0.0538	ND	U	0.0165	0.0549	ND ND	U	0.0161	0.0538	ND ND	U	0.0163		ND ND		0.0165	0.0549
	BENZO(B)FLOOKANTHENE BENZO(g,h,i)PERYLENE	0.092 1500	0.75 0.13	ND ND			0.0538	ND ND		0.0161 0.0161	0.0538 0.0538	ND ND	U	0.0165 0.0165	0.0549 0.0549	ND	U	0.0161	0.0538 0.0538	ND	U	0.0163 0.0163	0.0543 0.0543	ND	•	0.0165 0.0165	0.0549 0.0549
	BENZO(k)FLUORANTHENE	0.92	0.4	ND			0.0538	ND		0.0161	0.0538	ND	Ü	0.0165	0.0549	ND	Ü	0.0161	0.0538	ND	Ü	0.0163	0.0543	ND	•	0.0165	0.0549
` '	CHRYSENE	9.2	1	ND			0.0538	ND		0.0161	0.0538	ND	Ü	0.0165	0.0549	ND	Ü	0.0161	0.0538	ND	Ü	0.0163		ND		0.0165	0.0549
	DIBENZ(a,h)ANTHRACENE	0.0092	0.52	ND			0.0538	ND		0.0161	0.0538	ND	Ü	0.0165	0.0549	ND	Ū	0.0161	0.0538	ND	Ü	0.0163	0.0543	ND		0.0165	0.0549
	FLUORANTHENE	1500	130	ND	U 0	.0161	0.0538	ND	U	0.0161	0.0538	ND	U	0.0165	0.0549	ND	U	0.0161	0.0538	ND	U	0.0163	0.0543	ND	U	0.0165	0.0549
	FLUORENE	240	950	0.0455			0.0538	0.224		0.0161	0.0538	0.23		0.0165	0.0549	ND	U	0.0161	0.0538	ND	U	0.0163	0.0543	ND		0.0165	0.0549
	INDENO(1,2,3-c,d)PYRENE	0.092	0.095	ND			0.0538	ND	U	0.0161	0.0538	ND	U	0.0165	0.0549	ND	U	0.0161	0.0538	ND	U			ND		0.0165	0.0549
	NAPHTHALENE	17	21	ND			0.108	14.3		0.333	1.08	12.7	l	0.341	1.1	ND	U	0.0333	0.108	0.0752	F	0.0337	0.109	ND		0.0341	0.11
	PHENANTHRENE	240	410	ND			0.0538	ND		0.0161	0.0538	ND		0.0165	0.0549	ND	U	0.0161	0.0538	ND	U	0.0163		ND		0.0165	0.0549
	PYRENE 1,1,1,2-TETRACHLOROETHANE	180	68	ND			0.0538	ND ND	U	0.0161	0.0538	ND	U	0.0165	0.0549	ND ND	U	0.0161	0.0538	ND	U	0.0163		ND	U	0.0165	0.0549
	1,1,1,2-TETRACHLOROETHANE 1,1,1-TRICHLOROETHANE	0.52 200	50000 970	ND ND		0.15 0.31	0.5 1	ND ND	l l	0.15 0.31	0.5 1	ND ND	U	0.15 0.31	0.5 1	ND ND		0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5 1
	1,1,2,2-TETRACHLOROETHANE	0.067	500	ND	_	0.15	0.5	ND	Ü	0.15	0.5	ND	Ü	0.15	0.5	ND	Ü	0.15	0.5	ND	Ü	0.15	0.5	ND	Ü	0.15	0.5
	1,1,2-TRICHLOROETHANE	5	50000	ND	-	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1
	1,1-DICHLOROETHANE	2.4	50000	ND		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		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		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	_	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		0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND ND	U	0.31	1 0.5
	1,2-DICHLOROETHANE 1,2-DICHLOROPROPANE	0.15 5	7000 10	ND ND		0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5
	1,3-DICHLOROBENZENE	180	50000	ND	_	0.31	1	ND	ii i	0.31	1	ND	U	0.31 0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1
	1,4-DICHLOROBENZENE	75	5	ND	_	0.15	0.5	ND	U	0.15	0.5	ND	Ü	0.15	0.5	ND	Ü	0.15	0.5	ND	Ü	0.15	0.5	ND	Ü	0.15	0.5
	ACETONE	22000	20000	ND	_	3.1	10	ND	Ü	3.1	10	ND	Ü	3.1	10	ND	Ü	3.1	10	ND	Ü	3.1	10	ND	Ü	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		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		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
1 X260B I	CARBON TETRACHLORIDE	5	520	ND		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
(VOCs)	CHLOROBENZENE CHLOROETHANE	100 8600	50 16	ND ND	_	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5	ND ND	U	0.15 0.31	0.5
	CHLOROFORM	70	2400	ND	_	0.3	1	ND ND	11	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	Ü	0.31	1
	CHLOROMETHANE	1.8	50000	ND		0.31	1	ND	U	0.31	1 1	ND	Ü	0.31	1	ND	U	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1
	cis-1,2-DICHLOROETHYLENE	70	50000	ND	_	0.31	1	ND	Ú	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1	ND	Ū	0.31	1
	cis-1,3-DICHLOROPROPENE	0.43	50000	ND		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
	DIBROMOCHLOROMETHANE	0.16	50000	ND	-	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		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		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		0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2	ND	U	0.62	2 10	ND	U	0.62	2
	METHYL ETHYL KETONE (2-BUTANONE) METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	7100 2000	8400 1300	ND ND	_	3.1 3.1	10 10	ND ND	U	3.1 3.1	10 10	ND ND	U	3.1 3.1	10 10	ND ND	U II	3.1 3.1	10 10	ND ND	U	3.1 3.1	10	ND ND	U	3.1 3.1	10 10
	METHYLENE CHLORIDE	4.8	9100	ND ND	U	1	5	ND ND	l li	J. I 1	5	ND	U	1	5	ND	U	3.1	5	ND	U	1	5	ND ND	IJ	1	5
	NAPHTHALENE	17	21	ND	_	0.62	2	20.6		0.62	2	21.4	ľ	0.62	2	ND	Ü	0.62	2	ND	Ü	0.62	2	ND	Ü	0.62	2
	STYRENE	100	10	ND	_	0.31	1	ND	υl	0.31	1	ND	U	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1
	TETRACHLOROETHYLENE(PCE)	5	170	ND		0.31	1	ND	U	0.31	1	ND	Ü	0.31	1	ND	Ü	0.31	1	ND	Ū	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		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		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		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
	XYLENES, TOTAL	10000	20	ND		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
	LEAD Polynuclear aromatic hydrocarbons	15	50000	ND	U	0.31	1	ND Method	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1	ND	U	0.31	1

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

RL - Reporting limit

TPH - Total petroleum hydrocarbons ND - Indicates that the compound was not detected above the stated method detection limit

NA - not analyzed

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RHMW02

In April 2010, TPH-DRO was detected in RHMW02 in the normal and duplicate samples at 2,350 μ g/L and 2,080 μ g/L, respectively. These results exceeded the HDOH Drinking Water EAL of 210 μ g/L, but not the site-specific risk based level (SSRBL) of 4,500 μ g/L. The average concentration between the normal and duplicate samples for TPH-DRO was 2,215 μ g/L, slightly less than half of the SSRBL. The concentration of TPH-GRO detected in the normal and duplicate sample from RHMW02 averaged 39.2F μ g/L, less than the HDOH Drinking Water EAL of 100 μ g/L.

Naphthalene was analyzed by USEPA Method 8270C SIM and USEPA Method 8260B. USEPA Method 8260B produced the highest naphthalene concentrations, which averaged 21 μ g/L from the normal and duplicate sample (HDOH Drinking Water EAL is 17 μ g/L). In addition, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, and flourene were detected in the normal and duplicate samples at averaged concentrations of 6.26 μ g/L, 1.795 μ g/L, 0.428 μ g/L, and 0.227 μ g/L, respectively (Table 1). All of these concentrations are below the HDOH Drinking Water EALs for each constituent, except for 1-methylnaphthalene (HDOH Drinking Water EAL is 4.7 μ g/L). No other constituents were detected above the laboratory MDL.

RHMW03

No parameters were detected above the laboratory MDLs in RHMW03 (Table 1).

RHMW05

1-methylnaphthalene and naphthalene were detected above the laboratory MDL, but below the RL, at estimated concentrations of 0.0335F $\mu g/L$ and 0.0752F $\mu g/L$, respectively. These concentrations are below the HDOH Drinking Water EAL for each compound. No other constituents were detected above the laboratory MDL (Table 1).

US Navy Well 2254-01

No parameters were detected above the laboratory MDLs in RHMW2254-01 (Table 1).

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.

The following is a discussion of compounds that exceeded HDOH Drinking Water EALs during two or more recent consecutive sampling events of increasing or decreasing concentrations, thus establishing a trend:

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 μ g/L. TPH-DRO had exhibited a decreasing trend since October 2008 with the lowest concentration (i.e., 248

 μ g/L) recorded in July 2009. Since July 2009, this trend began increasing with 299F μ g/L, 312F μ g/L, and 377 μ g/L detected in October 2009, January 2010, and April 2010, respectively.

RHMW02

At RHMW02, from September 2005 through February 2009, TPH-DRO exceeded the HDOH Drinking Water EAL and was greater than 50 percent of the SSRBL (estimated solubility limit of 4,500 μ g/L). Specifically, the concentration of TPH-DRO was relatively stable at RHMW02 until July 2008, ranging from 2,250 to 2,995 μ g/L. However, during the July and October 2008 sampling events, these average concentrations increased. The July 2008 average concentration was 4,055 μ g/L and the October 2008 average concentration was 5,420 μ g/L. Both of these values were significantly above the HDOH Drinking Water EAL of 210 μ g/L, with the October 2008 average also exceeding the SSRBL of 4,500 μ g/L.

However, TPH-DRO at RHMW02 had shown a decreasing trend from October 2008 through July 2009. In May and July 2009, TPH-DRO remained above the HDOH Drinking Water EAL, but was below 50 percent of the SSRBL of 4,500 μ g/L. In October 2009, TPH-DRO began an increasing trend greater than 50 percent of the SSRBL which continued through February 2010 when it exceeded the SSRBL due to tentatively identified compounds (TICs) apparently not associated with petroleum from the Facility (TEC, 2010). In March and April 2010, TPH-DRO has exhibited a decreasing trend and the TICs detected in the two previous sampling events were not observed. During April 2010, TPH-DRO concentrations at RHMW02 decreased to an averaged concentration of 2,215 μ g/L, just below 50 percent of the SSRBL.

For other parameters, the average concentration for 1-methylnaphthalene (i.e., 6.26 $\mu g/L$) exhibited a decrease from the January 2010 average concentration (i.e., 8.65 $\mu g/L$) that was above the HDOH Drinking Water EAL of 4.7 $\mu g/L$. Naphthalene had shown an increasing trend since its lowest concentration in May 2009. However since October 2009, average naphthalene concentrations in RHMW02 have remained relatively stable between 20 $\mu g/L$ and 22 $\mu g/L$, exceeding the HDOH Drinking Water EAL of 17 $\mu g/L$.

RHMW03

At RHMW03, historically, concentrations of TPH-DRO have fluctuated around the HDOH Drinking Water EAL, but have been significantly lower than corresponding values observed at RHMW01 and RHMW02. However, the measured concentrations decreased since October 2008 dropping below the laboratory MDL in May 2009. There has been no detectable TPH-DRO result since May 2009.

RHMW05

At RHMW05 there has been an increasing trend for TPH-DRO since it was first sampled in May 2009. Since July 2009, TPH-DRO concentrations at RHMW05 were greater than the HDOH Drinking Water EAL (i.e., 210 μ g/L). However, in April 2010 TPH-DRO concentrations exhibited a significant decrease and was not detected above the laboratory MDL.

US Navy Well 2254-01

At US Navy Well 2254-01, no compounds were detected above the laboratory MDLs during April 2010. Additionally, no compounds have ever been detected at this sample location at concentrations greater than any HDOH Drinking Water EALs.

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 is monitored at the Facility (see Table 2). Static water levels and fuel thickness is measured to a precision of ± 0.01 feet.

In January 2008, fuel was measured in monitoring wells RHMW01 and RHMW02 at a thickness of less than 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, RHMW03, and RHMW05 following the April 2010 sampling round. Since January 2008, no free product has been observed in any of these Facility wells (Table 2).

Table 2. Oil/Water Interface Measurements

	RHM	W01	RHM	W02	RHM	IW03	RHI	MW05
	SWL	LNAPL	SWL	LNAPL	SWL	LNAPL	SWL ⁶	LNAPL
Date	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
January 2008	17.74	< 0.01	18.78	< 0.01	NT^1	NT¹		
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^2	NT^2	18.66	0.00	18.75	0.00		
March 2009	18.59	0.00	18.57	0.00	18.67	0.00		
May 2009 ³	18.69	0.00	18.64	0.00	18.72	0.00	NT ⁵	NT^5
May 2009	18.91	0.00	18.86	0.00	18.90	0.00	NT ⁵	NT^5
July 2009 ⁴	18.66	0.00	18.59	0.00	18.64	0.00	18.63	0.00
August 2009	18.37	0.00	18.30	0.00	18.47	0.00	18.21	0.00
September 2009	18.20	0.00	18.17	0.00	18.24	0.00	18.11	0.00
October 2009	18.17	0.00	18.14	0.00	18.24	0.00	18.10	0.00
November 2009	18.50	0.00	18.45	0.00	18.50	0.00	18.47	0.00
December 2009	18.29	0.00	18.26	0.00	18.31	0.00	18.19	0.00
January 2010	18.05	0.00	18.01	0.00	18.09	0.00	17.97	0.00
February 2010	18.17	0.00	18.12	0.00	18.17	0.00	18.12	0.00
March 2010	17.88	0.00	17.86	0.00	17.93	0.00	17.76	0.00
April 2010	17.66	0.00	17.64	0.00	17.71	0.00	17.55	0.00

SWL - Static water level, elevation above mean sea level

LNAPL - Light Non-Aqueous Phased Liquid, fuel product on groundwater attributed to the Facility ft - Feet

NT - Not Taken

- $^{\mathrm{1}}$ The January 2008 measurement at RHMW03 was not taken due to equipment malfunction
- ² During the February 2009 measurements, RHMW01 was inaccessible due to extensive work being conducted at Tank 02
- ³ The measurements scheduled for April 2009 were postponed until May 6, 2009 due to RHMW05 drilling activities
- ⁴ The June 2009 measurements were skipped due to the installation of dedicated oil/water interface probes
- ⁵ Oil/water interface measurements were not taken at RHMW05 until the installation of the oil/water interface probe was completed
- ⁶ Elevation at RHMW05 is estimated from the difference between RHMW01 and RHMW05 during a survey conducted in January 2010 ---- Time period prior to the installation of RHMW05

Oil/water interface measurements were not taken in April 2008

3.4 Groundwater Status

Facility-specific contaminants of concern are defined as petroleum-related chemicals that have been observed in the groundwater samples above the HDOH Drinking Water EALs. In accordance with the *Red Hill Bulk Fuel Storage Facility Final Groundwater Protection Plan* (TEC, 2008), Table 3 defines these Facility-specific compounds and their associated SSRBLs and updated EALs (HDOH 2008).

Table 3. Action Levels for Contaminants 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, RHMW05 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.

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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 have been collected at the Facility monitoring wells. As Table 2 indicates, free product has been observed only during the January 2008 monitoring event (i.e., at both RHMW01 and RHMW02 at less than 0.01 foot each).

<u>US Navy Well 2254-01</u>

Based upon the April 2010 sampling event, the US Navy Well 2254-01 is not eligible for any category status change since no compounds were detected above the laboratory MDLs.

RHMW03

Based upon the April 2010 sampling event, RHMW03 is not eligible for any category status change since no compounds were detected above the laboratory MDLs.

Category 1 Status Locations

There are no Category 1 status locations based upon the April 2010 event.

Category 2 Status Locations

RHMW01

The April 2010 sampling event indicates that RHMW01 should remain in Category 2 status. This is because the TPH-DRO concentration of 377F μ g/L is greater than the HDOH Drinking Water EAL (210 μ g/L), but less than half the SSRBL of 4,500 μ g/L (estimated solubility limit of JP-5).

RHMW02

Based upon the April 2010 sampling event, RHMW02 has been downgraded to Category 2 status. Although TPH-DRO concentrations remain greater than the HDOH Drinking Water EAL (210 $\mu g/L$), the April 2010 averaged concentration (2,215 $\mu g/L$) is less than half the SSRBL of 4,500 $\mu g/L$.

RHMW05

Based upon the April 2010 sampling event, RHMW05 should remain in a Category 2 status. This is because estimated trace concentrations of 1-methylnaphthalene have demonstrated a slight increasing trend (i.e., two or more consecutive sampling events of increasing concentrations) starting with the January 2010 sampling event.

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Category 2 for RHMW01, RHMW02, and RHMW05 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 Status Locations

There are no Category 3 status locations.

Category 4 Status Locations

There are no Category 4 status locations.

4.0 Summary and Conclusions

Summary

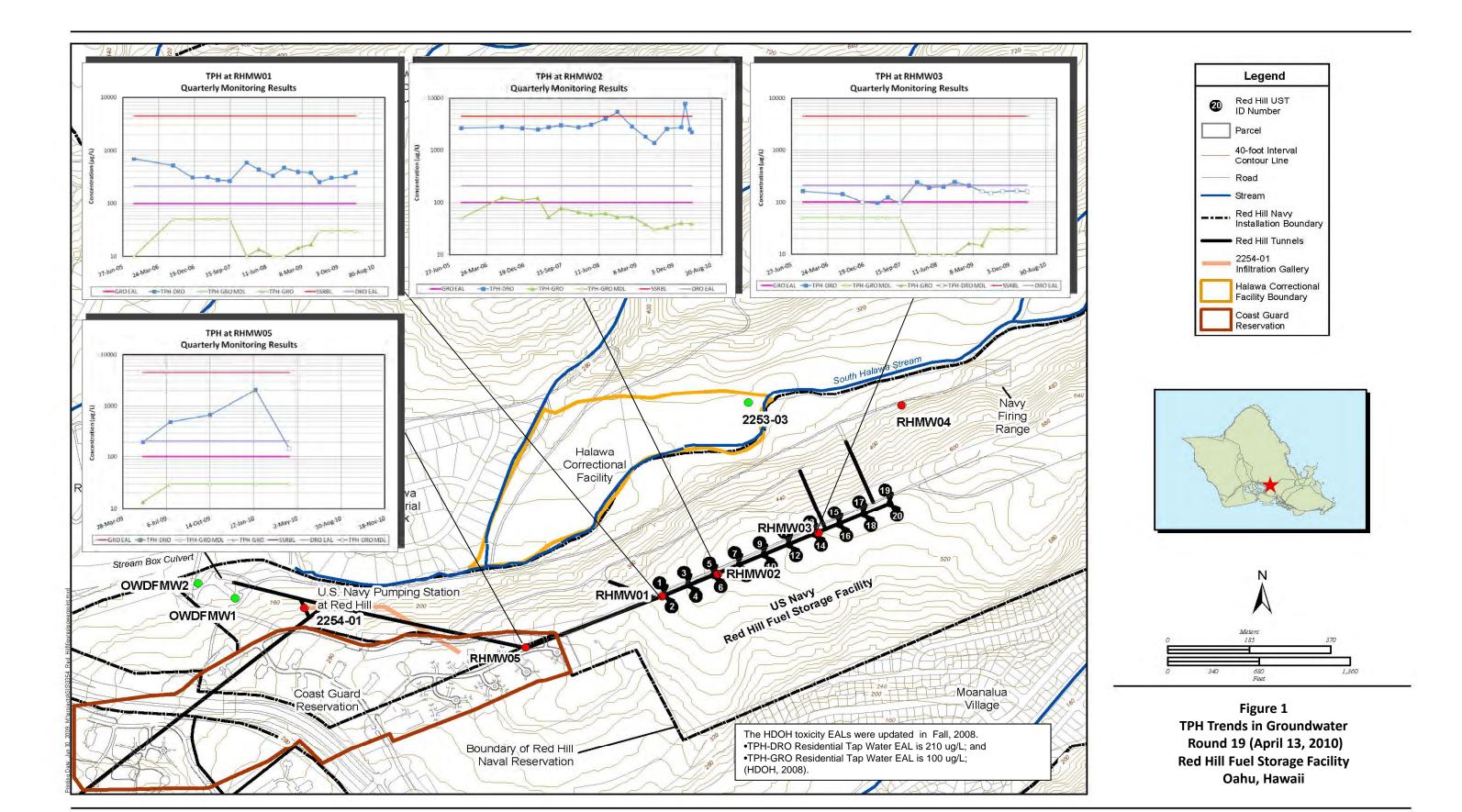
There is no indication of an immediate threat of disruption to drinking water resources of the US Navy Well 2254-01 as a result of the April 2010 data. Based on the April 2010 sampling event, the US Navy Well 2254-01 does not fall into any Results Category of the Plan.

