

## ANALYTICAL REPORT

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Laboratory Job ID: 580-111294-1  
Client Project/Site: Red Hill NOI GW

For:  
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Authorized for release by:  
3/23/2022 8:17:39 PM

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*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Case Narrative

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Job ID: 580-111294-1**

**Laboratory: Eurofins Seattle**

## Narrative

### CASE NARRATIVE Client: AECOM Project: Red Hill NOI GW Report Number: 580-111294-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

Following DoD QSM guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: Q-S-002. The reason(s) for manual integration have been documented on the affected chromatogram(s), which is/are provided in the raw data package. The raw data also includes the original chromatogram(s) prior to any manual integration being performed. Manual integrations are detailed in the manual integration summary forms following this narrative.

It should be noted that samples with elevated Limits of Quantitation (LOQs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the LOQs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

#### **RECEIPT**

Five samples were received on 3/11/2022 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.3° C and 1.9° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

#### **SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)**

**Samples ERH2692 (OWDFMW01) (580-111294-1), ERH2772 (Equipment Blank) (580-111294-2), ERH2743 (RHMW13-5) (580-111294-3), ERH2744 (RHMW13-5) (580-111294-4) and ERH2745 (RHMW13-5) (580-111294-5) were analyzed for semivolatile organic compounds (GC-MS) in accordance with 8270E.** The samples were prepared on 03/17/2022 and analyzed on 03/22/2022.

Surrogate recovery for the following samples were outside control limits: ERH2772 (Equipment Blank) (580-111294-2) and ERH2745 (RHMW13-5) (580-111294-5). The associated samples were ND for all analytes.

The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-384725 was outside criteria for the following analyte: N-Nitrosodi-n-propylamine. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte is considered estimated.

The continuing calibration verification (CCV) associated with batch 580-384725 recovered above the upper control limit for bis (2-chloroisopropyl) ether (%D 26.6), Di-n-octyl phthalate (%D 30.8). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: ERH2692 (OWDFMW01) (580-111294-1), ERH2772 (Equipment Blank) (580-111294-2), ERH2743 (RHMW13-5) (580-111294-3), ERH2744 (RHMW13-5) (580-111294-4), ERH2745 (RHMW13-5) (580-111294-5) and (CCVIS 580-384725/3).

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 580-383995 and

# Case Narrative

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

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## Job ID: 580-111294-1 (Continued)

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### Laboratory: Eurofins Seattle (Continued)

580-384177 and analytical batch 580-384146 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene, 1,3-Dichlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Phenol, Pyridine and 3 & 4 Methylphenol. The associated LCS and LCSD recoveries were in control.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### **SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS - SIM)**

**Samples ERH2692 (OWDFMW01) (580-111294-1), ERH2772 (Equipment Blank) (580-111294-2), ERH2743 (RHMW13-5) (580-111294-3), ERH2744 (RHMW13-5) (580-111294-4) and ERH2745 (RHMW13-5) (580-111294-5) were analyzed for semivolatile organic compounds (GC-MS - SIM) in accordance with 8270E SIM. The samples were prepared on 03/17/2022 and analyzed on 03/18/2022.**

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Definitions/Glossary

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFI	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2692 (OWDFMW01)**