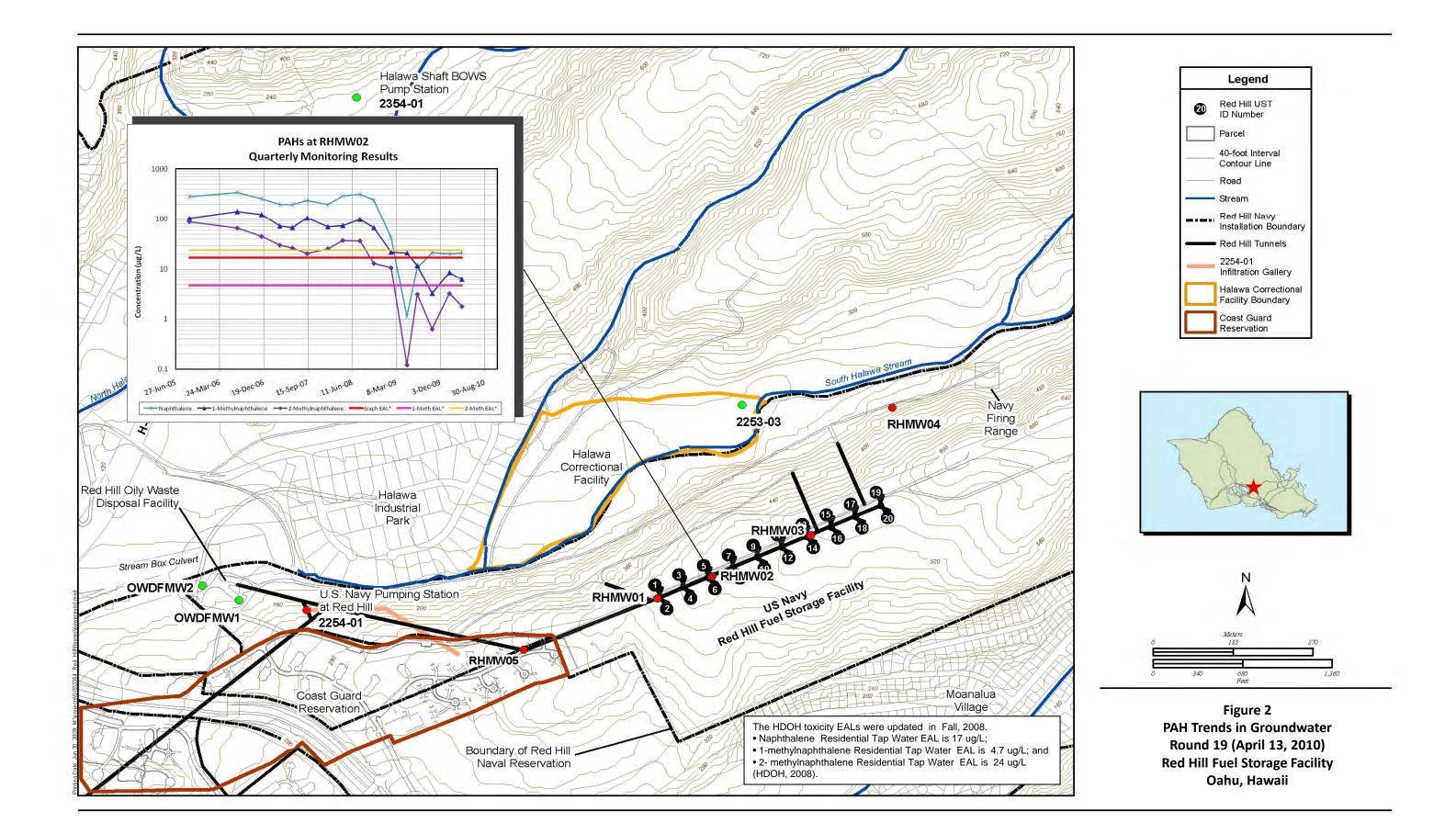
RHMW01 is exhibiting an increasing trend for TPH-DRO relative to the concentrations observed in the most recent sampling events. However, the April 2010 results from RHMW01 are still at concentration levels within the historical range. Also during April 2010, TPH-DRO concentrations for RHMW02 and RHMW05 decreased relative to the previous respective sampling events. Specifically, in April 2010, TPH-DRO at RHMW05 was not detected above the laboratory MDL (Table 1).

Conclusions/Recommendations

- To date, fuel on the groundwater has been observed only once (i.e., in January 2008 in RHMW01 and RHMW02 at less than 0.01 ft.). Continued monitoring of Facility wells for the presence of fuel on groundwater is recommended.
- The concentration of TPH-DRO measured in the newest monitoring well, RHMW05, has drastically declined since exhibiting an increasing trend during all the previous sampling events at this location.
- RHMW01 has exhibited a slightly increasing TPH-DRO trend while TPH-DRO at RHMW02 has slightly decreased since March 2010. However, April 2010 TPH-DRO concentrations are within the historical ranges for both RHMW01 and RHMW02. It is recommended that quarterly monitoring of the Facility wells continue so that overall groundwater quality trends may be evaluated and proactive action taken if the groundwater quality shows evidence of deterioration.
- The US Navy Well 2254-01 is not imminently threatened at this time; however, sampling should continue to monitor and assess contaminant migration from up-gradient locations.
- Consideration should be given to having future samples analyzed using both Massachusetts Department of Environmental Protection (MADEP) analytical methods in addition to TPH-GRO and TPH-DRO analytical methods.
- The following activities are in process to monitor and/or clarify the groundwater contamination situation at the Facility:

- 1. Continue monthly free product measurements at RHMW01, RHMW02, RHMW03, and RHMW05;
- 2. Continue monthly soil vapor monitoring; and
- 3. Continue quarterly groundwater monitoring of Facility wells for TPH-DRO, TPH-GRO, VOCs, PAHs, and lead until such time that new data indicates that a different monitoring program is warranted.





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.

Hawaii Administrative Rules, Title 11, Chapter 281, Subchapter 7.

HDOH. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Summary Lookup Tables. March 2009.

HDOH. Use of May 2005 Environmental Action Levels ("EALs") at Leaking Underground Storage Tank Sites. Memo. July 2005.

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

Massachusetts Department of Environmental Protection (MADEP). *Implementation of the MADEP VPH/EPH Approach*. Final Policy, October 2002

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 revised in December 2009.

TEC, Inc. Quarterly Groundwater Monitoring Report, Red Hill Fuel Storage Facility, Pearl Harbor, Hawaii. April 2010.

Appendix A

Laboratory Analytical Reports



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

Project:	3354-003 Red Hill BFSF

Client: The Environmental Company, Inc. (TEC)

SGS Work Order: 1101584

Released by:

Contents:

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

Note:

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



CASE NARRATIVE Print Date: 4/30/2010

Client Name: The Environmental Company, Inc. (TEC)

Project Name: 3354-003 Red Hill BFSF

Workorder No.: 1101584

Sample Comments

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

<u>Lab Sample ID</u> 1101584002	Sample Type * BMS	Client Sample ID RHMW2254-WG19 MS
	8270D SIM - MS rec	overy for mutliple analytes is outside of QC criteria (biased high). Refer to LCS for accuracy.
1101584004	PS	RHMW03-WG19
	8270D SIM - LCS re	covery for multiple analytes is outside of QC criteria (biased high) due to concentration of the spike.
1101584005	PS	RHMW02-WG19
		covery for multiple analytes is outside of QC criteria (biased high) due to concentration of the spike. is consistent with a weathered middle distillate.
1101584006	PS	RHMWA01-WG19
		covery for multiple analytes is outside of QC criteria (biased high) due to concentration of the spike. is consistent with a weathered middle distillate.
1101584007	PS	RHMW01-WG19
	8270D SIM - LCS re	covery for multiple analytes is outside of QC criteria (biased high) due to concentration of the spike.
1101584008	PS	RHMW05-WG19
	8270D SIM - LCS re	covery for multiple analytes is outside of QC criteria (biased high) due to concentration of the spike.
956904	* LCS	LCS for HBN 227260 [XXX/22499]
	8270D SIM - LCS re	covery for multiple analytes is outside of QC criteria (biased high) due to concentration of the spike.
956905	* LCSD	LCSD for HBN 227260 [XXX/22499
		recovery for multiple analytes is outside of QC criteria (biased high). These analytes were not detected e associated samples.
956911	* MS	RHMW2254-WG19 MS(110158400)
	8270D SIM - MS rec	overy for is outside of QC criteria (biased high). Refer to LCS for accuracy.
957642	* CCV	CCV for HBN 227420 [VMS/11176]
		y for chloromethane and bromomethane does not meet QC criteria (biased high). These analytes were LOQ in the associated samples.

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



Laboratory Analytical Report

Client: The Environmental Company, Inc.

1003 Bishop Street, Pauahi Tower Suite 1550 Honolulu, HI 96813

Attn: Rick Adkisson

T: (808)528-1445 F:(808)528-0768

Project: 3354-003 Red Hill BFSF

Workorder No.: 1101584

Certification:

This data package is in compliance with the terms and conditions of the contract, both technically and for completeness, unless otherwise noted on the sample data sheet(s) and/or 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.

Jennifer Serna

jennifer.serna@sgs.com Project Manager

Contents (Bookmarked in PDF):

Cover Page Glossary Sample Summary Forms Case Narrative Sample Results Forms Batch Summary Forms (by method) Quality Control Summary Forms (by method) Chain of Custody/Sample Receipt Forms Attachments (if applicable)



Print Date: 4/30/2010

Enclosed are the analytical results associated with the above work order. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. All work is provided under SGS general terms and conditions (http://www.sgs.com/terms and conditions.htm>), unless other written agreements have been accepted by both parties.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & UST-005 (CS) for ADEC and AK100001 for NELAP (RCRA methods: 1020A, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035B, 6010B, 6020, 7470A, 7471B, 8021B, 8082A, 8260B, 8270D, 8270D-SIM, 9040B, 9045C, 9056A, 9060A, AK101 and AK102/103). Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, the National Environmental Laboratory Accreditation Program and other regulatory authorities. The following descriptors or qualifiers may be found in your report:

- * The analyte has exceeded allowable regulatory or control limits.
- ! Surrogate out of control limits.
- B Indicates the analyte is found in a blank associated with the sample.
- CCV Continuing Calibration Verification
- CL Control Limit
- D The analyte concentration is the result of a dilution.
- DF Dilution Factor
- DL Detection Limit (i.e., maximum method detection limit)
- E The analyte result is above the calibrated range.
- F Indicates value that is greater than or equal to the DL
- GT Greater Than
- ICV Initial Calibration Verification

 J The quantitation is an estimation.
- JL The analyte was positively identified, but the quantitation is a low estimation.
- LCS(D) Laboratory Control Spike (Duplicate)
- LOD Limit of Detection (i.e., 2xDL)
- LOQ Limit of Quantitation (i.e., reporting or practical quantitation limit)
- LT Less Than
- M A matrix effect was present.
- MB Method Blank
- MS(D) Matrix Spike (Duplicate)
- ND Indicates the analyte is not detected.
 O OC parameter out of acceptance range.
- R Rejected
- RL Reporting Limit
- RPD Relative Percent Difference
- U Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content.

All DRO/RRO analyses are integrated per SOP.



SAMPLE SUMMARY

Print Date: 4/30/2010 10:42 am

Client Name: The Environmental Company, Inc. (TEC)

Project Name: 3354-003 Red Hill BFSF

Workorder No.: 1101584

Analytical Methods

Lab Sample ID

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 8015C (W) SW8015C GRO (W) SW8015C

Client Sample ID

Sample ID Cross Reference

1101584001	RHMW2254-WG19
1101584002	RHMW2254-WG19 MS
1101584003	RHMW2254-WG19 MSD
1101584004	RHMW03-WG19
1101584005	RHMW02-WG19
1101584006	RHMWA01-WG19
1101584007	RHMW01-WG19
1101584008	RHMW05-WG19
1101584009	TB01-WG19



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW2254-WG19

SGS Ref. #: 1101584001

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 11:05 Receipt Date/Time: 04/15/10 11:10

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch Qualifiers		
Lead	0.620 U	1.00	0.310	ug/L	5	MMS6398	MXX22905		
Batch Information									
Analytical Batch: MMS6398		Prep Batch: N	MXX22905			Initial Prep	Wt./Vol.: 50 mL		
Analytical Method: SW6020	Prep Method: SW3010A Prep Ext						act Vol.: 50 mL		
Analysis Date/Time: 04/21/10 11:38 Prep Date/Time: 04/19/10 12:10 Container ID:1101584001-G						D:1101584001-G			
Dilution Factor: 5						Analyst: NF	RB		



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW2254-WG19

SGS Ref. #: 1101584001

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 11:05 Receipt Date/Time: 04/15/10 11:10

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch	Qualifiers			
Gasoline Range Organics	60.0 U	100	30.0	ug/L	1	VFC9900	VXX20571	1			
4-Bromofluorobenzene <surr></surr>	105	50-150		%	1	VFC9900	VXX20571	1			
Batch Information											
Analytical Batch: VFC9900		Prep Batch	: VXX20571			Initial Prep Wt./Vol.: 5 mL					
Analytical Method: SW8015C			Prep Extract Vol.: 5 mL								
Analysis Date/Time: 04/16/10 11:48 Prep Date/Time: 04/16/10 09:20						Container ID:1101584001-A					
Dilution Factor: 1						Analyst: EA	AΒ				



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW2254-WG19

SGS Ref. #: 1101584001

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 11:05 Receipt Date/Time: 04/15/10 11:10

Semivolatile Organic Fuels Department

<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	<u>Qualifiers</u>		
Diesel Range Organics	0.320 U	0.426	0.160	mg/L	1	XFC9164	XXX22502	2		
5a Androstane <surr></surr>	88.8	50-150		%	1	XFC9164	XXX2250	2		
Batch Information										
Analytical Batch: XFC9164 Prep Batch: XXX22502					Initial Prep Wt./Vol.: 940 mL					
Analytical Method: SW8015C		Prep Metho	od: SW3520C			Prep Extra	ct Vol.: 1 mL			
Analysis Date/Time: 04/28/10 14:02	Prep Date/	Time: 04/19/10 1	10:30	Container ID:1101584001-H						
Dilution Factor: 1						Analyst: L0	Œ			



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW2254-WG19

SGS Ref. #: 1101584001

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 11:05 Receipt Date/Time: 04/15/10 11:10

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	tolatilo das em ematography/maet	Totalio Sas Silionalography, illass Specialosopy					Analytical	<u>Prep</u>
1.1,1-Trichloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1,2,2-Teirdachloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,1-1,2-Trichloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropthane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropthene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trinchlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibriomo-S-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene <th><u>Parameter</u></th> <th>Result</th> <th>LOQ/CL</th> <th><u>DL</u></th> <th><u>Units</u></th> <th><u>DF</u></th> <th></th> <th>·</th>	<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>		·
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1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibromo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.620 U	1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	-	1	VMS11176	
1,2-Dibromo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropthane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 0.400 0.150 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane<	1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	=	1	VMS11176	VXX20578
1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropenane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-5-Dichloropenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropenzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,4-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U <td>1,2-Dibromo-3-chloropropane</td> <td>1.24 U</td> <td>2.00</td> <td>0.620</td> <td></td> <td>1</td> <td>VMS11176</td> <td>VXX20578</td>	1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620		1	VMS11176	VXX20578
1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3,5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,5-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,-Butanone (MEK) 6.20 U	1,2-Dibromoethane	0.620 U	1.00	0.310	=	1	VMS11176	VXX20578
1,2-Dichloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-F-Timethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorobexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U	1,2-Dichlorobenzene	0.620 U	1.00	0.310	-	1	VMS11176	VXX20578
1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3,5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,5-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,5-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,5-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Chlorobulene 0.620 U	1,2-Dichloroethane	0.300 U	0.500	0.150	-	1	VMS11176	VXX20578
1,3,5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorobexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Holorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578	1,2-Dichloropropane	0.620 U	1.00	0.310		1	VMS11176	VXX20578
1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 <td>1,3,5-Trimethylbenzene</td> <td>0.620 U</td> <td>1.00</td> <td>0.310</td> <td></td> <td>1</td> <td>VMS11176</td> <td>VXX20578</td>	1,3,5-Trimethylbenzene	0.620 U	1.00	0.310		1	VMS11176	VXX20578
1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromoch	1,3-Dichlorobenzene	0.620 U	1.00	0.310	-	1	VMS11176	VXX20578
1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform <td< td=""><td>1,3-Dichloropropane</td><td>0.240 U</td><td>0.400</td><td>0.120</td><td>-</td><td>1</td><td>VMS11176</td><td>VXX20578</td></td<>	1,3-Dichloropropane	0.240 U	0.400	0.120	-	1	VMS11176	VXX20578
1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform <td< td=""><td>1,4-Dichlorobenzene</td><td>0.300 U</td><td>0.500</td><td>0.150</td><td>ug/L</td><td>1</td><td>VMS11176</td><td>VXX20578</td></td<>	1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	1-Chlorohexane	0.620 U	1.00	0.310		1	VMS11176	VXX20578
2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	4-Chlorotoluene	0.620 U	1.00	0.310		1	VMS11176	VXX20578
Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Acetone	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Benzene	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Bromobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Bromochloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
-g	Bromodichloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
	Bromoform	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
	Bromomethane	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
Carbon tetrachloride 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Carbon tetrachloride	0.620 U	1.00	0.310		1	VMS11176	VXX20578
Chlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578	Chlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578

SGS North America Inc. Environmental Division 200 West Potter Drive Anchorage AK 99518 t(907)562.2343 f(907)561 5301 www.ussgs.com Member of SGS Group



Client Sample ID: RHMW2254-WG19

SGS Ref. #: 1101584001

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 11:05 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

						Analytical	<u>Prep</u>
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
Chloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chloroform	0.600 U	1.00	0.300	ug/L	1	VMS11176	VXX20578
Chloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromomethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Ethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Isopropylbenzene (Cumene)	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Methylene chloride	2.00 U	5.00	1.00	ug/L	1	VMS11176	VXX20578
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	1	VMS11176	VXX20578
Naphthalene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
n-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
n-Propylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
o-Xylene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
P & M -Xylene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
sec-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Styrene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
tert-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Toluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Vinyl chloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Xylenes (total)	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane-D4 <surr></surr>	101	73-120		%	1	VMS11176	VXX20578
4-Bromofluorobenzene <surr></surr>	101	76-120		%	1	VMS11176	VXX20578
Toluene-d8 <surr></surr>	97.6	80-120		%	1	VMS11176	VXX20578



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW2254-WG19

SGS Ref. #: 1101584001

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 11:05 Receipt Date/Time: 04/15/10 11:10

Volatile Gas Chromatography/Mass Spectroscopy

Parameter Batch Information	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> <u>Batch</u>	Qualifiers	
Analytical Batch: VMS11176	Prep Batch: VXX20578				Initial Prep Wt./Vol.: 5 mL				
Analytical Method: SW8260B		Prep Method: SW5030B				Prep Extract Vol.: 5 mL			
Analysis Date/Time: 04/21/10 16:37		Prep Date/Time: 04/21/10 11:58				Container ID:1101584001-D			
Dilution Factor: 1						Analyst: DS	SH		



Client Sample ID: RHMW2254-WG19

SGS Ref. #: 1101584001

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 11:05 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Container ID:1101584001-J

Analyst: JDH

Polynuclear Aromatics GC/MS

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
1-Methylnaphthalene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
2-Methylnaphthalene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Acenaphthene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Acenaphthylene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Anthracene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Benzo(a)Anthracene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Benzo[a]pyrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Benzo[b]Fluoranthene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Benzo[g,h,i]perylene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Benzo[k]fluoranthene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Chrysene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Dibenzo[a,h]anthracene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Fluoranthene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Fluorene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Indeno[1,2,3-c,d] pyrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Naphthalene	0.0682 U	0.110	0.0341	ug/L	1	XMS5373	XXX22498	
Phenanthrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Pyrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5373	XXX22498	
Terphenyl-d14 <surr></surr>	101	50-126		%	1	XMS5373	XXX22498	
Batch Information								
Analytical Batch: XMS5373	Prep Batch: XXX22498					Initial Prep Wt./Vol.: 910 mL		
Analytical Method: 8270D SIMS	Prep Method: SW3520C					Prep Extract Vol.: 1 mL		

Prep Date/Time: 04/16/10 09:50

Analysis Date/Time: 04/26/10 06:57

Dilution Factor: 1



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW03-WG19

SGS Ref. #: 1101584004

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 14:55 Receipt Date/Time: 04/15/10 11:10

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch Qualifiers
Lead	0.620 U	1.00	0.310	ug/L	5	MMS6398	MXX22905
Batch Information							
Analytical Batch: MMS6398		Prep Batch: I	MXX22905			Initial Prep	Nt./Vol.: 50 mL
Analytical Method: SW6020		Prep Method	: SW3010A			Prep Extrac	t Vol.: 50 mL
Analysis Date/Time: 04/21/10 11:48		Prep Date/Ti	me: 04/19/10 1	2:10		Container II	D:1101584004-G
Dilution Factor: 5						Analyst: NF	RB



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW03-WG19

SGS Ref. #: 1101584004

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 14:55 Receipt Date/Time: 04/15/10 11:10

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	<u>Qualifiers</u>
Gasoline Range Organics	60.0 U	100	30.0	ug/L	1	VFC9900	VXX20571	1
4-Bromofluorobenzene <surr></surr>	110	50-150		%	1	VFC9900	VXX20571	1
Batch Information								
Analytical Batch: VFC9900		Prep Batch:	VXX20571			Initial Prep	Wt./Vol.: 5 m	nL
Analytical Method: SW8015C		Prep Metho	d: SW5030B			Prep Extra	ct Vol.: 5 mL	
Analysis Date/Time: 04/16/10 13:28		Prep Date/1	ime: 04/16/10	09:20		Container I	D:11015840	04-A
Dilution Factor: 1						Analyst: EA	AΒ	



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW03-WG19

SGS Ref. #: 1101584004 Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 14:55 Receipt Date/Time: 04/15/10 11:10

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Diesel Range Organics	0.320 U	0.426	0.160	mg/L	1	XFC9164	XXX22502	2
5a Androstane <surr></surr>	95.7	50-150		%	1	XFC9164	XXX22502	2
Batch Information								
Analytical Batch: XFC9164		Prep Batch	: XXX22502			Initial Prep	Wt./Vol.: 940) mL
Analytical Method: SW8015C		Prep Metho	od: SW3520C			Prep Extra	ct Vol.: 1 mL	
Analysis Date/Time: 04/28/10 15:05		Prep Date/	Time: 04/19/10 1	10:30		Container I	D:11015840	04-H
Dilution Factor: 1						Analyst: I (CF.	



Client Sample ID: RHMW03-WG19

SGS Ref. #: 1101584004

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 14:55 Receipt Date/Time: 04/15/10 11:10 Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

volumo ouo om omatograpny ma	oo opconoccopy					Analytical	Prep
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Batch	Batch Qualifiers
1,1,1,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,1-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1,2,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,2-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
1,2-Dibromoethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3,5-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichloropropane	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1-Chlorohexane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Acetone	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Benzene	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
Bromobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromochloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromodichloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Bromoform	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromomethane	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
Carbon tetrachloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578

SGS North America Inc. Environmental Division 200 West Potter Drive Anchorage AK 99518 t(907)562.2343 f(907)561 5301 www.ussgs.com Member of SGS Group



Client Sample ID: RHMW03-WG19

SGS Ref. #: 1101584004

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 14:55 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

0.,						Analytical	Prep
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Batch	Batch Qualifiers
Chloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chloroform	0.600 U	1.00	0.300	ug/L	1	VMS11176	VXX20578
Chloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromomethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Ethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Isopropylbenzene (Cumene)	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Methylene chloride	2.00 U	5.00	1.00	ug/L	1	VMS11176	VXX20578
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	1	VMS11176	VXX20578
Naphthalene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
n-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
n-Propylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
o-Xylene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
P & M -Xylene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
sec-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Styrene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
tert-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Toluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Vinyl chloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Xylenes (total)	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane-D4 <surr></surr>	99.5	73-120		%	1	VMS11176	VXX20578
4-Bromofluorobenzene <surr></surr>	100	76-120		%	1	VMS11176	VXX20578
Toluene-d8 <surr></surr>	98.7	80-120		%	1	VMS11176	VXX20578



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW03-WG19

SGS Ref. #: 1101584004

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 14:55 Receipt Date/Time: 04/15/10 11:10

Parameter Batch Information	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> <u>Batch</u>	Qualifiers
Analytical Batch: VMS11176		Prep Batch:	VXX20578			Initial Prep	Nt./Vol.: 5 r	mL
Analytical Method: SW8260B		Prep Metho	d: SW5030B			Prep Extrac	t Vol.: 5 mL	_
Analysis Date/Time: 04/21/10 17:04		Prep Date/T	ime: 04/21/10	11:58		Container II	D:11015840	004-D
Dilution Factor: 1						Analyst: DS	H	



Client Sample ID: RHMW03-WG19

SGS Ref. #: 1101584004

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 14:55 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Analytical Bron

Container ID:1101584004-J

Analyst: JDH

Polynuclear Aromatics GC/MS

						<u>Analytical</u>	<u>Prep</u>	
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	<u>Batch</u>	<u>Qualifiers</u>
1-Methylnaphthalene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
2-Methylnaphthalene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Acenaphthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Acenaphthylene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Benzo(a)Anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Benzo[a]pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Benzo[b]Fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Benzo[g,h,i]perylene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Benzo[k]fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Chrysene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Dibenzo[a,h]anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Fluorene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Indeno[1,2,3-c,d] pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Naphthalene	0.0666 U	0.108	0.0333	ug/L	1	XMS5372	XXX22499	
Phenanthrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499	
Terphenyl-d14 <surr></surr>	98.5	50-126		%	1	XMS5372	XXX22499	
Batch Information								
Analytical Batch: XMS5372		Prep Batch	: XXX22499			Initial Prep	Wt./Vol.: 930	mL
Analytical Method: 8270D SIMS		Prep Metho	od: SW3520C			Prep Extra	t Vol.: 1 mL	

Prep Date/Time: 04/16/10 10:30

Analysis Date/Time: 04/23/10 16:55

Dilution Factor: 1



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW02-WG19

SGS Ref. #: 1101584005

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 16:10 Receipt Date/Time: 04/15/10 11:10

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch Qualifiers
Lead	0.620 U	1.00	0.310	ug/L	5	MMS6398	MXX22905
Batch Information							
Analytical Batch: MMS6398		Prep Batch: N	MXX22905			Initial Prep	Wt./Vol.: 50 mL
Analytical Method: SW6020		Prep Method:	: SW3010A			Prep Extrac	t Vol.: 50 mL
Analysis Date/Time: 04/21/10 11:50		Prep Date/Tir	me: 04/19/10 12	2:10		Container II	D:1101584005-G
Dilution Factor: 5						Analyst: NF	RB



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW02-WG19

SGS Ref. #: 1101584005

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 16:10 Receipt Date/Time: 04/15/10 11:10

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Gasoline Range Organics	39.3J	100	30.0	ug/L	1	VFC9900	VXX20571	1
4-Bromofluorobenzene <surr></surr>	122	50-150		%	1	VFC9900	VXX20571	1
Batch Information								
Analytical Batch: VFC9900		Prep Batch:	VXX20571			Initial Prep	Wt./Vol.: 5 m	ıL
Analytical Method: SW8015C		Prep Metho	d: SW5030B			Prep Extra	ct Vol.: 5 mL	
Analysis Date/Time: 04/16/10 13:47		Prep Date/1	ime: 04/16/10 (09:20		Container I	D:11015840	05-A
Dilution Factor: 1						Analyst: EA	AΒ	



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW02-WG19

SGS Ref. #: 1101584005 Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 16:10 Receipt Date/Time: 04/15/10 11:10

Semivolatile Organic Fuels Department

Parameter Parameter	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Diesel Range Organics	2.35	0.426	0.160	mg/L	1	XFC9164	XXX22502	2
5a Androstane <surr></surr>	83.2	50-150		%	1	XFC9164	XXX22502	2
Batch Information								
Analytical Batch: XFC9164		Prep Batch	: XXX22502			Initial Prep	Wt./Vol.: 940) mL
Analytical Method: SW8015C		Prep Metho	od: SW3520C			Prep Extra	ct Vol.: 1 mL	
Analysis Date/Time: 04/28/10 15:28		Prep Date/	Time: 04/19/10 1	10:30		Container I	D:11015840	05-H
Dilution Factor: 1						Analyst: L0	Œ	



Client Sample ID: RHMW02-WG19

SGS Ref. #: 1101584005

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 16:10 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Tolumo Guo omomutogrupny/muot	о ороси сосору					Analytical	<u>Prep</u>
1.1,1-Trichloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1,2,2-Teirdachloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,1-1,2-Trichloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropthane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropthene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trinchlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibriomo-S-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene <th><u>Parameter</u></th> <th>Result</th> <th>LOQ/CL</th> <th><u>DL</u></th> <th><u>Units</u></th> <th><u>DF</u></th> <th></th> <th>·</th>	<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>		·
1.1,1-Trichloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1,2,2-Teirdachloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,1-Dichloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropthane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropthane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trinchlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibriomo-S-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene	1.1.1.2-Tetrachloroethane	0.300 U	0.500	0.150	ua/l	1	VMS11176	VXX20578
1.1,2,2-Tetrachloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,1,2-Tinchloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloroethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropropene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Dirbromo-S-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene					=			
1.1,2-Trichloroethane								
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1,1-Dichloroethene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,1-Dichloropropene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trichloropenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichomo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane <					-			
1,1-Dichloropropene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibromo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene	1,1-Dichloroethene	0.620 U	1.00	0.310	-			VXX20578
1,2,3-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,3-Trichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibromo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene <t< td=""><td>1,1-Dichloropropene</td><td>0.620 U</td><td>1.00</td><td></td><td>-</td><td>1</td><td></td><td>VXX20578</td></t<>	1,1-Dichloropropene	0.620 U	1.00		-	1		VXX20578
1,2,3-Trichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibromo-s-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dibromo-shane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0	• •		1.00					VXX20578
1,2,4-Trichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibromo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropenzene 0.620 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene		0.620 U	1.00		=			VXX20578
1,2,4-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dibromo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.620 U	1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	-	1	VMS11176	
1,2-Dibromo-3-chloropropane 1.24 U 2.00 0.620 ug/L 1 VMS11176 VXX20578 1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropthane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 0.400 0.150 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane<	1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	=	1	VMS11176	VXX20578
1,2-Dibromoethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloropenane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-5-Dichloropenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,4-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U <td>1,2-Dibromo-3-chloropropane</td> <td>1.24 U</td> <td>2.00</td> <td>0.620</td> <td></td> <td>1</td> <td>VMS11176</td> <td>VXX20578</td>	1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620		1	VMS11176	VXX20578
1,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,2-Dichloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3,5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,5-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,-Butanone (MEK) 6.20 U	1,2-Dibromoethane	0.620 U	1.00	0.310	=	1	VMS11176	VXX20578
1,2-Dichloroethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-F-Timethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U	1,2-Dichlorobenzene	0.620 U	1.00	0.310	-	1	VMS11176	VXX20578
1,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3,5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1,5-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,5-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,5-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Chlorobulene 0.620 U	1,2-Dichloroethane	0.300 U	0.500	0.150	-	1	VMS11176	VXX20578
1,3,5-Trimethylbenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorobexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Holorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578	1,2-Dichloropropane	0.620 U	1.00	0.310		1	VMS11176	VXX20578
1,3-Dichlorobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 <td>1,3,5-Trimethylbenzene</td> <td>0.620 U</td> <td>1.00</td> <td>0.310</td> <td></td> <td>1</td> <td>VMS11176</td> <td>VXX20578</td>	1,3,5-Trimethylbenzene	0.620 U	1.00	0.310		1	VMS11176	VXX20578
1,3-Dichloropropane 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 1,4-Dichlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromoch	1,3-Dichlorobenzene	0.620 U	1.00	0.310	-	1	VMS11176	VXX20578
1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform <td< td=""><td>1,3-Dichloropropane</td><td>0.240 U</td><td>0.400</td><td>0.120</td><td>-</td><td>1</td><td>VMS11176</td><td>VXX20578</td></td<>	1,3-Dichloropropane	0.240 U	0.400	0.120	-	1	VMS11176	VXX20578
1-Chlorohexane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2,2-Dichloropropane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform <td< td=""><td>1,4-Dichlorobenzene</td><td>0.300 U</td><td>0.500</td><td>0.150</td><td>ug/L</td><td>1</td><td>VMS11176</td><td>VXX20578</td></td<>	1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
2-Butanone (MEK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	1-Chlorohexane	0.620 U	1.00	0.310		1	VMS11176	VXX20578
2-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Isopropyltoluene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Methyl-2-pentanone (MIBK) 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	4-Chlorotoluene	0.620 U	1.00	0.310		1	VMS11176	VXX20578
Acetone 6.20 U 10.0 3.10 ug/L 1 VMS11176 VXX20578 Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Benzene 0.240 U 0.400 0.120 ug/L 1 VMS11176 VXX20578 Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Bromobenzene 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Acetone	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Bromochloromethane 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578 Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Benzene	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
Bromodichloromethane 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578 Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Bromobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromoform 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Bromochloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
-g	Bromodichloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
	Bromoform	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
	Bromomethane	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
Carbon tetrachloride 0.620 U 1.00 0.310 ug/L 1 VMS11176 VXX20578	Carbon tetrachloride	0.620 U	1.00	0.310		1	VMS11176	VXX20578
Chlorobenzene 0.300 U 0.500 0.150 ug/L 1 VMS11176 VXX20578	Chlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578

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Client Sample ID: RHMW02-WG19

SGS Ref. #: 1101584005

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 16:10 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

						Analytical	<u>Prep</u>
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
Chloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chloroform	0.600 U	1.00	0.300	ug/L	1	VMS11176	VXX20578
Chloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromomethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Ethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Isopropylbenzene (Cumene)	4.15	1.00	0.310	ug/L	1	VMS11176	VXX20578
Methylene chloride	2.00 U	5.00	1.00	ug/L	1	VMS11176	VXX20578
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	1	VMS11176	VXX20578
Naphthalene	20.6	2.00	0.620	ug/L	1	VMS11176	VXX20578
n-Butylbenzene	3.40	1.00	0.310	ug/L	1	VMS11176	VXX20578
n-Propylbenzene	6.24	1.00	0.310	ug/L	1	VMS11176	VXX20578
o-Xylene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
P & M -Xylene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
sec-Butylbenzene	4.33	1.00	0.310	ug/L	1	VMS11176	VXX20578
Styrene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
tert-Butylbenzene	0.840J	1.00	0.310	ug/L	1	VMS11176	VXX20578
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Toluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Vinyl chloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Xylenes (total)	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane-D4 <surr></surr>	100	73-120		%	1	VMS11176	VXX20578
4-Bromofluorobenzene <surr></surr>	101	76-120		%	1	VMS11176	VXX20578
Toluene-d8 <surr></surr>	96.9	80-120		%	1	VMS11176	VXX20578



Client Sample ID: RHMW02-WG19

SGS Ref. #: 1101584005

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 16:10 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Parameter Batch Information	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> <u>Batch</u>	Qualifiers
Analytical Batch: VMS11176		Prep Batch:	VXX20578			Initial Prep	Wt./Vol.: 5 r	mL
Analytical Method: SW8260B		Prep Metho	d: SW5030B			Prep Extrac	t Vol.: 5 mL	_
Analysis Date/Time: 04/21/10 17:31		Prep Date/1	ime: 04/21/10	11:58		Container II	D:11015840	005-D
Dilution Factor: 1						Analyst: DS	SH	



Client Sample ID: RHMW02-WG19

SGS Ref. #: 1101584005

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 16:10 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Polynuclear Aromatics GC/MS

r orymuoloui / ii olimuuloo oo/iiilo						<u>Analytical</u>	<u>Prep</u>
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
1-Methylnaphthalene	6.61	0.538	0.161	ug/L	10	XMS5373	XXX22499
2-Methylnaphthalene	1.69	0.538	0.161	ug/L	10	XMS5373	XXX22499
Acenaphthene	0.426	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Acenaphthylene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Benzo(a)Anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Benzo[a]pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Benzo[b]Fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Benzo[g,h,i]perylene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Benzo[k]fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Chrysene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Dibenzo[a,h]anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Fluorene	0.224	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Indeno[1,2,3-c,d] pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Naphthalene	14.3	1.08	0.333	ug/L	10	XMS5373	XXX22499
Phenanthrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499
Terphenyl-d14 <surr></surr>	104	50-126		%	1	XMS5372	XXX22499
Batch Information							
Analytical Batch: XMS5372		Prep Batch	: XXX22499			Initial Prep	Wt./Vol.: 930 mL
Analytical Method: 8270D SIMS		Prep Metho	od: SW3520C			Prep Extrac	t Vol.: 1 mL
Analysis Date/Time: 04/23/10 17:14		Prep Date/	Time: 04/16/10 1	0:30		Container II	D:1101584005-J
Dilution Factor: 1						Analyst: JD	Н
Analytical Batch: XMS5373		Prep Batch	: XXX22499			Initial Prep	Wt./Vol.: 930 mL
Analytical Method: 8270D SIMS		Prep Metho	od: SW3520C			Prep Extrac	t Vol.: 1 mL
Analysis Date/Time: 04/25/10 21:53		Prep Date/	Time: 04/16/10 1	0:30		Container II	D:1101584005-J
Dilution Factor: 10						Analyst: JD	Н



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMWA01-WG19

SGS Ref. #: 1101584006

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 12:05 Receipt Date/Time: 04/15/10 11:10

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch Qualifiers
Lead	0.620 U	1.00	0.310	ug/L	5	MMS6398	MXX22905
Batch Information							
Analytical Batch: MMS6398		Prep Batch: I	MXX22905			Initial Prep	Nt./Vol.: 50 mL
Analytical Method: SW6020		Prep Method	: SW3010A			Prep Extrac	t Vol.: 50 mL
Analysis Date/Time: 04/21/10 11:52		Prep Date/Ti	me: 04/19/10 1	2:10		Container II	D:1101584006-G
Dilution Factor: 5						Analyst: NF	RB