**Lab Sample ID: 580-111294-1**

Date Collected: 03/10/22 10:05

Matrix: Water

Date Received: 03/11/22 09:40

**Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.033	U M	0.10	0.020	ug/L		03/17/22 11:35	03/18/22 13:59	1
2-Methylnaphthalene	0.082	U M	0.21	0.040	ug/L		03/17/22 11:35	03/18/22 13:59	1
Acenaphthene	0.033	U M	0.10	0.014	ug/L		03/17/22 11:35	03/18/22 13:59	1
Acenaphthylene	0.033	U M	0.052	0.0093	ug/L		03/17/22 11:35	03/18/22 13:59	1
Anthracene	0.082	U M	0.10	0.023	ug/L		03/17/22 11:35	03/18/22 13:59	1
Benzo[a]anthracene	0.033	U M	0.052	0.014	ug/L		03/17/22 11:35	03/18/22 13:59	1
Benzo[a]pyrene	0.033	U M	0.10	0.011	ug/L		03/17/22 11:35	03/18/22 13:59	1
Benzo[b]fluoranthene	0.033	U	0.052	0.011	ug/L		03/17/22 11:35	03/18/22 13:59	1
Benzo[g,h,i]perylene	0.033	U	0.052	0.012	ug/L		03/17/22 11:35	03/18/22 13:59	1
Benzo[k]fluoranthene	0.033	U	0.052	0.012	ug/L		03/17/22 11:35	03/18/22 13:59	1
Chrysene	0.033	U M	0.10	0.016	ug/L		03/17/22 11:35	03/18/22 13:59	1
Dibenz(a,h)anthracene	0.033	U	0.10	0.027	ug/L		03/17/22 11:35	03/18/22 13:59	1
Fluoranthene	0.033	U M	0.21	0.019	ug/L		03/17/22 11:35	03/18/22 13:59	1
Fluorene	0.033	U M	0.10	0.018	ug/L		03/17/22 11:35	03/18/22 13:59	1
Indeno[1,2,3-cd]pyrene	0.033	U	0.052	0.014	ug/L		03/17/22 11:35	03/18/22 13:59	1
Naphthalene	0.082	U M	0.10	0.032	ug/L		03/17/22 11:35	03/18/22 13:59	1
Phenanthrene	0.082	U M	0.10	0.032	ug/L		03/17/22 11:35	03/18/22 13:59	1
Pyrene	0.082	U M	0.10	0.034	ug/L		03/17/22 11:35	03/18/22 13:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-methylnaphthalene-d10	63		40 - 140	03/17/22 11:35	03/18/22 13:59	1
Fluoranthene-d10 (Surr)	82		40 - 140	03/17/22 11:35	03/18/22 13:59	1
Terphenyl-d14	90		58 - 132	03/17/22 11:35	03/18/22 13:59	1

**Method: 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.31	U Q	0.41	0.093	ug/L		03/17/22 11:35	03/22/22 17:10	1
1,2-Dichlorobenzene	0.15	U	0.41	0.052	ug/L		03/17/22 11:35	03/22/22 17:10	1
1,3-Dichlorobenzene	0.093	U Q	0.41	0.041	ug/L		03/17/22 11:35	03/22/22 17:10	1
1,4-Dichlorobenzene	0.093	U	0.41	0.041	ug/L		03/17/22 11:35	03/22/22 17:10	1
2,4,5-Trichlorophenol	0.31	U	0.41	0.10	ug/L		03/17/22 11:35	03/22/22 17:10	1
2,4,6-Trichlorophenol	0.31	U	0.62	0.10	ug/L		03/17/22 11:35	03/22/22 17:10	1
2,4-Dichlorophenol	0.52	U	1.0	0.21	ug/L		03/17/22 11:35	03/22/22 17:10	1
2,4-Dimethylphenol	0.52	U	4.1	0.16	ug/L		03/17/22 11:35	03/22/22 17:10	1
2,4-Dinitrophenol	3.3	U	5.2	1.6	ug/L		03/17/22 11:35	03/22/22 17:10	1
2,4-Dinitrotoluene	0.31	U	1.0	0.10	ug/L		03/17/22 11:35	03/22/22 17:10	1
2,6-Dinitrotoluene	0.31	U	0.41	0.10	ug/L		03/17/22 11:35	03/22/22 17:10	1
2-Chloronaphthalene	0.15	U	1.0	0.072	ug/L		03/17/22 11:35	03/22/22 17:10	1
2-Chlorophenol	0.15	U	1.0	0.052	ug/L		03/17/22 11:35	03/22/22 17:10	1
2-Nitrophenol	0.15	U	1.0	0.072	ug/L		03/17/22 11:35	03/22/22 17:10	1
3,3'-Dichlorobenzidine	0.62	U	1.0	0.27	ug/L		03/17/22 11:35	03/22/22 17:10	1
4,6-Dinitro-2-methylphenol	1.2	U	2.1	0.57	ug/L		03/17/22 11:35	03/22/22 17:10	1
4-Bromophenyl phenyl ether	0.15	U	0.62	0.062	ug/L		03/17/22 11:35	03/22/22 17:10	1
4-Chloro-3-methylphenol	0.31	U M	0.62	0.13	ug/L		03/17/22 11:35	03/22/22 17:10	1
4-Chlorophenyl phenyl ether	0.15	U	0.62	0.052	ug/L		03/17/22 11:35	03/22/22 17:10	1
4-Nitrophenol	6.2	U	10	1.8	ug/L		03/17/22 11:35	03/22/22 17:10	1
Azobenzene	0.15	U	2.1	0.062	ug/L		03/17/22 11:35	03/22/22 17:10	1
Bis(2-chloroethoxy)methane	0.15	U	0.62	0.052	ug/L		03/17/22 11:35	03/22/22 17:10	1
Bis(2-chloroethyl)ether	0.093	U	0.10	0.031	ug/L		03/17/22 11:35	03/22/22 17:10	1
Bis(2-ethylhexyl) phthalate	1.6	U	3.1	0.76	ug/L		03/17/22 11:35	03/22/22 17:10	1