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMWA01-WG19

SGS Ref. #: 1101584006

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 12:05 Receipt Date/Time: 04/15/10 11:10

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch	<u>Qualifiers</u>
Gasoline Range Organics	39.0J	100	30.0	ug/L	1	VFC9900	VXX20571	I
4-Bromofluorobenzene <surr></surr>	120	50-150		%	1	VFC9900	VXX20571	l
Batch Information								
Analytical Batch: VFC9900		Prep Batch	: VXX20571			Initial Prep	Wt./Vol.: 5 m	ıL
Analytical Method: SW8015C		Prep Metho	d: SW5030B			Prep Extra	ct Vol.: 5 mL	
Analysis Date/Time: 04/16/10 14:06		Prep Date/	Γime: 04/16/10 (09:20		Container I	D:110158400	06-A
Dilution Factor: 1						Analyst: EA	AΒ	



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMWA01-WG19

SGS Ref. #: 1101584006

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 12:05 Receipt Date/Time: 04/15/10 11:10

Semivolatile Organic Fuels Department

Parameter	Result	LOQ/CL	DL	Units	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Diesel Range Organics	2.08	0.430	0.161	mg/L	1	XFC9164	XXX22502	2
5a Androstane <surr></surr>	77.8	50-150		%	1	XFC9164	XXX22502	2
Batch Information								
Analytical Batch: XFC9164		Prep Batch	: XXX22502			Initial Prep	Wt./Vol.: 930) mL
Analytical Method: SW8015C		Prep Metho	od: SW3520C			Prep Extra	ct Vol.: 1 mL	
Analysis Date/Time: 04/28/10 15:49		Prep Date/	Time: 04/19/10 1	10:30		Container I	D:11015840	06-H
Dilution Factor: 1						Analyst: LC	Œ	



Client Sample ID: RHMWA01-WG19

SGS Ref. #: 1101584006

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 12:05 Receipt Date/Time: 04/15/10 11:10 Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

						Analytical	Prep
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Batch	Batch Qualifiers
1,1,1,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,1-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1,2,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,2-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
1,2-Dibromoethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3,5-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichloropropane	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1-Chlorohexane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Acetone	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Benzene	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
Bromobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromochloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromodichloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Bromoform	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromomethane	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
Carbon tetrachloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578

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Client Sample ID: RHMWA01-WG19

SGS Ref. #: 1101584006

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 12:05 Receipt Date/Time: 04/15/10 11:10 Print Date: 4/30/2010 10:42 am

						Analytical	<u>Prep</u>
<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
Chloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chloroform	0.600 U	1.00	0.300	ug/L	1	VMS11176	VXX20578
Chloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromomethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Ethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Isopropylbenzene (Cumene)	4.08	1.00	0.310	ug/L	1	VMS11176	VXX20578
Methylene chloride	2.00 U	5.00	1.00	ug/L	1	VMS11176	VXX20578
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	1	VMS11176	VXX20578
Naphthalene	21.4	2.00	0.620	ug/L	1	VMS11176	VXX20578
n-Butylbenzene	3.56	1.00	0.310	ug/L	1	VMS11176	VXX20578
n-Propylbenzene	6.44	1.00	0.310	ug/L	1	VMS11176	VXX20578
o-Xylene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
P & M -Xylene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
sec-Butylbenzene	4.34	1.00	0.310	ug/L	1	VMS11176	VXX20578
Styrene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
tert-Butylbenzene	0.790J	1.00	0.310	ug/L	1	VMS11176	VXX20578
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Toluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Vinyl chloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Xylenes (total)	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane-D4 <surr></surr>	102	73-120		%	1	VMS11176	VXX20578
4-Bromofluorobenzene <surr></surr>	105	76-120		%	1	VMS11176	VXX20578
Toluene-d8 <surr></surr>	98	80-120		%	1	VMS11176	VXX20578



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMWA01-WG19

SGS Ref. #: 1101584006

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 12:05 Receipt Date/Time: 04/15/10 11:10

Parameter Batch Information	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> <u>Batch</u>	Qualifiers	
Analytical Batch: VMS11176	Prep Batch: VXX20578				Initial Prep Wt./Vol.: 5 mL				
Analytical Method: SW8260B		Prep Metho	d: SW5030B			Prep Extract Vol.: 5 mL			
Analysis Date/Time: 04/21/10 17:57		Prep Date/T	ime: 04/21/10	11:58		Container II	D:11015840	006-D	
Dilution Factor: 1						Analyst: DS	H		



Client Sample ID: RHMWA01-WG19

SGS Ref. #: 1101584006

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 12:05 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Polynuclear Aromatics GC/MS

r c.yc						Analytical	<u>Prep</u>
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
1-Methylnaphthalene	5.90	0.549	0.165	ug/L	10	XMS5373	XXX22499
2-Methylnaphthalene	1.90	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Acenaphthene	0.429	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Acenaphthylene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Anthracene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Benzo(a)Anthracene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Benzo[a]pyrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Benzo[b]Fluoranthene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Benzo[g,h,i]perylene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Benzo[k]fluoranthene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Chrysene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Dibenzo[a,h]anthracene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Fluoranthene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Fluorene	0.230	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Indeno[1,2,3-c,d] pyrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Naphthalene	12.7	1.10	0.341	ug/L	10	XMS5373	XXX22499
Phenanthrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Pyrene	0.0330 U	0.0549	0.0165	ug/L	1	XMS5372	XXX22499
Terphenyl-d14 <surr></surr>	93.6	50-126		%	1	XMS5372	XXX22499
Batch Information							
Analytical Batch: XMS5372		Prep Batch	: XXX22499			Initial Prep	Wt./Vol.: 910 mL
Analytical Method: 8270D SIMS		Prep Metho	od: SW3520C			Prep Extrac	t Vol.: 1 mL
Analysis Date/Time: 04/23/10 17:32		Prep Date/	Time: 04/16/10 1	0:30		Container II	D:1101584006-J
Dilution Factor: 1						Analyst: JD	H
Analytical Batch: XMS5373		Prep Batch	: XXX22499			Initial Prep	Wt./Vol.: 910 mL
Analytical Method: 8270D SIMS		Prep Metho	od: SW3520C			Prep Extrac	t Vol.: 1 mL
Analysis Date/Time: 04/25/10 22:12		Prep Date/	Time: 04/16/10 1	0:30		Container II	D:1101584006-J
Dilution Factor: 10						Analyst: JD	Н



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW01-WG19

SGS Ref. #: 1101584007

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 18:40 Receipt Date/Time: 04/15/10 11:10

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch Qualif	<u>iers</u>
Lead	0.620 U	1.00	0.310	ug/L	5	MMS6398	MXX22905	
Batch Information								
Analytical Batch: MMS6398		Prep Batch: I	MXX22905			Initial Prep	Vt./Vol.: 50 mL	
Analytical Method: SW6020		Prep Method	: SW3010A			Prep Extrac	t Vol.: 50 mL	
Analysis Date/Time: 04/21/10 11:54		Prep Date/Ti	me: 04/19/10 1	2:10		Container II	D:1101584007-G	
Dilution Factor: 5						Analyst: NF	lB	



Client Sample ID: RHMW01-WG19

Collection Date/Time: 04/13/10 18:40 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Volatile Fuels Department

SGS Ref. #: 1101584007

<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Gasoline Range Organics	60.0 U	100	30.0	ug/L	1	VFC9900	VXX20571	
4-Bromofluorobenzene <surr></surr>	105	50-150		%	1	VFC9900	VXX20571	
Batch Information								
Analytical Batch: VFC9900		Prep Batch	: VXX20571			Initial Prep	Wt./Vol.: 5 m	L
Analytical Method: SW8015C		Prep Metho	d: SW5030B			Prep Extra	ct Vol.: 5 mL	
Analysis Date/Time: 04/16/10 14:25		Prep Date/	Γime: 04/16/10	09:20		Container I	D:110158400)7-A
Dilution Factor: 1						Analyst: EA	AB	



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW01-WG19

SGS Ref. #: 1101584007 Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 18:40 Receipt Date/Time: 04/15/10 11:10

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Diesel Range Organics	0.377J	0.435	0.163	mg/L	1	XFC9164	XXX22502	2
5a Androstane <surr></surr>	98.8	50-150		%	1	XFC9164	XXX22502	2
Batch Information								
Analytical Batch: XFC9164		Prep Batch	: XXX22502			Initial Prep	Wt./Vol.: 920) mL
Analytical Method: SW8015C		Prep Metho	od: SW3520C			Prep Extra	ct Vol.: 1 mL	
Analysis Date/Time: 04/28/10 16:10		Prep Date/	Time: 04/19/10 1	10:30		Container I	D:11015840	07-H
Dilution Factor: 1						Analyst: I (CF.	



Client Sample ID: RHMW01-WG19

SGS Ref. #: 1101584007

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 18:40 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

Volume Sub-Smothatography, mass Special Society						Analytical	Prep
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Batch	Batch Qualifiers
1,1,1,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,1-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1,2,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,2-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
1,2-Dibromoethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3,5-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichloropropane	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1-Chlorohexane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Acetone	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Benzene	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
Bromobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromochloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromodichloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Bromoform	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromomethane	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
Carbon tetrachloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578

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Client Sample ID: RHMW01-WG19

SGS Ref. #: 1101584007

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 18:40 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

0.,						Analytical	<u>Prep</u>
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
Chloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chloroform	0.600 U	1.00	0.300	ug/L	1	VMS11176	VXX20578
Chloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromomethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Ethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Isopropylbenzene (Cumene)	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Methylene chloride	2.00 U	5.00	1.00	ug/L	1	VMS11176	VXX20578
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	1	VMS11176	VXX20578
Naphthalene	1.24 U	2.00	0.620	ug/L	1	VMS11182	VXX20584
n-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
n-Propylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
o-Xylene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
P & M -Xylene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
sec-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Styrene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
tert-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Toluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Vinyl chloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Xylenes (total)	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane-D4 <surr></surr>	104	73-120		%	1	VMS11176	VXX20578
4-Bromofluorobenzene <surr></surr>	97.3	76-120		%	1	VMS11176	VXX20578
Toluene-d8 <surr></surr>	98.9	80-120		%	1	VMS11176	VXX20578



Print Date: 4/30/2010 10:42 am

Analytical Bron

Client Sample ID: RHMW01-WG19

SGS Ref. #: 1101584007 Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 18:40 Receipt Date/Time: 04/15/10 11:10

						Anaiyticai	Prep	
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	<u>Batch</u>	Qualifiers
Batch Information								
Analytical Batch: VMS11176		Prep Batch	n: VXX20578			Initial Prep	Wt./Vol.: 5	mL
Analytical Method: SW8260B		Prep Metho		L				
Analysis Date/Time: 04/21/10 18:24	Prep Date/	Container	ID:1101584	007-D				
Dilution Factor: 1	Dilution Factor: 1					Analyst: [SH	
Analytical Batch: VMS11182		Prep Batch	n: VXX20584			Initial Prep	Wt./Vol.: 5	mL
Analytical Method: SW8260B		Prep Metho	od: SW5030B			Prep Extra	act Vol.: 5 m	L
Analysis Date/Time: 04/22/10 15:42		Prep Date/	Time: 04/22/10	11:17		Container	ID:1101584	007-E
Dilution Factor: 1						Analyst: J	DB	



Client Sample ID: RHMW01-WG19

SGS Ref. #: 1101584007

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 18:40 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Container ID:1101584007-J

Analyst: JDH

Polynuclear Aromatics GC/MS

<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> <u>Batch</u> Qu	alifiers	
1-Methylnaphthalene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
2-Methylnaphthalene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Acenaphthene	0.0450J	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Acenaphthylene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Benzo(a)Anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Benzo[a]pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Benzo[b]Fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Benzo[g,h,i]perylene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Benzo[k]fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Chrysene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Dibenzo[a,h]anthracene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Fluoranthene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Fluorene	0.0455J	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Indeno[1,2,3-c,d] pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Naphthalene	0.0666 U	0.108	0.0333	ug/L	1	XMS5372	XXX22499		
Phenanthrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Pyrene	0.0322 U	0.0538	0.0161	ug/L	1	XMS5372	XXX22499		
Terphenyl-d14 <surr></surr>	98.1	50-126		%	1	XMS5372	XXX22499		
Batch Information									
Analytical Batch: XMS5372	Prep Batch: XXX22499				Initial Prep Wt./Vol.: 930 mL				
Analytical Method: 8270D SIMS		Prep Metho	d: SW3520C			Prep Extrac	t Vol.: 1 mL		

Prep Date/Time: 04/16/10 10:30

Analysis Date/Time: 04/23/10 17:50

Dilution Factor: 1



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW05-WG19

SGS Ref. #: 1101584008

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 13:20 Receipt Date/Time: 04/15/10 11:10

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	Prep Batch Qualifiers
Lead	0.620 U	1.00	0.310	ug/L	5	MMS6398	MXX22905
Batch Information							
Analytical Batch: MMS6398		Prep Batch: I	MXX22905			Initial Prep	Nt./Vol.: 50 mL
Analytical Method: SW6020		Prep Method	: SW3010A			Prep Extrac	t Vol.: 50 mL
Analysis Date/Time: 04/21/10 12:06		Prep Date/Ti	me: 04/19/10 1	2:10		Container II	D:1101584008-G
Dilution Factor: 5						Analyst: NF	RB



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW05-WG19

Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 13:20 Receipt Date/Time: 04/15/10 11:10

Volatile Fuels Department

SGS Ref. #: 1101584008

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Gasoline Range Organics	60.0 U	100	30.0	ug/L	1	VFC9900	VXX20571	1
4-Bromofluorobenzene <surr></surr>	99.5	50-150		%	1	VFC9900	VXX20571	1
Batch Information								
Analytical Batch: VFC9900		Prep Batch	: VXX20571			Initial Prep	Wt./Vol.: 5 m	ıL
Analytical Method: SW8015C		Prep Metho	d: SW5030B			Prep Extra	ct Vol.: 5 mL	
Analysis Date/Time: 04/16/10 14:44		Prep Date/	Γime: 04/16/10 (09:20		Container I	D:110158400	08-A
Dilution Factor: 1						Analyst: EA	AΒ	



Client Sample ID: RHMW05-WG19

SGS Ref. #: 1101584008

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 13:20 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Diesel Range Organics	0.300 U	0.400	0.150	mg/L	1	XFC9164	XXX22502	2
5a Androstane <surr></surr>	94.3	50-150		%	1	XFC9164	XXX22502	2
Batch Information								
Analytical Batch: XFC9164		Prep Batch	: XXX22502			Initial Prep	Wt./Vol.: 100	00 mL
Analytical Method: SW8015C		Prep Metho	od: SW3520C			Prep Extra	ct Vol.: 1 mL	
Analysis Date/Time: 04/28/10 16:52		Prep Date/	Time: 04/19/10 1	10:30		Container I	D:11015840	08-H
Dilution Factor: 1						Analyst: LC	Œ	



Client Sample ID: RHMW05-WG19

SGS Ref. #: 1101584008

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 13:20 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

Volume Sub-Smothatography, mass Special Society						Analytical	Prep
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Batch	Batch Qualifiers
1,1,1,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,1-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1,2,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,2-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
1,2-Dibromoethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3,5-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichloropropane	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1-Chlorohexane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Acetone	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Benzene	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
Bromobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromochloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromodichloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Bromoform	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromomethane	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
Carbon tetrachloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578

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Client Sample ID: RHMW05-WG19

SGS Ref. #: 1101584008

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 13:20 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

						Analytical	<u>Prep</u>
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
Chloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chloroform	0.600 U	1.00	0.300	ug/L	1	VMS11176	VXX20578
Chloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromomethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Ethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Isopropylbenzene (Cumene)	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Methylene chloride	2.00 U	5.00	1.00	ug/L	1	VMS11176	VXX20578
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	1	VMS11176	VXX20578
Naphthalene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
n-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
n-Propylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
o-Xylene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
P & M -Xylene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
sec-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Styrene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
tert-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Toluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Vinyl chloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Xylenes (total)	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane-D4 <surr></surr>	99.6	73-120		%	1	VMS11176	VXX20578
4-Bromofluorobenzene <surr></surr>	105	76-120		%	1	VMS11176	VXX20578
Toluene-d8 <surr></surr>	97.8	80-120		%	1	VMS11176	VXX20578



Print Date: 4/30/2010 10:42 am

Client Sample ID: RHMW05-WG19

SGS Ref. #: 1101584008 Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 13:20 Receipt Date/Time: 04/15/10 11:10

Parameter Batch Information	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
Analytical Batch: VMS11176		Prep Batch:	VXX20578			Initial Prep	Wt./Vol.: 5 r	mL
Analytical Method: SW8260B		Prep Metho	d: SW5030B			Prep Extrac	t Vol.: 5 ml	_
Analysis Date/Time: 04/21/10 18:50		Prep Date/T	ime: 04/21/10	11:58		Container II	D:11015840	008-D
Dilution Factor: 1						Analyst: DS	SH	



Client Sample ID: RHMW05-WG19

SGS Ref. #: 1101584008

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 13:20 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Container ID:1101584008-J

Analyst: JDH

Polynuclear Aromatics GC/MS

<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	Qualifiers
1-Methylnaphthalene	0.0335J	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
2-Methylnaphthalene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Acenaphthene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Acenaphthylene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Anthracene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Benzo(a)Anthracene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Benzo[a]pyrene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Benzo[b]Fluoranthene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Benzo[g,h,i]perylene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Benzo[k]fluoranthene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Chrysene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Dibenzo[a,h]anthracene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Fluoranthene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Fluorene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Indeno[1,2,3-c,d] pyrene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Naphthalene	0.0752J	0.109	0.0337	ug/L	1	XMS5372	XXX22499	
Phenanthrene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Pyrene	0.0326 U	0.0543	0.0163	ug/L	1	XMS5372	XXX22499	
Terphenyl-d14 <surr></surr>	101	50-126		%	1	XMS5372	XXX22499	
Batch Information								
Analytical Batch: XMS5372		Prep Batch:	XXX22499			Initial Prep	Wt./Vol.: 920 r	mL
Analytical Method: 8270D SIMS		Prep Metho	d: SW3520C		Prep Extract Vol.: 1 mL			

Prep Date/Time: 04/16/10 10:30

Analysis Date/Time: 04/23/10 18:09

Dilution Factor: 1



Print Date: 4/30/2010 10:42 am

Client Sample ID: **TB01-WG19** SGS Ref. #: 1101584009

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 08:05 Receipt Date/Time: 04/15/10 11:10

Volatile Fuels Department

<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> Batch	<u>Qualifiers</u>
Gasoline Range Organics	60.0 U	100	30.0	ug/L	1	VFC9900	VXX2057	1
4-Bromofluorobenzene <surr></surr>	112	50-150		%	1	VFC9900	VXX2057	1
Batch Information								
Analytical Batch: VFC9900		Prep Batch	: VXX20571			Initial Prep	Wt./Vol.: 5 n	nL
Analytical Method: SW8015C		Prep Metho	d: SW5030B			Prep Extra	ct Vol.: 5 mL	
Analysis Date/Time: 04/16/10 11:29		Prep Date/Time: 04/16/10 09:20				Container I	D:11015840	009-A
Dilution Factor: 1						Analyst: EA	AΒ	



The Environmental Company, Inc. (TEC)

Client Sample ID: TB01-WG19

SGS Ref. #: 1101584009

Project ID: 3354-003 Red Hill BFSF Matrix: Water (Surface, Eff., Ground) Collection Date/Time: 04/13/10 08:05 Receipt Date/Time: 04/15/10 11:10

Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

Volume Gue Ginematography/made opeotrocoopy						Analytical	Prep
<u>Parameter</u>	Result	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Batch	Batch Qualifiers
1,1,1,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,1-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1,2,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,1,2-Trichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,1-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,3-Trichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
1,2-Dibromoethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3,5-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
1,3-Dichloropropane	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
1-Chlorohexane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Chlorotoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Acetone	6.20 U	10.0	3.10	ug/L	1	VMS11176	VXX20578
Benzene	0.240 U	0.400	0.120	ug/L	1	VMS11176	VXX20578
Bromobenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromochloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromodichloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Bromoform	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Bromomethane	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
Carbon tetrachloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chlorobenzene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578

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The Environmental Company, Inc. (TEC)

Client Sample ID: **TB01-WG19** SGS Ref. #: 1101584009

Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 08:05 Receipt Date/Time: 04/15/10 11:10 Print Date: 4/30/2010 10:42 am

Volatile Gas Chromatography/Mass Spectroscopy

						Analytical	<u>Prep</u>
<u>Parameter</u>	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Batch</u>	Batch Qualifiers
Chloroethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Chloroform	0.600 U	1.00	0.300	ug/L	1	VMS11176	VXX20578
Chloromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	1	VMS11176	VXX20578
Dibromomethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Ethylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Isopropylbenzene (Cumene)	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Methylene chloride	2.00 U	5.00	1.00	ug/L	1	VMS11176	VXX20578
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	1	VMS11176	VXX20578
Naphthalene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
n-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
n-Propylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
o-Xylene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
P & M -Xylene	1.24 U	2.00	0.620	ug/L	1	VMS11176	VXX20578
sec-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Styrene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
tert-Butylbenzene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Toluene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichloroethene	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Vinyl chloride	0.620 U	1.00	0.310	ug/L	1	VMS11176	VXX20578
Xylenes (total)	1.88 U	3.00	0.940	ug/L	1	VMS11176	VXX20578
1,2-Dichloroethane-D4 <surr></surr>	96.6	73-120		%	1	VMS11176	VXX20578
4-Bromofluorobenzene <surr></surr>	103	76-120		%	1	VMS11176	VXX20578
Toluene-d8 <surr></surr>	98.1	80-120		%	1	VMS11176	VXX20578



The Environmental Company, Inc. (TEC)

Print Date: 4/30/2010 10:42 am

Client Sample ID: **TB01-WG19** SGS Ref. #: 1101584009

Project ID: 3354-003 Red Hill BFSF

Matrix: Water (Surface, Eff., Ground)

Collection Date/Time: 04/13/10 08:05 Receipt Date/Time: 04/15/10 11:10

Volatile Gas Chromatography/Mass Spectroscopy

Parameter Batch Information	<u>Result</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Analytical Batch	<u>Prep</u> <u>Batch</u>	Qualifiers	
Analytical Batch: VMS11176	Prep Batch: VXX20578					Initial Prep Wt./Vol.: 5 mL			
Analytical Method: SW8260B		Prep Metho	d: SW5030B		Prep Extract Vol.: 5 mL			_	
Analysis Date/Time: 04/21/10 16:11		Prep Date/Time: 04/21/10 11:58				Container ID:1101584009-B			
Dilution Factor: 1						Analyst: DS	H		



956901

Method Blank

Printed Date/Time
Prep Batch

04/30/2010 10:42

Client Name

The Environmental Company, Inc. (TEC)

Batch Method

XXX22498 SW3520C

Project Name/# Matrix 3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

Date 04/16/2010

QC results affect the following production samples:

1101584001

Parameter	Results	LOQ/CL	DL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
1-Methylnaphthalene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
2-Methylnaphthalene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Acenaphthene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Acenaphthylene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Anthracene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Benzo(a)Anthracene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Benzo[a]pyrene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Benzo[b]Fluoranthene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Benzo[g,h,i]perylene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Benzo[k]fluoranthene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Chrysene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Dibenzo[a,h]anthracene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Fluoranthene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Fluorene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Indeno[1,2,3-c,d] pyrene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Naphthalene	0.0620 U	0.100	0.0310	ug/L	04/26/10
Phenanthrene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Pyrene	0.0300 U	0.0500	0.0150	ug/L	04/26/10
Surrogates					
Terphenyl-d14 <surr></surr>	103	50-126		%	04/26/10

BatchXMS5373Method8270D SIMS

Instrument HP 6890/5973 MS SVQA



956903

Method Blank

Printed Date/Time
Prep Batch

04/30/2010 10:42

Client Name Project Name/# The Environmental Company, Inc. (TEC) 3354-003 Red Hill BFSF

Batch Method Date

XXX22499 SW3520C 04/16/2010

Matrix

3334-003 Red Till BI'SI

Water (Surface, Eff., Ground)

QC results affect the following production samples:

1101584004, 1101584005, 1101584006, 1101584007, 1101584008

Parameter	Results	LOQ/CL	DL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
1-Methylnaphthalene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
2-Methylnaphthalene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Acenaphthene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Acenaphthylene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Anthracene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Benzo(a)Anthracene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Benzo[a]pyrene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Benzo[b]Fluoranthene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Benzo[g,h,i]perylene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Benzo[k]fluoranthene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Chrysene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Dibenzo[a,h]anthracene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Fluoranthene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Fluorene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Indeno[1,2,3-c,d] pyrene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Naphthalene	0.0620 U	0.100	0.0310	ug/L	04/23/10
Phenanthrene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Pyrene	0.0300 U	0.0500	0.0150	ug/L	04/23/10
Surrogates					
Terphenyl-d14 <surr></surr>	111	50-126		%	04/23/10

BatchXMS5372Method8270D SIMS

Instrument HP 6890/5973 MS SVQA



957070

Method Blank

Printed Date/Time 04/30/2010 10:42

Prep

Client Name

The Environmental Company, Inc. (TEC)

Batch VXX20571 Method SW5030B

Project Name/# Matrix

3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

Date 04/16/2010

QC results affect the following production samples:

1101584001, 1101584004, 1101584005, 1101584006, 1101584007, 1101584008, 1101584009

Parameter		Results	LOQ/CL	DL	Units	Analysis Date
Volatile Fuel	s Department					
Gasoline Range On	rganics	60.0 U	100	30.0	ug/L	04/16/10
Surrogates						
4-Bromofluoroben	zene <surr></surr>	107	50-150		%	04/16/10
Batch	VFC9900					
Method	SW8015C					
Instrument	HP 5890 Series II PID+FII	D VCA				



957073

Method Blank

Printed Date/Time
Prep Batch

04/30/2010 10:42

Client Name

The Environmental Company, Inc. (TEC)

Batch Method

XXX22502 SW3520C

Project Name/# Matrix 3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

water (Surface, Eff., Grou

Date 04/19/2010

QC results affect the following production samples:

1101584001, 1101584004, 1101584005, 1101584006, 1101584007, 1101584008

Parameter			Results	LOQ/CL	DL	Units	Analysis Date		
Semivolatile Organic Fuels Department									
Diesel Range Org	anics		0.300 U	0.400	0.150	mg/L	04/28/10		
Surrogates									
5a Androstane <sı< td=""><td>urr></td><td></td><td>86.2</td><td>60-120</td><td></td><td>%</td><td>04/28/10</td></sı<>	urr>		86.2	60-120		%	04/28/10		
Batch	XFC9164								
Method	SW8015C								
Instrument	HP 7890A	FID SV E R							



957189

Method Blank

Printed Date/Time

Prep

04/30/2010 10:42

Client Name

The Environmental Company, Inc. (TEC)

Batch Method

MXX22905 SW3010A

Project Name/# Matrix

Instrument

3354-003 Red Hill BFSF Water (Surface, Eff., Ground)

Perkin Elmer Sciex ICP-MS P3

Date

04/19/2010

QC results affect the following production samples:

1101584001, 1101584004, 1101584005, 1101584006, 1101584007, 1101584008

Parameter		Results	LOQ/CL	DL	Units	Analysis Date
Metals by I	CP/MS					
Lead		0.620 U	1.00	0.310	ug/L	04/21/10
Batch	MMS6398					
Method	SW6020					



SGS Ref.# 957639 Method Blank **Printed Date/Time** 04/30/2010 10:42

Client Name The Environmental Company, Inc. (TEC) Prep Batch VXX20578

 Project Name/#
 3354-003 Red Hill BFSF
 Method
 SW5030B

 Matrix
 Water (Surface, Eff., Ground)
 Date
 04/21/2010

QC results affect the following production samples:

1101584001, 1101584004, 1101584005, 1101584006, 1101584007, 1101584008, 1101584009

Parameter Results LOQ/CL DL Units Analysis

Date

Volatile Gas Chromatography/Mass Spectroscopy



SGS Ref.# Client Name 957639 Method Blank

The Environmental Company, Inc. (TEC)

Project Name/# Matrix 3354-003 Red Hill BFSF Water (Surface, Eff., Ground) Printed Date/Time
Prep Batch

04/30/2010 10:42

Method Date VXX20578 SW5030B 04/21/2010

Parameter	Results	LOQ/CL	DL	Units	Analysis Date
Volatile Gas Chromatography	/Mass Spectros	copy			
1,1,1,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	04/21/10
1,1,1-Trichloroethane	0.620 U	1.00	0.310	ug/L	04/21/10
1,1,2,2-Tetrachloroethane	0.300 U	0.500	0.150	ug/L	04/21/10
1,1,2-Trichloroethane	0.620 U	1.00	0.310	ug/L	04/21/10
1,1-Dichloroethane	0.620 U	1.00	0.310	ug/L	04/21/10
1,1-Dichloroethene	0.620 U	1.00	0.310	ug/L	04/21/10
1,1-Dichloropropene	0.620 U	1.00	0.310	ug/L	04/21/10
1,2,3-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	04/21/10
1,2,3-Trichloropropane	0.620 U	1.00	0.310	ug/L	04/21/10
1,2,4-Trichlorobenzene	0.620 U	1.00	0.310	ug/L	04/21/10
1,2,4-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	04/21/10
1,2-Dibromo-3-chloropropane	1.24 U	2.00	0.620	ug/L	04/21/10
1,2-Dibromoethane	0.620 U	1.00	0.310	ug/L	04/21/10
1,2-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	04/21/10
1,2-Dichloroethane	0.300 U	0.500	0.150	ug/L	04/21/10
1,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	04/21/10
1,3,5-Trimethylbenzene	0.620 U	1.00	0.310	ug/L	04/21/10
1,3-Dichlorobenzene	0.620 U	1.00	0.310	ug/L	04/21/10
1,3-Dichloropropane	0.240 U	0.400	0.120	ug/L	04/21/10
1,4-Dichlorobenzene	0.300 U	0.500	0.150	ug/L	04/21/10
1-Chlorohexane	0.620 U	1.00	0.310	ug/L	04/21/10
2,2-Dichloropropane	0.620 U	1.00	0.310	ug/L	04/21/10
2-Butanone (MEK)	6.20 U	10.0	3.10	ug/L	04/21/10
2-Chlorotoluene	0.620 U	1.00	0.310	ug/L	04/21/10
4-Chlorotoluene	0.620 U	1.00	0.310	ug/L	04/21/10
4-Isopropyltoluene	0.620 U	1.00	0.310	ug/L	04/21/10
4-Methyl-2-pentanone (MIBK)	6.20 U	10.0	3.10	ug/L	04/21/10
Acetone	6.20 U	10.0	3.10	ug/L	04/21/10
Benzene	0.240 U	0.400	0.120	ug/L	04/21/10
Bromobenzene	0.620 U	1.00	0.310	ug/L	04/21/10
Bromochloromethane	0.620 U	1.00	0.310	ug/L	04/21/10
Bromodichloromethane	0.300 U	0.500	0.150	ug/L	04/21/10
Bromoform	0.620 U	1.00	0.310	ug/L	04/21/10
Bromomethane	1.88 U	3.00	0.940	ug/L	04/21/10
Carbon tetrachloride	0.620 U	1.00	0.310	ug/L	04/21/10
Chlorobenzene	0.300 U	0.500	0.150	ug/L	04/21/10
Chloroethane	0.620 U	1.00	0.310	ug/L	04/21/10
Chloroform	0.600 U	1.00	0.300	ug/L	04/21/10
Chloromethan58 of 97	0.620 U	1.00	0.310	ug/L	04/21/10



SGS Ref.# Client Name

Matrix

957639

Method Blank

Project Name/#

The Environmental Company, Inc. (TEC)

3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

Printed Date/Time Batch

Prep

04/30/2010 10:42 VXX20578

Method Date

SW5030B 04/21/2010

Parameter	Results	LOQ/CL	DL	Units	Analysis Date
Volatile Gas Chromatography/Mass	Spectros	сору			
cis-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	04/21/10
cis-1,3-Dichloropropene	0.300 U	0.500	0.150	ug/L	04/21/10
Dibromochloromethane	0.300 U	0.500	0.150	ug/L	04/21/10
Dibromomethane	0.620 U	1.00	0.310	ug/L	04/21/10
Dichlorodifluoromethane	0.620 U	1.00	0.310	ug/L	04/21/10
Ethylbenzene	0.620 U	1.00	0.310	ug/L	04/21/10
Hexachlorobutadiene	0.620 U	1.00	0.310	ug/L	04/21/10
Isopropylbenzene (Cumene)	0.620 U	1.00	0.310	ug/L	04/21/10
Methylene chloride	2.00 U	5.00	1.00	ug/L	04/21/10
Methyl-t-butyl ether	3.00 U	5.00	1.50	ug/L	04/21/10
Naphthalene	1.24 U	2.00	0.620	ug/L	04/21/10
n-Butylbenzene	0.620 U	1.00	0.310	ug/L	04/21/10
n-Propylbenzene	0.620 U	1.00	0.310	ug/L	04/21/10
o-Xylene	0.620 U	1.00	0.310	ug/L	04/21/10
P & M -Xylene	1.24 U	2.00	0.620	ug/L	04/21/10
sec-Butylbenzene	0.620 U	1.00	0.310	ug/L	04/21/10
Styrene	0.620 U	1.00	0.310	ug/L	04/21/10
tert-Butylbenzene	0.620 U	1.00	0.310	ug/L	04/21/10
Tetrachloroethene	0.620 U	1.00	0.310	ug/L	04/21/10
Toluene	0.620 U	1.00	0.310	ug/L	04/21/10
trans-1,2-Dichloroethene	0.620 U	1.00	0.310	ug/L	04/21/10
trans-1,3-Dichloropropene	0.620 U	1.00	0.310	ug/L	04/21/10
Trichloroethene	0.620 U	1.00	0.310	ug/L	04/21/10
Trichlorofluoromethane	0.620 U	1.00	0.310	ug/L	04/21/10
Vinyl chloride	0.620 U	1.00	0.310	ug/L	04/21/10
Xylenes (total)	1.88 U	3.00	0.940	ug/L	04/21/10
Surrogates					
1,2-Dichloroethane-D4 <surr></surr>	99.7	73-120		%	04/21/10
4-Bromofluorobenzene <surr></surr>	99.8	76-120		%	04/21/10
Toluene-d8 <surr></surr>	101	80-120		%	04/21/10
Batch VMS11176					

VMS11176

Method

SW8260B

Instrument

HP 5890 Series II MS1 VJA



957825

Method Blank

Client Name

The Environmental Company, Inc. (TEC)

Project Name/# Matrix

3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

Printed Date/Time Batch Prep

04/30/2010 10:42

Method Date

VXX20584 SW5030B 04/22/2010

QC results affect the following production samples:

1101584007

Parameter		Results	LOQ/CL	DL	Units	Analysis Date
Volatile Gas	Chromatography/Mass	Spectros	сору			
Naphthalene		1.24 U	2.00	0.620	ug/L	04/22/10
Surrogates						
1,2-Dichloroetha	ne-D4 <surr></surr>	97.7	73-120		%	04/22/10
4-Bromofluorobe	enzene <surr></surr>	99	76-120		%	04/22/10
Toluene-d8 <sur< td=""><td>r></td><td>100</td><td>80-120</td><td></td><td>%</td><td>04/22/10</td></sur<>	r>	100	80-120		%	04/22/10
Batch	VMS11182					
Method	SW8260B					
Instrument	HP 5890 Series II MS1 VJA					



956902

Lab Control Sample

Printed Date/Time

Prep

04/30/2010 XXX22498 10:42

Client Name Project Name/#

Matrix

The Environmental Company, Inc. (TEC)

3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

Batch Method Date

SW3520C 04/16/2010

QC results affect the following production samples:

1101584001

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/M	<u>s</u>							
1-Methylnaphthalene	LCS	0.424	85	(42-92)			0.5 ug/L	04/26/2010
2-Methylnaphthalene	LCS	0.370	74	(45-89)			0.5 ug/L	04/26/2010
Acenaphthene	LCS	0.416	83	(45-93)			0.5 ug/L	04/26/2010
Acenaphthylene	LCS	0.457	92	(50-101)			0.5 ug/L	04/26/2010
Anthracene	LCS	0.484	97	(55-105)			0.5 ug/L	04/26/2010
Benzo(a)Anthracene	LCS	0.478	96	(55-120)			0.5 ug/L	04/26/2010
Benzo[a]pyrene	LCS	0.404	81	(57-110)			0.5 ug/L	04/26/2010
Benzo[b]Fluoranthene	LCS	0.487	97	(45-120)			0.5 ug/L	04/26/2010
Benzo[g,h,i]perylene	LCS	0.400	80	(49-116)			0.5 ug/L	04/26/2010
Benzo[k]fluoranthene	LCS	0.430	86	(56-112)			0.5 ug/L	04/26/2010
Chrysene	LCS	0.508	102	(56-109)			0.5 ug/L	04/26/2010
Dibenzo[a,h]anthracene	LCS	0.447	89	(54-113)			0.5 ug/L	04/26/2010
Fluoranthene	LCS	0.494	99	(58-109)			0.5 ug/L	04/26/2010
Fluorene	LCS	0.453	91	(50-98)			0.5 ug/L	04/26/2010
Indeno[1,2,3-c,d] pyrene	LCS	0.427	85	(55-111)			0.5 ug/L	04/26/2010
Naphthalene	LCS	0.355	71	(44-89)			0.5 ug/L	04/26/2010
Phenanthrene	LCS	0.506	101	(50-104)			0.5 ug/L	04/26/2010
Pyrene	LCS	0.483	97	(56-105)			0.5 ug/L	04/26/2010
Surrogates Terphenyl-d14 <surr> 61 of 97</surr>	LCS		94	(50-126)				04/26/2010



Client Name

 SGS Ref.#
 956902
 Lab Control Sample
 Printed Date/Time
 04/30/2010
 10:42

The Environmental Company, Inc. (TEC)

Prep Batch XXX22498

SW3520C

Project Name/#3354-003 Red Hill BFSFDate04/16/2010MatrixWater (Surface, Eff., Ground)

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

Polynuclear Aromatics GC/MS

Batch XMS5373 **Method** 8270D SIMS

Instrument HP 6890/5973 MS SVQA



SGS Ref.# 956904 Lab Control Sample **Printed Date/Time** 04/30/2010 10:42

956905 Lab Control Sample Duplicate Prep Batch XXX22499

Client NameThe Environmental Company, Inc. (TEC)MethodSW3520CProject Name/#3354-003 Red Hill BFSFDate04/16/2010

Matrix Water (Surface, Eff., Ground)

QC results affect the following production samples:

 $1101584004,\,1101584005,\,1101584006,\,1101584007,\,1101584008$

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

Polynuclear Aromatics GC/MS



Client Name

956904 SGS Ref.# Lab Control Sample

> 956905 Lab Control Sample Duplicate

The Environmental Company, Inc. (TEC)

Project Name/# 3354-003 Red Hill BFSF

Water (Surface, Eff., Ground) Matrix

Printed Date/Time Prep Batch

XXX22499 Method Date

SW3520C 04/16/2010

04/30/2010

10:42

LCS/LCSD RPD OC Pct Spiked Analysis RPD Parameter Results Limits Limits Recov Amount Date Polynuclear Aromatics GC/MS LCS 92 * (42-92)1-Methylnaphthalene 0.462 0.5 ug/L 04/23/2010 91 2 (<30) 0.5 ug/L 04/23/2010 **LCSD** 0.453 2-Methylnaphthalene LCS 0.449 90 * (45-89)0.5 ug/L 04/23/2010 LCSD 0.462 92 * 3 (< 30)0.5 ug/L 04/23/2010 LCS 0.476 95 * Acenaphthene (45-93)0.5 ug/L 04/23/2010 $0.5\ ug/L$ **LCSD** 90 6 (< 30)04/23/2010 0.449 97 LCS Acenaphthylene 0.483 (50-101)0.5 ug/L 04/23/2010 LCSD 0.461 92 5 (< 30)0.5 ug/L 04/23/2010 Anthracene LCS 0.505 101 (55-105)0.5 ug/L 04/23/2010 95 (< 30)0.5 ug/L04/23/2010 **LCSD** 0.477 6 LCS Benzo(a)Anthracene 0.562 112 (55-120)0.5 ug/L 04/23/2010 **LCSD** 0.542 108 4 (< 30)0.5 ug/L 04/23/2010 LCS 0.508 102 (57-110) Benzo[a]pyrene 0.5 ug/L 04/23/2010 103 2 (< 30)0.5 ug/L04/23/2010 **LCSD** 0.517 Benzo[b]Fluoranthene LCS 0.566 113 (45-120)0.5 ug/L 04/23/2010 3 (< 30)**LCSD** 0.550 110 0.5 ug/L 04/23/2010 LCS 0.544 109 Benzo[g,h,i]perylene (49-116)0.5 ug/L 04/23/2010 04/23/2010 6 (< 30)0.5 ug/L LCSD 0.580 116 Benzo[k]fluoranthene LCS 0.547 109 (56-112)0.5 ug/L 04/23/2010 LCSD 0.547 109 0 (< 30)0.5 ug/L 04/23/2010 LCS 0.562 Chrysene 112 * (56-109)0.5 ug/L 04/23/2010 110 * 2 (< 30)0.5 ug/L 04/23/2010 LCSD 0.551 Dibenzo[a,h]anthracene LCS 0.540 108 (54-113)0.5 ug/L 04/23/2010 7 LCSD 0.580 116 * (< 30)0.5 ug/L 04/23/2010 Fluoranthene LCS 0.565 113 * (58-109)0.5 ug/L 04/23/2010 115 * 2 (< 30)0.5 ug/L 04/23/2010 **LCSD** 0.577 Fluorene LCS 0.482 97 (50-98)0.5 ug/L 04/23/2010 LCSD 0.465 93 4 (< 30)0.5 ug/L 04/23/2010 64 of 97



Client Name

956904

Lab Control Sample

956905 Lab Control Sample Duplicate

The Environmental Company, Inc. (TEC)

Project Name/# 3354-003 Red Hill BFSF

Matrix Water (Surface, Eff., Ground)

Printed Date/Time

Prep

Batch

04/30/2010

10:42

XXX22499 SW3520C

 $\begin{array}{ll} \textbf{Method} & SW3520C \\ \textbf{Date} & 04/16/2010 \\ \end{array}$

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/M	<u>s</u>							
Indeno[1,2,3-c,d] pyrene	LCS	0.542	108	(55-111)			0.5 ug/L	04/23/2010
	LCSD	0.582	116 *		7	(<30)	0.5 ug/L	04/23/2010
Naphthalene	LCS	0.404	81	(44-89)			0.5 ug/L	04/23/2010
	LCSD	0.402	80		1	(<30)	0.5 ug/L	04/23/2010
Phenanthrene	LCS	0.515	103	(50-104)			0.5 ug/L	04/23/2010
	LCSD	0.491	98	,	5	(<30)	0.5 ug/L	04/23/2010
Pyrene	LCS	0.543	109 *	(56-105)			0.5 ug/L	04/23/2010
- ,	LCSD	0.550	110 *	(** -**)	1	(<30)	0.5 ug/L	04/23/2010
Surrogates								
Terphenyl-d14 <surr></surr>	LCS		100	(50-126)				04/23/2010
	LCSD		105		5			04/23/2010

Batch Method XMS5372

Instrument

8270D SIMS

nent HP 6890/5973 MS SVQA



957071 957072 Lab Control Sample

Printed Date/Time Prep Batch

04/30/2010

10:42

VXX20571

SW5030B

Client Name Project Name/#

Matrix

The Environmental Company, Inc. (TEC)

3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

Method Date

04/16/2010

QC results affect the following production samples:

Lab Control Sample Duplicate

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Fuels Department								
Gasoline Range Organics	LCS LCSD	216 205	108 102	(79-108)	5	(< 20)	200 ug/L 200 ug/L	04/16/2010 04/16/2010
Surrogates								
4-Bromofluorobenzene <surr></surr>	LCS LCSD		108 105	(50-150)	3			04/16/2010 04/16/2010

Batch Method VFC9900 SW8015C

Instrument

HP 5890 Series II PID+FID VCA



Matrix

Lead

04/30/2010 10:42 SGS Ref.# 957190 Lab Control Sample **Printed Date/Time**

> Prep Batch MXX22905

> > 1000 ug/L

04/21/2010

Method SW3010A Client Name The Environmental Company, Inc. (TEC) Project Name/# 3354-003 Red Hill BFSF

101

Date 04/19/2010

Water (Surface, Eff., Ground) QC results affect the following production samples:

1101584001, 1101584004, 1101584005, 1101584006, 1101584007, 1101584008

LCS

1010

QC Pct LCS/LCSD RPD Spiked Analysis RPD Parameter Limits Limits Results Recov Amount Date Metals by ICP/MS

(80-120)

Batch MMS6398 Method SW6020

Instrument Perkin Elmer Sciex ICP-MS P3



SGS Ref.# 957640 Lab Control Sample **Printed Date/Time** 04/30/2010 10:42

Prep Batch VXX20578
The Environmental Company, Inc. (TEC) Method SW5030B

Client NameThe Environmental Company, Inc. (TEC)MethodSW5030BProject Name/#3354-003 Red Hill BFSFDate04/21/2010

Matrix Water (Surface, Eff., Ground)

QC results affect the following production samples:

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

Volatile Gas Chromatography/Mass Spectroscopy



957640

Lab Control Sample

Printed Date/Time

Prep

04/30/2010

10:42

Client Name

The Environmental Company, Inc. (TEC)

Batch Method Date VXX20578 SW5030B 04/21/2010

Project Name/#
Matrix

3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatograph	hy/Mass	Spectrosc	ору					
1,1,1,2-Tetrachloroethane	LCS	27.5	92	(80-120)			30 ug/L	04/21/2010
1,1,1-Trichloroethane	LCS	31.2	104	(80-122)			30 ug/L	04/21/2010
1,1,2,2-Tetrachloroethane	LCS	32.4	108	(76-123)			30 ug/L	04/21/2010
1,1,2-Trichloroethane	LCS	29.7	99	(77-120)			30 ug/L	04/21/2010
1,1-Dichloroethane	LCS	32.2	107	(80-120)			30 ug/L	04/21/2010
1,1-Dichloroethene	LCS	33.9	113	(76-130)			30 ug/L	04/21/2010
1,1-Dichloropropene	LCS	31.7	106	(80-122)			30 ug/L	04/21/2010
1,2,3-Trichlorobenzene	LCS	28.1	94	(77-120)			30 ug/L	04/21/2010
1,2,3-Trichloropropane	LCS	30.9	103	(80-120)			30 ug/L	04/21/2010
1,2,4-Trichlorobenzene	LCS	29.4	98	(80-120)			30 ug/L	04/21/2010
1,2,4-Trimethylbenzene	LCS	30.6	102	(80-125)			30 ug/L	04/21/2010
1,2-Dibromo-3-chloropropane	LCS	31.4	105	(73-130)			30 ug/L	04/21/2010
1,2-Dibromoethane	LCS	30.4	101	(80-120)			30 ug/L	04/21/2010
1,2-Dichlorobenzene	LCS	29.3	98	(80-120)			30 ug/L	04/21/2010
1,2-Dichloroethane	LCS	31.9	106	(80-129)			30 ug/L	04/21/2010
1,2-Dichloropropane	LCS	31.3	104	(80-121)			30 ug/L	04/21/2010
1,3,5-Trimethylbenzene	LCS	30.8	103	(80-128)			30 ug/L	04/21/2010
1,3-Dichlorobenzene	LCS	29.6	99	(80-120)			30 ug/L	04/21/2010
1,3-Dichloropropane	LCS	29.1	97	(80-121)			30 ug/L	04/21/2010
1,4-Dichlorobenzene	LCS	30.1	100	(80-120)			30 ug/L	04/21/2010
1-Chlorohexane 69 of 97	LCS	47.9	106	(70-125)			45 ug/L	04/21/2010



 SGS Ref.#
 957640
 Lab Control Sample
 Printed Date/Time
 04/30/2010
 10:42

 Prep
 Batch
 VXX20578

Client Name The Environmental Company, Inc. (TEC) Method SW5030B

Project Name/# 3354-003 Red Hill BFSF Date 04/21/2010

Matrix Water (Surface, Eff., Ground)

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatograph	y/Mass	Spectrosc	ору					
2,2-Dichloropropane	LCS	33.6	112	(80-132)			30 ug/L	04/21/2010
2-Butanone (MEK)	LCS	102	113	(66-136)			90 ug/L	04/21/2010
2-Chlorotoluene	LCS	30.4	101	(80-125)			30 ug/L	04/21/2010
4-Chlorotoluene	LCS	30.8	103	(79-128)			30 ug/L	04/21/2010
4-Isopropyltoluene	LCS	29.4	98	(80-125)			30 ug/L	04/21/2010
4-Methyl-2-pentanone (MIBK)	LCS	93.9	104	(69-134)			90 ug/L	04/21/2010
Acetone	LCS	93.6	104	(50-135)			90 ug/L	04/21/2010
Benzene	LCS	32.0	107	(80-120)			30 ug/L	04/21/2010
Bromobenzene	LCS	29.8	99	(80-120)			30 ug/L	04/21/2010
Bromochloromethane	LCS	30.6	102	(77-129)			30 ug/L	04/21/2010
Bromodichloromethane	LCS	29.7	99	(80-120)			30 ug/L	04/21/2010
Bromoform	LCS	27.0	90	(80-120)			30 ug/L	04/21/2010
Bromomethane	LCS	26.9	90	(30-140)			30 ug/L	04/21/2010
Carbon tetrachloride	LCS	30.7	102	(80-126)			30 ug/L	04/21/2010
Chlorobenzene	LCS	29.7	99	(80-120)			30 ug/L	04/21/2010
Chloroethane	LCS	30.7	102	(67-133)			30 ug/L	04/21/2010
Chloroform	LCS	31.4	105	(80-124)			30 ug/L	04/21/2010
Chloromethane	LCS	32.0	107	(67-125)			30 ug/L	04/21/2010
cis-1,2-Dichloroethene	LCS	32.1	107	(80-125)			30 ug/L	04/21/2010
cis-1,3-Dichloropropene	LCS	29.7	99	(80-120)			30 ug/L	04/21/2010



71 of 97

SGS Ref.#

957640

Lab Control Sample

Printed Date/Time
Prep Batch

04/30/2010

10:42

Client Name

The Environmental Company, Inc. (TEC)

Batch Method Date VXX20578 SW5030B 04/21/2010

Project Name/#
Matrix

3354-003 Red Hill BFSF

Water (Surface, Eff., Ground)

LCS/LCSD RPD Pct Spiked Analysis RPD Parameter Results Recov Limits Limits Amount Date Volatile Gas Chromatography/Mass Spectroscopy Dibromochloromethane LCS 92 27.7 (80-120)30 ug/L 04/21/2010 Dibromomethane LCS 32.4 108 (80-120)30 ug/L 04/21/2010 Dichlorodifluoromethane LCS 30.5 102 (62-153)04/21/2010 30 ug/L Ethylbenzene LCS 99 29.6 (80-120) 04/21/2010 30 ug/L Hexachlorobutadiene LCS 26.3 88 (77-125)30 ug/L 04/21/2010 Isopropylbenzene (Cumene) LCS 29.0 97 (80-121)30 ug/L 04/21/2010 Methylene chloride LCS 30.1 100 (63-131)30 ug/L 04/21/2010 LCS Methyl-t-butyl ether 49.5 110 (80-120)45 ug/L 04/21/2010 Naphthalene LCS 30.1 100 (75-120)30 ug/L 04/21/2010 n-Butylbenzene LCS 31.1 104 (80-124)30 ug/L 04/21/2010 n-Propylbenzene LCS 30.8 103 (80-129)04/21/2010 30 ug/L LCS 29.3 98 o-Xylene (80-120)30 ug/L 04/21/2010 P & M -Xylene LCS 60.8 101 (80-120)04/21/2010 60 ug/L sec-Butylbenzene LCS 29.1 97 (80-120)30 ug/L 04/21/2010 LCS Styrene 29.7 99 (80-120)30 ug/L 04/21/2010 tert-Butylbenzene LCS 30.1 100 (80-122)30 ug/L 04/21/2010 Tetrachloroethene LCS 29.0 97 (79-122)30 ug/L 04/21/2010 Toluene LCS 30.2 101 (77-120)30 ug/L 04/21/2010 LCS trans-1,2-Dichloroethene 33.0 110 (79-132)30 ug/L 04/21/2010 trans-1,3-Dichloropropene LCS 27.9 93 (80-124)30 ug/L 04/21/2010 LCS Trichloroethene 31.4 105 (80-125)04/21/2010 30 ug/L



04/30/2010 10:42 SGS Ref.# 957640 Lab Control Sample Printed Date/Time VXX20578

Prep Batch Method Client Name

SW5030B The Environmental Company, Inc. (TEC) Date Project Name/# 3354-003 Red Hill BFSF 04/21/2010

Matrix Water (Surface, Eff., Ground)

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatograp	phy/Mass	Spectrosc	ору					
Trichlorofluoromethane	LCS	31.0	103	(68-145)			30 ug/L	04/21/2010
Vinyl chloride	LCS	29.5	98	(72-145)			30 ug/L	04/21/2010
Xylenes (total)	LCS	90.1	100	(80-120)			90 ug/L	04/21/2010
Surrogates								
1,2-Dichloroethane-D4 <surr></surr>	LCS		98	(73-120)				04/21/2010
4-Bromofluorobenzene <surr></surr>	LCS		102	(76-120)				04/21/2010
Toluene-d8 <surr></surr>	LCS		97	(80-120)				04/21/2010

Batch VMS11176 Method SW8260B

Instrument HP 5890 Series II MS1 VJA



SGS Ref.# 957826 Lab Control Sample

957827 Lab Control Sample Duplicate

The Environmental Company, Inc. (TEC)

Project Name/# 3354-003 Red Hill BFSF

Matrix Water (Surface, Eff., Ground)

 Printed Date/Time
 04/30/2010
 10:42

 Prep
 Batch
 VXX20584

 $\begin{array}{ll} \textbf{Method} & SW5030B \\ \textbf{Date} & 04/22/2010 \end{array}$

QC results affect the following production samples:

1101584007

Client Name

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatograp	hy/Mass S	Spectrosc	юру					
Naphthalene	LCS	29.2	97	(75-120)			30 ug/L	04/22/2010
	LCSD	31.2	104		7	(< 20)	30 ug/L	04/22/2010
Surrogates								
1,2-Dichloroethane-D4 <surr></surr>	LCS		98	(73-120)				04/22/2010
	LCSD		96		1			04/22/2010
4-Bromofluorobenzene <surr></surr>	LCS		98	(76-120)				04/22/2010
	LCSD		97		0			04/22/2010
Toluene-d8 <surr></surr>	LCS		97	(80-120)				04/22/2010
	LCSD		97	(55 120)	1			04/22/2010

Batch VMS11182 Method SW8260B

Instrument HP 5890 Series II MS1 VJA



SGS Ref.# 958549 Lab Control Sample Printed Date/Time 04/30/2010

Prep Batch XXX22502

It Name The Environmental Company Inc. (TEC) Method SW3520C

Client NameThe Environmental Company, Inc. (TEC)MethodSW3520CProject Name/#3354-003 Red Hill BFSFDate04/19/2010

Matrix Water (Surface, Eff., Ground)

QC results affect the following production samples:

1101584001, 1101584004, 1101584005, 1101584006, 1101584007, 1101584008

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic Fuels	Departm	nent						
Diesel Range Organics	LCS	4.00	80	(75-125)			5 mg/L	04/28/2010
Surrogates								
5a Androstane <surr></surr>	LCS		82	(60-120)				04/28/2010

10:42

Batch XFC9164 Method SW8015C

Instrument HP 7890A FID SV E R



Matrix

1101584002

Billable Matrix Spike

1101584003 Billable Matrix Spike Dup.

Printed Date/Time

Prep

04/30/2010 10:42

Batch MXX22905

Method Date 3010 H20 Digest for Metals ICI

04/19/2010

Original

1101584001

Water (Surface, Eff., Ground)

QC results affect the following production samples:

Parameter	Qualifier	Original 'S Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spike Amour	,
Dissolved Me	etals by ICP	/MS							
Lead		BMS (0.620) U	969	97	(80-120)			1000	ug/L 04/21/2010
		BMSD	994	99		3	(< 15)	1000	ug/L 04/21/2010
Batch	MMS6398								
Method	SW6020								
Instrument	Perkin Elmer	Sciex ICP-MS P3							
olatile Fu	els Departme	<u>nt</u>							
Gasoline Range	Organics	BMS (60.0) U	475	106	(79-108)			450	ug/L 04/16/2010
		BMSD	487	108		3	(< 20)	450	ug/L 04/16/2010
Surrogates									
l-Bromofluorob	enzene <surr></surr>	BMS	58.9	118	(50-150)				04/16/2010
		BMSD	56.1	112		5			04/16/2010
Batch	VFC9900								
Method	SW8015C								
Instrument	HP 5890 Serie	es II PID+FID VCA							
Semivolatile	e Organic Fu	els Department							
Diesel Range Or	ganics	BMS (0.320) U	4.9	91	(75-125)			5.38	mg/L 04/28/2010
		BMSD	4.55	87		8	(<30)	5.26	mg/L 04/28/2010
Surrogates									
a Androstane <	surr>	BMS	.104	97	(50-150)				04/28/2010
		BMSD	0.0993	94		5			04/28/2010
Batch	XFC9164								
Method	SW8015C								
Instrument	HP 7890A	FID SV E R							

Volatile Gas Chromatography/Mass Spectroscopy



Billable Matrix Spike Billable Matrix Spike Dup. Printed Date/Time

04/30/2010 10:42 VXX20578

1101584003

Prep Batch Method

Volatiles Extraction AFCEE 3.1

Date

04/21/2010

Original 1101584001

Matrix Water (Surface, Eff., Ground)