Eurolins Seattle

# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2692 (OWDFMW01)**

**Lab Sample ID: 580-111294-1**

**Date Collected: 03/10/22 10:05**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

**Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	0.15	U M Q	0.26	0.062	ug/L		03/17/22 11:35	03/22/22 17:10	1
Butyl benzyl phthalate	0.62	U	4.1	0.28	ug/L		03/17/22 11:35	03/22/22 17:10	1
Diethyl phthalate	0.31	U	1.0	0.15	ug/L		03/17/22 11:35	03/22/22 17:10	1
Dimethyl phthalate	0.15	U	0.62	0.062	ug/L		03/17/22 11:35	03/22/22 17:10	1
Di-n-butyl phthalate	0.52	U	3.1	0.20	ug/L		03/17/22 11:35	03/22/22 17:10	1
Di-n-octyl phthalate	0.31	U M Q	1.0	0.13	ug/L		03/17/22 11:35	03/22/22 17:10	1
Hexachlorobenzene	0.093	U	0.62	0.041	ug/L		03/17/22 11:35	03/22/22 17:10	1
Hexachlorobutadiene	0.15	U Q	1.0	0.062	ug/L		03/17/22 11:35	03/22/22 17:10	1
Hexachlorocyclopentadiene	0.31	U Q	1.0	0.14	ug/L		03/17/22 11:35	03/22/22 17:10	1
Hexachloroethane	0.15	U Q	1.0	0.052	ug/L		03/17/22 11:35	03/22/22 17:10	1
Isophorone	0.31	U	0.41	0.10	ug/L		03/17/22 11:35	03/22/22 17:10	1
m+p-Cresol	0.31	U Q	0.62	0.10	ug/L		03/17/22 11:35	03/22/22 17:10	1
Nitrobenzene	0.093	U	1.0	0.041	ug/L		03/17/22 11:35	03/22/22 17:10	1
N-Nitrosodimethylamine	0.62	U	2.1	0.27	ug/L		03/17/22 11:35	03/22/22 17:10	1
N-Nitrosodi-n-propylamine	0.093	U	0.41	0.062	ug/L		03/17/22 11:35	03/22/22 17:10	1
N-Nitrosodiphenylamine	0.15	U	1.0	0.072	ug/L		03/17/22 11:35	03/22/22 17:10	1
o-Cresol	0.15	U	0.62	0.052	ug/L		03/17/22 11:35	03/22/22 17:10	1
Pentachlorophenol	1.0	U	10	0.53	ug/L		03/17/22 11:35	03/22/22 17:10	1
Phenol	0.62	U Q	1.0	0.37	ug/L		03/17/22 11:35	03/22/22 17:10	1
Pyrene	0.093	U	1.0	0.041	ug/L		03/17/22 11:35	03/22/22 17:10	1
Pyridine	3.3	U Q	10	1.1	ug/L		03/17/22 11:35	03/22/22 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	69		43 - 140	03/17/22 11:35	03/22/22 17:10	1
2-Fluorobiphenyl	69		44 - 119	03/17/22 11:35	03/22/22 17:10	1
2-Fluorophenol (Surr)	53		19 - 119	03/17/22 11:35	03/22/22 17:10	1
Nitrobenzene-d5 (Surr)	76		44 - 120	03/17/22 11:35	03/22/22 17:10	1
Phenol-d5 (Surr)	32		10 - 120	03/17/22 11:35	03/22/22 17:10	1
Terphenyl-d14	97		50 - 134	03/17/22 11:35	03/22/22 17:10	1

# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2772 (Equipment Blank)**

**Lab Sample ID: 580-111294-2**

Date Collected: 03/10/22 11:42

Matrix: Water

Date Received: 03/11/22 09:40

**Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.031	U M	0.095	0.018	ug/L		03/17/22 11:35	03/18/22 14:18	1
2-Methylnaphthalene	0.076	U M	0.19	0.037	ug/L		03/17/22 11:35	03/18/22 14:18	1
Acenaphthene	0.031	U	0.095	0.013	ug/L		03/17/22 11:35	03/18/22 14:18	1
Acenaphthylene	0.031	U	0.048	0.0086	ug/L		03/17/22 11:35	03/18/22 14:18	1
Anthracene	0.076	U M	0.095	0.021	ug/L		03/17/22 11:35	03/18/22 14:18	1
Benzo[a]anthracene	0.031	U	0.048	0.013	ug/L		03/17/22 11:35	03/18/22 14:18	1
Benzo[a]pyrene	0.031	U	0.095	0.010	ug/L		03/17/22 11:35	03/18/22 14:18	1
Benzo[b]fluoranthene	0.031	U	0.048	0.010	ug/L		03/17/22 11:35	03/18/22 14:18	1
Benzo[g,h,i]perylene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 14:18	1
Benzo[k]fluoranthene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 14:18	1
Chrysene	0.031	U	0.095	0.015	ug/L		03/17/22 11:35	03/18/22 14:18	1
Dibenz(a,h)anthracene	0.031	U	0.095	0.025	ug/L		03/17/22 11:35	03/18/22 14:18	1
Fluoranthene	0.031	U M	0.19	0.017	ug/L		03/17/22 11:35	03/18/22 14:18	1
Fluorene	0.031	U	0.095	0.016	ug/L		03/17/22 11:35	03/18/22 14:18	1
Indeno[1,2,3-cd]pyrene	0.031	U	0.048	0.013	ug/L		03/17/22 11:35	03/18/22 14:18	1
Naphthalene	0.076	U M	0.095	0.030	ug/L		03/17/22 11:35	03/18/22 14:18	1
Phenanthrene	0.076	U M	0.095	0.030	ug/L		03/17/22 11:35	03/18/22 14:18	1
Pyrene	0.076	U M	0.095	0.031	ug/L		03/17/22 11:35	03/18/22 14:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-methylnaphthalene-d10	51		40 - 140	03/17/22 11:35	03/18/22 14:18	1
Fluoranthene-d10 (Surr)	72		40 - 140	03/17/22 11:35	03/18/22 14:18	1
Terphenyl-d14	88		58 - 132	03/17/22 11:35	03/18/22 14:18	1