Parameter		iginal esult	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chro	matography/Mas	s Specti	coscopy						
1,1,1,2-Tetrachloroethan	e BMS (0.	300) U	26	87	(80-120)			30.0	ug/L 04/21/2010
	BMSD	,	27.8	93		7	(< 20)		ug/L 04/21/2010
1,1,1-Trichloroethane	BMS (0.	620) U	31.1	104	(80-122)		, ,		ug/L 04/21/2010
	BMSD		31.0	103		0	(< 20)		ug/L 04/21/2010
1,1,2,2-Tetrachloroethan	e BMS (0.	300) U	27.9	93	(76-123)				ug/L 04/21/2010
	BMSD		31.0	103		10	(< 20)		ug/L 04/21/2010
1,1,2-Trichloroethane	BMS (0.	620) U	27.9	93	(77-120)				ug/L 04/21/2010
	BMSD		30.1	100		8	(< 20)		ug/L 04/21/2010
1,1-Dichloroethane	BMS (0.	620) U	31.1	104	(80-120)				ug/L 04/21/2010
	BMSD		32.1	107		3	(< 20)		ug/L 04/21/2010
1,1-Dichloroethene	BMS (0.	620) U	32.9	110	(76-130)				ug/L 04/21/2010
	BMSD		32.4	108		1	(< 20)		ug/L 04/21/2010
1,1-Dichloropropene	BMS (0.	620) U	30.8	103	(80-122)				ug/L 04/21/2010
	BMSD		31.3	104		2	(< 20)		ug/L 04/21/2010
1,2,3-Trichlorobenzene	BMS (0.	620) U	27.1	90	(77-120)			30.0	ug/L 04/21/2010
	BMSD		28.9	96		6	(< 20)		ug/L 04/21/2010
1,2,3-Trichloropropane	BMS (0.	620) U	27	90	(80-120)			30.0	ug/L 04/21/2010
	BMSD		29.8	99		10	(< 20)	30.0	ug/L 04/21/2010
1,2,4-Trichlorobenzene	BMS (0.	620) U	28.4	95	(80-120)			30.0	ug/L 04/21/2010
	BMSD		29.6	99		4	(< 20)	30.0	ug/L 04/21/2010
1,2,4-Trimethylbenzene	BMS (0.	620) U	29	97	(80-125)			30.0	ug/L 04/21/2010
	BMSD		30.5	102		5	(< 20)	30.0	ug/L 04/21/2010
1,2-Dibromo-3-chloropro	opane BMS (1.	24) U	26.9	90	(73-130)			30.0	ug/L 04/21/2010
	BMSD		30.8	103		13	(< 20)	30.0	ug/L 04/21/2010
1,2-Dibromoethane	BMS (0.	620) U	28.2	94	(80-120)			30.0	ug/L 04/21/2010
	BMSD		30.4	101		7	(< 20)	30.0	ug/L 04/21/2010
1,2-Dichlorobenzene	BMS (0.	620) U	27.9	93	(80-120)			30.0	ug/L 04/21/2010
	BMSD		29.0	97		4	(< 20)	30.0	ug/L 04/21/2010
1,2-Dichloroethane	BMS (0.	300) U	29.5	98	(80-129)			30.0	ug/L 04/21/2010
	BMSD		31.0	103		5	(< 20)	30.0	ug/L 04/21/2010
1,2-Dichloropropane	BMS (0.	620) U	30.1	100	(80-121)			30.0	ug/L 04/21/2010
	BMSD		31.7	106		5	(< 20)	30.0	ug/L 04/21/2010
1,3,5-Trimethylbenzene	BMS (0.	620) U	29.1	97	(80-128)			30.0	ug/L 04/21/2010
	BMSD		30.8	103		6	(< 20)	30.0	ug/L 04/21/2010
1,3-Dichlorobenzene	BMS (0.	620) U	28.6	96	(80-120)			30.0	ug/L 04/21/2010
	BMSD		29.8	99		4	(< 20)	30.0	ug/L 04/21/2010
1,3-Dichloropropane	BMS (0.	240) U	27	90	(80-121)			30.0	ug/L 04/21/2010
	BMSD		29.0	97		7	(< 20)	30.0	ug/L 04/21/2010
1,4-Dichlorobenzene	BMS (0.	300) U	29.1	97	(80-120)				ug/L 04/21/2010
76 of 97	BMSD		30.2	101		4	(< 20)	30.0	ug/L 04/21/2010



1101584002

Billable Matrix Spike Billable Matrix Spike Dup. Printed Date/Time

04/30/2010 10:42

1101584003

Prep Batch Method VXX20578 Volatiles Extraction AFCEE 3.1

Date

04/21/2010

Original 1101584001

Matrix Water (Surface, Eff., Ground)

Parameter 0	Original Qualifiers Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amoun	,
Volatile Gas Chrom	atography/Mass Spec	troscopy						
1-Chlorohexane	BMS (0.620) U	45.3	101	(70-125)			45.0	ug/L 04/21/2010
	BMSD	48.1	107		6	(< 20)	45.0	ug/L 04/21/2010
2,2-Dichloropropane	BMS (0.620) U	30.5	102	(80-132)			30.0	ug/L 04/21/2010
	BMSD	34.3	114		12	(< 20)	30.0	ug/L 04/21/2010
2-Butanone (MEK)	BMS (6.20) U	83.8	93	(66-136)			90.0	ug/L 04/21/2010
	BMSD	96.5	107		14	(< 20)	90.0	ug/L 04/21/2010
2-Chlorotoluene	BMS (0.620) U	28.7	96	(80-125)			30.0	ug/L 04/21/2010
	BMSD	30.3	101		6	(< 20)	30.0	ug/L 04/21/2010
4-Chlorotoluene	BMS (0.620) U	29	97	(79-128)			30.0	ug/L 04/21/2010
	BMSD	30.9	103		6	(< 20)	30.0	ug/L 04/21/2010
4-Isopropyltoluene	BMS (0.620) U	28.2	94	(80-125)			30.0	ug/L 04/21/2010
	BMSD	29.3	98		4	(< 20)	30.0	ug/L 04/21/2010
4-Methyl-2-pentanone (M	IBK) BMS (6.20) U	80.3	89	(69-134)			90.0	ug/L 04/21/2010
	BMSD	89.9	100		11	(< 20)	90.0	ug/L 04/21/2010
Acetone	BMS (6.20) U	77.7	86	(50-135)			90.0	ug/L 04/21/2010
	BMSD	84.5	94		8	(< 20)	90.0	ug/L 04/21/2010
Benzene	BMS (0.240) U	30.3	101	(80-120)			30.0	ug/L 04/21/2010
	BMSD	31.3	104		3	(< 20)	30.0	ug/L 04/21/2010
Bromobenzene	BMS (0.620) U	28.6	95	(80-120)			30.0	ug/L 04/21/2010
	BMSD	29.8	99		4	(< 20)	30.0	ug/L 04/21/2010
Bromochloromethane	BMS (0.620) U	29.8	99	(77-129)			30.0	ug/L 04/21/2010
	BMSD	30.1	100		1	(< 20)	30.0	ug/L 04/21/2010
Bromodichloromethane	BMS (0.300) U	28.7	96	(80-120)			30.0	ug/L 04/21/2010
	BMSD	30.1	100		5	(< 20)	30.0	ug/L 04/21/2010
Bromoform	BMS (0.620) U	26	87	(80-120)			30.0	ug/L 04/21/2010
	BMSD	27.5	92		6	(< 20)	30.0	ug/L 04/21/2010
Bromomethane	BMS (1.88) U	34.1	114	(30-140)			30.0	ug/L 04/21/2010
	BMSD	34.5	115		1	(< 20)	30.0	ug/L 04/21/2010
Carbon tetrachloride	BMS (0.620) U	31	103	(80-126)			30.0	ug/L 04/21/2010
	BMSD	31.2	104		0	(< 20)	30.0	ug/L 04/21/2010
Chlorobenzene	BMS (0.300) U	29.2	97	(80-120)			30.0	ug/L 04/21/2010
	BMSD	30.5	102		5	(< 20)	30.0	ug/L 04/21/2010
Chloroethane	BMS (0.620) U	28.8	96	(67-133)			30.0	ug/L 04/21/2010
	BMSD	30.0	100		4	(< 20)	30.0	ug/L 04/21/2010
Chloroform	BMS (0.600) U	30.9	103	(80-124)			30.0	ug/L 04/21/2010
	BMSD	31.5	105		2	(< 20)	30.0	ug/L 04/21/2010
Chloromethane	BMS (0.620) U	28.7	96	(67-125)		. ,	30.0	ug/L 04/21/2010
	BMSD	30.5	102		6	(< 20)	30.0	ug/L 04/21/2010
cis-1,2-Dichloroethene	BMS (0.620) U	31.5	105	(80-125)		* /	30.0	ug/L 04/21/2010
77 of 97	BMSD	32.3	108	,	3	(< 20)	30.0	ug/L 04/21/2010



1101584003

Billable Matrix Spike Billable Matrix Spike Dup. Printed Date/Time Prep

04/30/2010 10:42 Batch VXX20578

Method Volatiles Extraction AFCEE 3.1

Date 04/21/2010

Original 1101584001

Matrix Water (Surface, Eff., Ground)

Parameter	Qualifiers Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amoun	,
Volatile Gas Chro	natography/Mass Spe	ctroscopy						
cis-1,3-Dichloropropene	BMS (0.300) U	28.5	95	(80-120)			30.0	ug/L 04/21/2010
	BMSD	30.4	101		7	(< 20)	30.0	ug/L 04/21/2010
Dibromochloromethane	BMS (0.300) U	26.9	90	(80-120)			30.0	ug/L 04/21/2010
	BMSD	28.3	94		5	(< 20)	30.0	ug/L 04/21/2010
Dibromomethane	BMS (0.620) U	30.9	103	(80-120)			30.0	ug/L 04/21/2010
	BMSD	32.2	107		4	(< 20)	30.0	ug/L 04/21/2010
Dichlorodifluoromethane	BMS (0.620) U	25.9	86	(62-153)			30.0	ug/L 04/21/2010
	BMSD	26.4	88		2	(< 20)	30.0	ug/L 04/21/2010
Ethylbenzene	BMS (0.620) U	28.3	94	(80-120)			30.0	ug/L 04/21/2010
	BMSD	29.8	99		5	(< 20)	30.0	ug/L 04/21/2010
Hexachlorobutadiene	BMS (0.620) U	26.6	89	(77-125)			30.0	ug/L 04/21/2010
	BMSD	27.4	91		3	(< 20)	30.0	ug/L 04/21/2010
Isopropylbenzene (Cume	ne) BMS (0.620) U	28.3	94	(80-121)			30.0	ug/L 04/21/2010
	BMSD	29.6	99		5	(< 20)	30.0	ug/L 04/21/2010
Methylene chloride	BMS (2.00) U	29.7	99	(63-131)			30.0	ug/L 04/21/2010
	BMSD	30.3	101		2	(< 20)	30.0	ug/L 04/21/2010
Methyl-t-butyl ether	BMS (3.00) U	44.4	99	(80-120)			45.0	ug/L 04/21/2010
	BMSD	47.8	106		7	(< 20)	45.0	ug/L 04/21/2010
Naphthalene	BMS (1.24) U	27	90	(75-120)			30.0	ug/L 04/21/2010
	BMSD	30.6	102		13	(< 20)	30.0	ug/L 04/21/2010
n-Butylbenzene	BMS (0.620) U	29.1	97	(80-124)			30.0	ug/L 04/21/2010
	BMSD	30.7	102		5	(< 20)	30.0	ug/L 04/21/2010
n-Propylbenzene	BMS (0.620) U	29.1	97	(80-129)			30.0	ug/L 04/21/2010
	BMSD	30.6	102		5	(< 20)	30.0	ug/L 04/21/2010
o-Xylene	BMS (0.620) U	28.3	95	(80-120)			30.0	ug/L 04/21/2010
	BMSD	29.6	99		4	(< 20)	30.0	ug/L 04/21/2010
P & M -Xylene	BMS (1.24) U	58.5	98	(80-120)			60.0	ug/L 04/21/2010
	BMSD	61.1	102		4	(< 20)	60.0	ug/L 04/21/2010
sec-Butylbenzene	BMS (0.620) U	27.6	92	(80-120)			30.0	ug/L 04/21/2010
	BMSD	29.2	97		6	(< 20)	30.0	ug/L 04/21/2010
Styrene	BMS (0.620) U	28.2	94	(80-120)			30.0	ug/L 04/21/2010
	BMSD	30.0	100		6	(< 20)	30.0	ug/L 04/21/2010
tert-Butylbenzene	BMS (0.620) U	28.7	96	(80-122)			30.0	ug/L 04/21/2010
	BMSD	30.0	100		4	(< 20)	30.0	ug/L 04/21/2010
Tetrachloroethene	BMS (0.620) U	29.1	97	(79-122)			30.0	ug/L 04/21/2010
	BMSD	29.4	98		1	(< 20)	30.0	ug/L 04/21/2010
Toluene	BMS (0.620) U	29.4	98	(77-120)			30.0	ug/L 04/21/2010
	BMSD	30.8	103		5	(< 20)	30.0	ug/L 04/21/2010
trans-1,2-Dichloroethene	BMS (0.620) U	32.4	108	(79-132)			30.0	ug/L 04/21/2010
78 of 97	BMSD	32.6	109		0	(< 20)	30.0	ug/L 04/21/2010



1101584002 1101584003 Billable Matrix Spike

Billable Matrix Spike Dup.

Printed Date/Time

Batch

Prep

04/30/2010 10:42

VXX20578

Method Volatiles Extraction AFCEE 3.1

Date 04/21/2010

Original

1101584001

Matrix

Water (Surface, Eff., Ground)

Parameter	Original QC Pct MS/MSD Qualifiers Result Recov Limits RPI		RPD	RPD Limits	Spiked Amoun	•			
Volatile Gas Chrom	natography	Mass Spec	troscopy	· ·					
trans-1,3-Dichloropropen	e BMS	S (0.620) U	25.4	85	(80-124)			30.0	ug/L 04/21/2010
	BMS	SD	29.1	97		14	(< 20)	30.0	ug/L 04/21/2010
Trichloroethene	BMS	S (0.620) U	30.4	101	(80-125)			30.0	ug/L 04/21/2010
	BMS	SD	31.0	103		2	(< 20)	30.0	ug/L 04/21/2010
Trichlorofluoromethane	BMS	S (0.620) U	30.3	101	(68-145)			30.0	ug/L 04/21/2010
	BMS	SD	30.1	100		1	(< 20)	30.0	ug/L 04/21/2010
Vinyl chloride	BMS	S (0.620) U	27.3	91	(72-145)			30.0	ug/L 04/21/2010
	BMS	SD	28.2	94		3	(< 20)	30.0	ug/L 04/21/2010
Xylenes (total)	BMS	S (1.88) U	86.8	97	(80-120)			90.0	ug/L 04/21/2010
	BMS	SD	90.7	101		4	(< 20)	90.0	ug/L 04/21/2010
Surrogates									
1,2-Dichloroethane-D4 <s< td=""><td>surr> BMS</td><td>S</td><td>29.5</td><td>98</td><td>(73-120)</td><td></td><td></td><td></td><td>04/21/2010</td></s<>	surr> BMS	S	29.5	98	(73-120)				04/21/2010
	BMS	SD	29.1	97		1			04/21/2010
4-Bromofluorobenzene <	surr> BMS	S	29.8	99	(76-120)				04/21/2010
	BMS	SD	30.0	100		1			04/21/2010
Toluene-d8 <surr></surr>	BMS	S	29.3	98	(80-120)				04/21/2010
	BMS	SD	29.4	98		1			04/21/2010

Batch VMS11176 Method SW8260B

Instrument HP 5890 Series II MS1 VJA

Polynuclear Aromatics GC/MS



1101584002 1101584003 Billable Matrix Spike Billable Matrix Spike Dup. Printed Date/Time

04/30/2010 10:42

Prep Batch

XXX22498 3520 Liquid/Liquid Ext for 827

Method Date

04/16/2010

Original 1101584001

Matrix Water (Surface, Eff., Ground)

Parameter	Qualifiers Original Result	QC Result		S/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aroma	atics GC/MS							
1-Methylnaphthalene	BMS (0.0330) U	.504	95* (42	2-92)			0.532	ug/L 04/26/2010
i interny maphimateme	BMSD	0.471	88	,	7	(< 30)	0.538	ug/L 04/26/2010
2-Methylnaphthalene	BMS (0.0330) U	.445		5-89)	,	(50)	0.532	ug/L 04/26/2010
<i>y</i> y	BMSD	0.435	81	,	2	(< 30)	0.538	ug/L 04/26/2010
Acenaphthene	BMS (0.0330) U	.522		5-93)		,	0.532	ug/L 04/26/2010
r	BMSD	0.472	88	,	10	(< 30)	0.538	ug/L 04/26/2010
Acenaphthylene	BMS (0.0330) U	.53		0-101)		,	0.532	ug/L 04/26/2010
	BMSD	0.490	91	,	8	(< 30)	0.538	ug/L 04/26/2010
Anthracene	BMS (0.0330) U	.584	110* (55	5-105)		,	0.532	ug/L 04/26/2010
	BMSD	0.529	98	,	10	(< 30)	0.538	ug/L 04/26/2010
Benzo(a)Anthracene	BMS (0.0330) U	.561	106 (55	5-120)		,	0.532	ug/L 04/26/2010
	BMSD	0.520	97		8	(< 30)	0.538	ug/L 04/26/2010
Benzo[a]pyrene	BMS (0.0330) U	.491		7-110)		, ,	0.532	ug/L 04/26/2010
L 31 3	BMSD	0.451	84		9	(< 30)	0.538	ug/L 04/26/2010
Benzo[b]Fluoranthene	BMS (0.0330) U	.589		5-120)		,	0.532	ug/L 04/26/2010
	BMSD	0.535	100	,	10	(< 30)	0.538	ug/L 04/26/2010
Benzo[g,h,i]perylene	BMS (0.0330) U	.495	93 (49	9-116)			0.532	ug/L 04/26/2010
107 / H 7	BMSD	0.454	85		9	(< 30)	0.538	ug/L 04/26/2010
Benzo[k]fluoranthene	BMS (0.0330) U	.544	102 (56	5-112)			0.532	ug/L 04/26/2010
. ,	BMSD	0.489	91		11	(< 30)	0.538	ug/L 04/26/2010
Chrysene	BMS (0.0330) U	.615	116* (56	5-109)			0.532	ug/L 04/26/2010
•	BMSD	0.565	105		9	(< 30)	0.538	ug/L 04/26/2010
Dibenzo[a,h]anthracene	BMS (0.0330) U	.538	101 (54	4-113)			0.532	ug/L 04/26/2010
	BMSD	0.501	93		7	(< 30)	0.538	ug/L 04/26/2010
Fluoranthene	BMS (0.0330) U	.571	107 (58	3-109)			0.532	ug/L 04/26/2010
	BMSD	0.544	101		5	(< 30)	0.538	ug/L 04/26/2010
Fluorene	BMS (0.0330) U	.553	104* (50)-98)			0.532	ug/L 04/26/2010
	BMSD	0.495	92		11	(< 30)	0.538	ug/L 04/26/2010
indeno[1,2,3-c,d] pyrene	e BMS (0.0330) U	.512	96 (55	5-111)			0.532	ug/L 04/26/2010
	BMSD	0.468	87		9	(< 30)	0.538	ug/L 04/26/2010
Naphthalene	BMS (0.0682) U	.426	80 (44	1-89)			0.532	ug/L 04/26/2010
	BMSD	0.415	77		3	(< 30)	0.538	ug/L 04/26/2010
Phenanthrene	BMS (0.0330) U	.601	113* (50	0-104)			0.532	ug/L 04/26/2010
	BMSD	0.549	102		9	(< 30)	0.538	ug/L 04/26/2010
Pyrene	BMS (0.0330) U	.559	105 (56	5-105)			0.532	ug/L 04/26/2010
	BMSD	0.528	98		6	(< 30)	0.538	ug/L 04/26/2010
Surrogates								
Γerphenyl-d14 <surr></surr>	BMS	.531	100 (50	0-126)				04/26/2010
•	BMSD	0.505	94		5			04/26/2010
80 of 97								



Billable Matrix Spike

Billable Matrix Spike Dup.

Printed Date/Time

04/30/2010 10:42

Prep Batch XXX22498

Method 3520 Liquid/Liquid Ext for 827

Date 04/16/2010

Original 1101584001

Matrix Water (Surface, Eff., Ground)

1101584003

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

Polynuclear Aromatics GC/MS

BatchXMS5373Method8270D SIMS

Instrument HP 6890/5973 MS SVQA



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

CHAIN OF CUSTODY RECORD SGS Environmental Services Inc.