**Method: 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.29	U Q	0.38	0.086	ug/L		03/17/22 11:35	03/22/22 17:34	1
1,2-Dichlorobenzene	0.14	U	0.38	0.048	ug/L		03/17/22 11:35	03/22/22 17:34	1
1,3-Dichlorobenzene	0.086	U Q	0.38	0.038	ug/L		03/17/22 11:35	03/22/22 17:34	1
1,4-Dichlorobenzene	0.086	U	0.38	0.038	ug/L		03/17/22 11:35	03/22/22 17:34	1
2,4,5-Trichlorophenol	0.29	U Q	0.38	0.095	ug/L		03/17/22 11:35	03/22/22 17:34	1
2,4,6-Trichlorophenol	0.29	U Q	0.57	0.095	ug/L		03/17/22 11:35	03/22/22 17:34	1
2,4-Dichlorophenol	0.48	U	0.95	0.19	ug/L		03/17/22 11:35	03/22/22 17:34	1
2,4-Dimethylphenol	0.48	U	3.8	0.15	ug/L		03/17/22 11:35	03/22/22 17:34	1
2,4-Dinitrophenol	3.1	U Q	4.8	1.5	ug/L		03/17/22 11:35	03/22/22 17:34	1
2,4-Dinitrotoluene	0.29	U	0.95	0.095	ug/L		03/17/22 11:35	03/22/22 17:34	1
2,6-Dinitrotoluene	0.29	U	0.38	0.095	ug/L		03/17/22 11:35	03/22/22 17:34	1
2-Chloronaphthalene	0.14	U	0.95	0.067	ug/L		03/17/22 11:35	03/22/22 17:34	1
2-Chlorophenol	0.14	U	0.95	0.048	ug/L		03/17/22 11:35	03/22/22 17:34	1
2-Nitrophenol	0.14	U	0.95	0.067	ug/L		03/17/22 11:35	03/22/22 17:34	1
3,3'-Dichlorobenzidine	0.57	U	0.95	0.25	ug/L		03/17/22 11:35	03/22/22 17:34	1
4,6-Dinitro-2-methylphenol	1.1	U Q	1.9	0.52	ug/L		03/17/22 11:35	03/22/22 17:34	1
4-Bromophenyl phenyl ether	0.14	U	0.57	0.057	ug/L		03/17/22 11:35	03/22/22 17:34	1
4-Chloro-3-methylphenol	0.29	U Q	0.57	0.12	ug/L		03/17/22 11:35	03/22/22 17:34	1
4-Chlorophenyl phenyl ether	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 17:34	1
4-Nitrophenol	5.7	U Q	9.5	1.6	ug/L		03/17/22 11:35	03/22/22 17:34	1
Azobenzene	0.14	U	1.9	0.057	ug/L		03/17/22 11:35	03/22/22 17:34	1
Bis(2-chloroethoxy)methane	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 17:34	1
Bis(2-chloroethyl)ether	0.086	U	0.095	0.029	ug/L		03/17/22 11:35	03/22/22 17:34	1
Bis(2-ethylhexyl) phthalate	1.5	U	2.9	0.71	ug/L		03/17/22 11:35	03/22/22 17:34	1

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# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2772 (Equipment Blank)**