1101584



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CLIENT:	TEC INC.		SGS Reference #:										T	page / of				
CONTACT:	Rick Adkisson P	HONE NO:	808.528.1445														age _	of
PROJECT:	3354-003 s	TE/PWSID#:	Red Hill BFSF			Preserv. Used	/x ⁽⁾		\.\x\cdot\	\angle	N. Y. Y. Y.		Z	//	//			
REPORTS TO:	Rick Adkisson er		n@tecinc.com an@tecinc.co		# C O	SAMPLE TYPE C =	<u> </u>	(1)		SIMS)								
INVOICE TO:		UOTE #: O. NUMBER:					GRO (8015B)	RO (8015B)	(8260B)	(8270C	Pb (6020)							
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	E R S	G ≈ GRAB	TPH-G	TPH-DRO	NOC's	PAH's	Diss P							REMARKS
000 A OU	RHMW2254-WG19	4/13/2010	1105	Water	21		Х		X		X							3x Volume sent in 3 coolers
DA-K	RHMW03-WG19	4/13/2010	1455	Water	7		X		X		X							
(5)A-18G	RHMW02-WG19	4/13/2010	1610	Water	7		X		X		X							
(A-KG	RHMWA01-WG19	4/13/2010	1205	Water	7		X		X		X							
DAXG ØAXG	RHMW01-WG19	4/13/2010	1840	Water	7		X		X		X							
OA-XG	RHMW05-WG19	4/13/2010	1320	Water	7		X		X		X							
DA-C	TB01-WG19		0805	Water	3		X		X									
Collected/Relinquish	ed By: (1)	Date 4/14/10	Time 1200	Received By:					Shippir Shippir	ng Carr						Samples Received Cold? YES NO		
Relinquished By: (2)	Date	Time	Received By:	And the second second second				Special			Requirem	ents:			-		Custody Seal: (Circle) BROKEN ABSENT
Relinquished By: (3) Date Time Received					Requested Turnaround Time and-or Special Ins						Instruction	Aructions:						
Relinquished By: (Date	Time	Received For Labo	1 Cirl													
	ter Drive Anchorage, AK 99518 Tel: (90	7) 562-2343 Fax: (907)	561-5301		~	151	James	Drive V	Vest St	Rose.	LA 7	0087 Te	i: (504)	469-640	01 Fax:	(504)	463-3304	ļ

1258 Greenbrier Street **Charleston, WV 25311** Tel: (304) 346-0725 Fax: (304) 346-0761

5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557



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255 Sand Island Access Rd., Unit 1B Honolulu, HI 96819 Tel: (808) 224-6217 Fax: (808) 845-2287

CHAIN OF CUSTODY RECORD SGS Environmental Services Inc.

1101584

CLIENT:	TEC INC.		SGS Reference #:											page 2 of 5					
CONTACT:	Rick Adkisson	PHONE NO:	808.528.1445														page		OI
PROJECT:	3354-003	SITE/PWSID#:	Red Hill BFSF			Preserv. Used	\\ \x\cdot\	/	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\angle	\rightarrow \right	Z	\angle	\angle	\angle	\angle	Z	\angle	
REPORTS TO:	Rick Adkisson		n@tecinc.com nan@tecinc.co		# C O N	SAMPLE TYPE C =	3)	<u>~</u>		MS)									
INVOICE TO:	TEC INC	TEC INC QUOTE #: P.O. NUMBER:					RO (8015B)	RO (8015B)	VOC's (8260B)	PAH's (8270C-SIMS)	Pb (6020)								
LAB NO.	SAMPLE IDENTIFICATIO	N DATE	TIME	MATRIX	E R S	G = GRAB	TPH-GRO	TPH-DRO	VOC's	PAH's	Diss P								REMARKS
54-K	RHMW02-WG19	4/13/2010	1610	Water	4			X		X									
OH-K	RHMWA01-WG1	9 4/13/2010	1205	Water	4			X		X									
	77																		
Collected/Relinquish	ned By: (1)	Date 4/14/10	1200	Received By:	Shipping Carrier: Shipping Ticket No:									Samples Received Cold? YES NO					
Relinquished By: (2) Date Time				Received By:)		•	f Delive		Requirem	ents:				Chain o		itody Seal: (Circle) ROKEN ABSENT
Relinquished By: (3)	Date	Time	Received By:					Requested Turnaround Time and-or Special Instructions: See Contract										
Relinquished B) (Date	Time	Received For Labo	r Laboratory By:														
200 W. Pot	tter Drive Anchorage, AK 99518 Te	l: (907) 562-2343 Fax: (907)	561-5301			151	James	Drive \	Vest St	Rose	LA 7	0087 Te	(504)	469-6	401 Fa	x: (50-	4) 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



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

CHAIN OF CUSTODY RECORD SGS Environmental Services Inc.



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CLIENT:	TEC INC.				SGS Ref	erence #:										page 4 of 5				
CONTACT:	Rick Adkisson	PHONE NO:	808.528.1445		1												page		or	
PROJECT:	3354-003	SITE/PWSID#:	Red Hill BFSF			Preserv. Used	\z\cdot		_{X^{(1)}}	\angle	, krat		\angle	\angle	\angle	\angle	\angle	\angle		
REPORTS TO:	Rick Adkisson		n@tecinc.com nan@tecinc.co		# C O	SAMPLE TYPE C =	<u>.</u>	_		MS)										
INVOICE TO:	TEC INC	QUOTE #: P.O. NUMBER:				COMP G =	RO (8015B)	RO (8015B)	(8260B)	(8270C-SIMS)	b (6020)									
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	E R S	GRAB	TPH-GRO	TPH-DRO	s.oo	PAH's	Diss Pb								REMARKS	
T.HO	RHMW2254-WG1	9 4/13/2010	1105	Water	4			X		X									3x Volume sent in 3 coolers	
21-K	RHMW05-WG19	4/13/2010	1320	Water	4			X		X										
·					<u> </u>	<u></u>														
Collected/Relinquish	ed By: (1)	9/14/10	POD	Received By:	Shipping Carrier: Shipping Ticket No:										Samples Received Cold? YES NO					
Relinquished By: (2	2)	Date	Time	Received By		>				l Delive		Requirem	ents:			1	Chain	_	itody Seal: (Circle)	
Relinquished By: (3	tuished By: (3) Date Time Received By:					Requested Turnaround Time and-or Special Inst								Instru						
Relinquished By: (4		Date	Time	Received For Labor	oratory By:		2													
200 W. Pott	ter Drive Anchorage, AK 99518 Tel:	(907) 562-2343 Fax: (907)	561-5301			151	James	Drive \	Vost St	Rose	IA 70	0087 Te	l: (504)	469-64	101 Fa	x: (504	1) 463-3	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



TEC INC.

Rick Adkisson

Rick Adkisson

SAMPLE IDENTIFICATION

RHMW2254-WG19

TEC INC

3354-003

PHONE NO:

SITE/PWSID#:

QUOTE #:
P.O. NUMBER:

DATE

4/13/2010

email

808.528.1445

rkadkisson@tecinc.com

wmcwhitman@tecinc.com

Red Hill BFSF

TIME

1105

CLIENT:

CONTACT:

PROJECT:

REPORTS TO:

INVOICE TO:

LAB NO.

Relinquished By: (4)

CHAIN OF CUSTODY RECORD SGS Environmental Services Inc.

MATRIX

Water

SGS Reference #:

SAMPLE

TYPE

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TPH-GRO (8015B) TPH-DRO (8015B) 1101584

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uisiana

est Virginia

	pag	e _	5 of <u>5</u>
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			REMARKS
-			3x Volume sent in 3 coolers
_			

www.us.sgs.com

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ollected/Relinquished By: (1)	Date 4/14/10	120D_	Received By:			Shippir	_							Sampl		ceived Colo	b .	NO 36D
elinquished By: (2)	Date	Time	Received By:	$\overline{}$		Specia			Requirer	nents:				Chain		stody Seal	: (Circle)	
elinquished By: (3)	Date	Time	Received By:	 	 	See (1) 	ROKEN	ABSENT	
						Reques	sted Tu	rnaroun	d Time	and-or	Specia	al Instru	uctions	3:				
						See	: Cor	ntrac	t									

Received For Laboratory By:

_	200	VV.	Potter	Drive	Anchorage,	AK	99010	rei:	(907)	562-2343	rax:	(907)	561-530

PAH's (8270C-SIMS)

X

Pb (6020)

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



255 Sand Island Access Rd., Unit 1B Honolulu, HI 96819 Tel: (808) 224-6217 Fax: (808) 845-2287

CHAIN OF CUSTODY RECORD SGS Environmental Services Inc.



inia

CLIENT:	CLIENT: TEC INC.								SGS Reference #:									page of					
CONTACT:	Rick Adkisson	PHONE NO:	808.528.1445													۰	age _						
PROJECT:	3354-003	SITE/PWSID#:	Red Hill BFSF			Preserv. Used	/ *	_	\\ x^0		FIFE.		\angle				//						
REPORTS TO:	Rick Adkisson		@tecinc.com an@tecinc.co		# 0 N	SAMPLE TYPE C =	_			MS)													
INVOICE TO:	TEC INC	QUOTE #: P.O. NUMBER:			T A I	COMP	TPH-GRO (8015B)	3O (8015B)	VOC's (8260B)	PAH's (8270C-SIMS)	Pb (6020)												
LAB NO.	SAMPLE IDENTIFICATION	I DATE	TIME	MATRIX	E R S	G = GRAB	TPH-G	TPH-DRO	S.DOA	PAH's	Diss Pt							REMARKS					
OHK	RHMW01-WG19	4/13/2010	1840	Water	4			Х		X													
STACO	RHMW03-WG19	4/13/2010	1455	Water	4			X		X													
Collected/Relinquish	D'all	Date 4/14/10	Time /WD	Received By:	1		<u> </u>	1	l ''	ng Carr		<u> </u>		<u> </u>		1	mples Re	ceived Cold? YES NO					
Relinquished By: (2)	Date	Time	Received By:	>					l Delive		Requireme	ents:			- 1	-	ustody Seal: (Circle) BROKEN ABSENT					
Relinquished By: ((3)	Date	Time	Received By:							urnaroun ntrac		and-or	Special	Instructio	ns:							
Relinquished By:	tter Drive Anchorage, AK 99518 Tel:	Date 4 5 10 10 10 10 10 10 10	Time 17.05	Received For Labo	oratory By:	151	lamee	Drive \	Nost St	t Rose	ΙΔ 70	1087 Tal	(504)	469-640	1 Fax	(504)	463-3304						

5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

SGS

SAMPLE RECEIPT FORM

SGS WO#:



Yes	No	NA		
	1/		Are samples RUSH , priority or <i>w/in 72 hrs</i> of hold time ?	TAT (circle one): Standard -or- Rush
		1	If yes, have you done e-mail ALERT notification?	Received Date: 4/15/10
	1	-	Are samples within 24 hrs. of hold time or due date?	Received Time: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
		1	If yes, have you also spoken with supervisor?	Cooler ID Temperature Measured w/
	1		Archiving bottles: Are lids marked w/ red "X"?	(Therm #)
V		-	Were samples collected with proper preservative?	Coder 1 0,4 °C 36,0
<u> </u>			Any problems (ID, cond'n, HT, etc.)? Explain:	(a) er 2 oh 1/3 1/2°C 360
	<u>v</u>		7 my problems (12) some in , irr, stoy. Explain.	COURTS & 25/13°C 3/60
				0015 0° 20 U 1900
				Note: Temperature readings include thermometer correction factors
	1		If this is for PWS, provide PWSID:	Delivery method (circle all that apply):
	1	**********	Payment received: \$ by Check or Credit Card	Client / Alert Courier / Lynden / SGS
,	1		Will courier charges apply?	UPS / FedEx / USPS / DHL / Carlile
-		,	Data package required? (Level: 1 / 2 / 3 / 4)	AkAir Goldstreak / NAC / ERA / PenAir
			Notes:	Other:
1			Is this a DoD project? (USACE, Navy, AFCEE)	Additional Sample Remarks: (\(\sigma\) if applicable)
				Extra Sample Volume?
	This s	ection	must be filled out for DoD projects (USACE, Navy, AFCEE):	Limited Sample Volume?
Yes	1	No OF	Yes N/A	Multi-Incremental Samples?
$\bot \mathcal{L}$			Is received temperature <6°C? Was pH verified upon receipt?	Lab-filtered for dissolved
	·		Were containers ice-free? Notify PM immediately of any ice in samples.	Ref Lab required for
			If some cooler temperatures are non-compliant, see form FS-0029 (attached) for samples/analyses affected.	Foreign Soil?
	V	•	Was there an airbill? (If "yes," see attached.)	
صا_ ا			Was cooler sealed with custody seals & were they intact?	This section must be completed if problems are noted.
			#/where: 2, 1 front, 1 back	Was diseased for defendations of Was No
	<u> </u>		Was there a COC with cooler?	Was client notified of problems? Yes No
	<u> </u>		Was COC sealed in plastic bag & taped inside lid of cooler?	By (SGS PM):
	<u> </u>		Was the COC filled out properly? Did labels correspond?	
ļ — ≻	<u> </u>	_	Did the COC indicate USACE / Navy / AFCEE project?	Individual contacted: Rick
			Samples were packed to prevent breakage with (circle one): Bubble Wrap Vermiculite Other (specify):	Via: (Phone /) Fax / E-mail (circle one)
			Were all samples sealed in separate plastic bags?	Date/Time: 4 5 10 310 9 m
-V	. <u> </u>		Were all VOCs free of headspace and/or MeOH preserved?	Reason for contact: Cooler temp
- 			Were correct container / sample sizes submitted?	was not taken upon receipt.
──∀			Was the PM notified of arrival so they can send	temp blanks are win
100			Sample Receipt Acknowledgement to client?	0-1e'C. Proceed w/ analysis
Cool	er ID_		Cooler Temp °C Cooler Temp °C	
Cool	er ID_		Cooler Temp °C Cooler ID Cooler Temp °C	Change Order Required? Yes No
				Change Order Required: 1 cs 110
Notes	s:	DIC	d not take cover temp of	
	-	12.	or total variety	
	1			
411	5/10	~ 1V	1 cooker temp was not taken upon	receipt of samples.
6			· · · · · · · · · · · · · · · · · · ·	
***************************************		ILM	12-Blanks are within the 0-60 re	quirement for POD
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*Notes :rbdtC NH[†]CI Preservative Ascorbic Acid HOPN H2SO4 * Note: Containers which require (additional) chemical preservation upon receipt must be documented per SOP#106 EONH **SGS WO#** HCI auon Other: Container Type Septa iloO Nalgene SAMPLE RECEIPT FORM - Bottle Tracking HDbE CG × X ÐΨ 18 10 Other: Container Volume 40m3 M 00 M 7m09 125mL or 40z zog so Jm052 4 Jm005 (1) ΊΓ Ø Bottle Totals 0 T (8) LB 21 Ty. σс > Test SISSOLVED PO 1000 - HA 02 82 TPH-DRO IPH-DR 9 で大文 250 (GR20 PAH PAH GRO 8 Matrix 开 ACC F 40 ¥ J. A Container ID D # 3 9

F042r02 Revised 9/8/2009

Date: - AISTON

Completed by:



Preservative

Notes :rbdr:

NH[†]CI

HOBN tOS7H

EONH

Ascorbic Acid

		UNIO					X						X						
#		HCI			X	X		X			<	χ		X			\overline{X}	X	
≥		None							X						X			Ì	
SGS WO#		Other:																	
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SAMPLE RECEIPT FORM - Bottle Tracking	ıme	Jm04	હ		b	Ь					3	2					3	8	
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				L			l												

Date: 4/18/10 0 Completed by:

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

Bottle Totals / 너

F042r02 Revised 9/8/2009



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		Other:		ļ					_					· · · · · · · · · · · · · · · · · · ·			,			3
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F042r02 Revised 9/8/2009

90 of 97

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SGS	_Environmental	CUSTODY SEA		
Signature:	•		Date/Time:	4/14/10/1200
SGS	_Environmental	CUSTODY SEA	L .	
	w.D. L.D.C		_ Date/Time:	9 4/14/10/1200
SGS	_Environmental	CUSTODY SEAL		
Signature:	W-0060		Date/Time:	4/14/10/200

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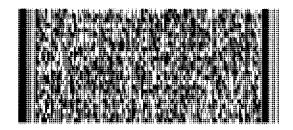
SHIP TO: (907) 562-2343



BILL THIRD PARTY

SAMPLE RECEIVING SGS Environmental Services 200 W POTTER DR

ANCHORAGE, AK 99518



Ship Date: 14APR10 ActWgt: 30.0 LB CAD: 1774997/INET3010

Dims: 24 X 14 X 14 IN

Delivery Address Bar Code



Ref# Invoice # PO# Dept#

1101584



3 of 5 MPS# 7934 4724 7400

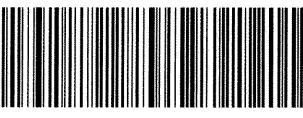
THU - 15 APR AM PRIORITY OVERNIGHT

Mstr# 7934 4724 7271 0201

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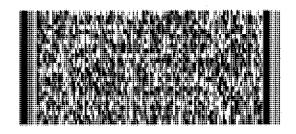


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SGS Environmental Services

SGS Environmental Services 200 W POTTER DR

ANCHORAGE, AK 99518



Ship Date: 14APR10 ActWgt: 30.0 LB CAD: 1774997/INET3010

Dims: 24 X 14 X 14 IN

Delivery Address Bar Code



Ref# FINVoice #PO #Dept #

1101584



1 of 5 TRK# 7934 4724 7271

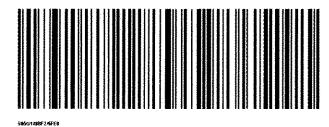
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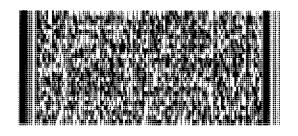


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SGS Environmental Services
200 W POTTER DR

ANCHORAGE, AK 99518



Ship Date: 14APR10 ActWgt: 30.0 LB CAD: 1774997/INET3010

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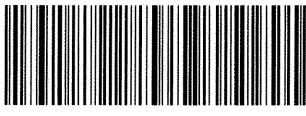
2 of 5 MPS# 7934 4724 7320 THU - 15 APR AM PRIORITY OVERNIGHT

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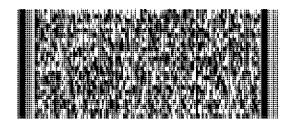
J18181882226224

SHIP TO: (907) 562-2343

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SGS Environmental Services
200 W POTTER DR

ANCHORAGE, AK 99518



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Dims: 24 X 14 X 14 IN

Delivery Address Bar Code



Ref # P# 3354 00 Invoice # PO # Dept #



5 of 5

MPS# 7934 4724 7514

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From: Origin ID: HIKA (808) 528-1445 BILL WHITMAN

TEC INC.

1001 BISHOP STREET, ASB TOWER

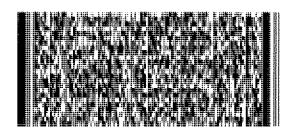
SUITE 1400

HONOLULU, HI 96813



SHIP TO: (907) 562-2343 **BILL THIRD PARTY** SAMPLE RECEIVING **SGS Environmental Services** 200 W POTTER DR

ANCHORAGE, AK 99518



Ship Date: 14APR10 ActWgt: 30.0 LB CAD: 1774997/INET3010

Dims: 24 X 14 X 14 IN

Delivery Address Bar Code



invoice# PO# Dept #

1101584



4 of 5

7934 4724 7455

Mstr# 7934 4724 7271 0201

WU ANCA

THU - 15 APR PRIORITY OVERNIGHT

99518

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After printing this label:

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

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