**Lab Sample ID: 580-111294-2**

**Date Collected: 03/10/22 11:42**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

**Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	0.14	U M Q	0.24	0.057	ug/L		03/17/22 11:35	03/22/22 17:34	1
Butyl benzyl phthalate	0.57	U	3.8	0.26	ug/L		03/17/22 11:35	03/22/22 17:34	1
Diethyl phthalate	0.29	U	0.95	0.14	ug/L		03/17/22 11:35	03/22/22 17:34	1
Dimethyl phthalate	0.14	U	0.57	0.057	ug/L		03/17/22 11:35	03/22/22 17:34	1
Di-n-butyl phthalate	0.48	U	2.9	0.18	ug/L		03/17/22 11:35	03/22/22 17:34	1
Di-n-octyl phthalate	0.29	U M Q	0.95	0.12	ug/L		03/17/22 11:35	03/22/22 17:34	1
Hexachlorobenzene	0.086	U	0.57	0.038	ug/L		03/17/22 11:35	03/22/22 17:34	1
Hexachlorobutadiene	0.14	U Q	0.95	0.057	ug/L		03/17/22 11:35	03/22/22 17:34	1
Hexachlorocyclopentadiene	0.29	U Q	0.95	0.13	ug/L		03/17/22 11:35	03/22/22 17:34	1
Hexachloroethane	0.14	U Q	0.95	0.048	ug/L		03/17/22 11:35	03/22/22 17:34	1
Isophorone	0.29	U	0.38	0.095	ug/L		03/17/22 11:35	03/22/22 17:34	1
m+p-Cresol	0.29	U Q	0.57	0.095	ug/L		03/17/22 11:35	03/22/22 17:34	1
Nitrobenzene	0.086	U	0.95	0.038	ug/L		03/17/22 11:35	03/22/22 17:34	1
N-Nitrosodimethylamine	0.57	U	1.9	0.25	ug/L		03/17/22 11:35	03/22/22 17:34	1
N-Nitrosodi-n-propylamine	0.086	U	0.38	0.057	ug/L		03/17/22 11:35	03/22/22 17:34	1
N-Nitrosodiphenylamine	0.14	U	0.95	0.067	ug/L		03/17/22 11:35	03/22/22 17:34	1
o-Cresol	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 17:34	1
Pentachlorophenol	0.95	U Q	9.5	0.49	ug/L		03/17/22 11:35	03/22/22 17:34	1
Phenol	0.57	U Q	0.95	0.34	ug/L		03/17/22 11:35	03/22/22 17:34	1
Pyrene	0.086	U	0.95	0.038	ug/L		03/17/22 11:35	03/22/22 17:34	1
Pyridine	3.1	U Q	9.5	1.0	ug/L		03/17/22 11:35	03/22/22 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	31	M Q	43 - 140	03/17/22 11:35	03/22/22 17:34	1
2-Fluorobiphenyl	60		44 - 119	03/17/22 11:35	03/22/22 17:34	1
2-Fluorophenol (Surr)	38		19 - 119	03/17/22 11:35	03/22/22 17:34	1
Nitrobenzene-d5 (Surr)	56		44 - 120	03/17/22 11:35	03/22/22 17:34	1
Phenol-d5 (Surr)	22		10 - 120	03/17/22 11:35	03/22/22 17:34	1
Terphenyl-d14	87		50 - 134	03/17/22 11:35	03/22/22 17:34	1

# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2743 (RHMW13-5)**

**Lab Sample ID: 580-111294-3**

Date Collected: 03/10/22 09:15

Matrix: Water

Date Received: 03/11/22 09:40

## Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.032	U M	0.10	0.019	ug/L		03/17/22 11:35	03/18/22 14:38	1
2-Methylnaphthalene	0.080	U M	0.20	0.039	ug/L		03/17/22 11:35	03/18/22 14:38	1
Acenaphthene	0.032	U	0.10	0.014	ug/L		03/17/22 11:35	03/18/22 14:38	1
Acenaphthylene	0.032	U M	0.050	0.0091	ug/L		03/17/22 11:35	03/18/22 14:38	1
Anthracene	0.080	U M	0.10	0.022	ug/L		03/17/22 11:35	03/18/22 14:38	1
Benzo[a]anthracene	0.032	U M	0.050	0.014	ug/L		03/17/22 11:35	03/18/22 14:38	1
Benzo[a]pyrene	0.032	U	0.10	0.011	ug/L		03/17/22 11:35	03/18/22 14:38	1
Benzo[b]fluoranthene	0.032	U	0.050	0.011	ug/L		03/17/22 11:35	03/18/22 14:38	1
Benzo[g,h,i]perylene	0.032	U	0.050	0.012	ug/L		03/17/22 11:35	03/18/22 14:38	1
Benzo[k]fluoranthene	0.032	U	0.050	0.012	ug/L		03/17/22 11:35	03/18/22 14:38	1
Chrysene	0.032	U	0.10	0.016	ug/L		03/17/22 11:35	03/18/22 14:38	1
Dibenz(a,h)anthracene	0.032	U	0.10	0.026	ug/L		03/17/22 11:35	03/18/22 14:38	1
Fluoranthene	0.032	U	0.20	0.018	ug/L		03/17/22 11:35	03/18/22 14:38	1
Fluorene	0.032	U	0.10	0.017	ug/L		03/17/22 11:35	03/18/22 14:38	1
Indeno[1,2,3-cd]pyrene	0.032	U	0.050	0.014	ug/L		03/17/22 11:35	03/18/22 14:38	1
Naphthalene	0.080	U M	0.10	0.031	ug/L		03/17/22 11:35	03/18/22 14:38	1
Phenanthrene	0.080	U M	0.10	0.031	ug/L		03/17/22 11:35	03/18/22 14:38	1
Pyrene	0.080	U M	0.10	0.033	ug/L		03/17/22 11:35	03/18/22 14:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-methylnaphthalene-d10	58		40 - 140	03/17/22 11:35	03/18/22 14:38	1
Fluoranthene-d10 (Surr)	79		40 - 140	03/17/22 11:35	03/18/22 14:38	1
Terphenyl-d14	87		58 - 132	03/17/22 11:35	03/18/22 14:38	1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.30	U Q	0.40	0.091	ug/L		03/17/22 11:35	03/22/22 17:58	1
1,2-Dichlorobenzene	0.15	U	0.40	0.050	ug/L		03/17/22 11:35	03/22/22 17:58	1
1,3-Dichlorobenzene	0.091	U Q	0.40	0.040	ug/L		03/17/22 11:35	03/22/22 17:58	1
1,4-Dichlorobenzene	0.091	U	0.40	0.040	ug/L		03/17/22 11:35	03/22/22 17:58	1
2,4,5-Trichlorophenol	0.30	U	0.40	0.10	ug/L		03/17/22 11:35	03/22/22 17:58	1
2,4,6-Trichlorophenol	0.30	U	0.60	0.10	ug/L		03/17/22 11:35	03/22/22 17:58	1
2,4-Dichlorophenol	0.50	U	1.0	0.20	ug/L		03/17/22 11:35	03/22/22 17:58	1
2,4-Dimethylphenol	0.50	U	4.0	0.16	ug/L		03/17/22 11:35	03/22/22 17:58	1
2,4-Dinitrophenol	3.2	U	5.0	1.6	ug/L		03/17/22 11:35	03/22/22 17:58	1
2,4-Dinitrotoluene	0.30	U	1.0	0.10	ug/L		03/17/22 11:35	03/22/22 17:58	1
2,6-Dinitrotoluene	0.30	U	0.40	0.10	ug/L		03/17/22 11:35	03/22/22 17:58	1
2-Chloronaphthalene	0.15	U	1.0	0.070	ug/L		03/17/22 11:35	03/22/22 17:58	1
2-Chlorophenol	0.15	U	1.0	0.050	ug/L		03/17/22 11:35	03/22/22 17:58	1
2-Nitrophenol	0.15	U	1.0	0.070	ug/L		03/17/22 11:35	03/22/22 17:58	1
3,3'-Dichlorobenzidine	0.60	U	1.0	0.26	ug/L		03/17/22 11:35	03/22/22 17:58	1
4,6-Dinitro-2-methylphenol	1.2	U	2.0	0.55	ug/L		03/17/22 11:35	03/22/22 17:58	1
4-Bromophenyl phenyl ether	0.15	U	0.60	0.060	ug/L		03/17/22 11:35	03/22/22 17:58	1
4-Chloro-3-methylphenol	0.30	U M	0.60	0.13	ug/L		03/17/22 11:35	03/22/22 17:58	1
4-Chlorophenyl phenyl ether	0.15	U	0.60	0.050	ug/L		03/17/22 11:35	03/22/22 17:58	1
4-Nitrophenol	6.0	U	10	1.7	ug/L		03/17/22 11:35	03/22/22 17:58	1
Azobenzene	0.15	U M	2.0	0.060	ug/L		03/17/22 11:35	03/22/22 17:58	1
Bis(2-chloroethoxy)methane	0.15	U	0.60	0.050	ug/L		03/17/22 11:35	03/22/22 17:58	1
Bis(2-chloroethyl)ether	0.091	U	0.10	0.030	ug/L		03/17/22 11:35	03/22/22 17:58	1
Bis(2-ethylhexyl) phthalate	1.6	U	3.0	0.74	ug/L		03/17/22 11:35	03/22/22 17:58	1

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# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2743 (RHMW13-5)**

**Lab Sample ID: 580-111294-3**

Date Collected: 03/10/22 09:15

Matrix: Water

Date Received: 03/11/22 09:40

**Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	0.15	U M Q	0.25	0.060	ug/L		03/17/22 11:35	03/22/22 17:58	1
Butyl benzyl phthalate	0.60	U	4.0	0.27	ug/L		03/17/22 11:35	03/22/22 17:58	1
Diethyl phthalate	0.30	U	1.0	0.15	ug/L		03/17/22 11:35	03/22/22 17:58	1
Dimethyl phthalate	0.15	U	0.60	0.060	ug/L		03/17/22 11:35	03/22/22 17:58	1
Di-n-butyl phthalate	0.50	U	3.0	0.19	ug/L		03/17/22 11:35	03/22/22 17:58	1
Di-n-octyl phthalate	0.30	U M Q	1.0	0.13	ug/L		03/17/22 11:35	03/22/22 17:58	1
Hexachlorobenzene	0.091	U	0.60	0.040	ug/L		03/17/22 11:35	03/22/22 17:58	1
Hexachlorobutadiene	0.15	U Q	1.0	0.060	ug/L		03/17/22 11:35	03/22/22 17:58	1
Hexachlorocyclopentadiene	0.30	U Q	1.0	0.14	ug/L		03/17/22 11:35	03/22/22 17:58	1
Hexachloroethane	0.15	U Q	1.0	0.050	ug/L		03/17/22 11:35	03/22/22 17:58	1
Isophorone	0.30	U	0.40	0.10	ug/L		03/17/22 11:35	03/22/22 17:58	1
m+p-Cresol	0.30	U Q	0.60	0.10	ug/L		03/17/22 11:35	03/22/22 17:58	1
Nitrobenzene	0.091	U	1.0	0.040	ug/L		03/17/22 11:35	03/22/22 17:58	1
N-Nitrosodimethylamine	0.60	U	2.0	0.26	ug/L		03/17/22 11:35	03/22/22 17:58	1
N-Nitrosodi-n-propylamine	0.091	U	0.40	0.060	ug/L		03/17/22 11:35	03/22/22 17:58	1
N-Nitrosodiphenylamine	0.15	U	1.0	0.070	ug/L		03/17/22 11:35	03/22/22 17:58	1
o-Cresol	0.15	U	0.60	0.050	ug/L		03/17/22 11:35	03/22/22 17:58	1
Pentachlorophenol	1.0	U	10	0.51	ug/L		03/17/22 11:35	03/22/22 17:58	1
Phenol	0.60	U M Q	1.0	0.36	ug/L		03/17/22 11:35	03/22/22 17:58	1
Pyrene	0.091	U	1.0	0.040	ug/L		03/17/22 11:35	03/22/22 17:58	1
Pyridine	3.2	U Q	10	1.1	ug/L		03/17/22 11:35	03/22/22 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	68		43 - 140	03/17/22 11:35	03/22/22 17:58	1
2-Fluorobiphenyl	59		44 - 119	03/17/22 11:35	03/22/22 17:58	1
2-Fluorophenol (Surr)	44		19 - 119	03/17/22 11:35	03/22/22 17:58	1
Nitrobenzene-d5 (Surr)	70		44 - 120	03/17/22 11:35	03/22/22 17:58	1
Phenol-d5 (Surr)	24		10 - 120	03/17/22 11:35	03/22/22 17:58	1
Terphenyl-d14	95		50 - 134	03/17/22 11:35	03/22/22 17:58	1

# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2744 (RHMW13-5)**

**Lab Sample ID: 580-111294-4**

Date Collected: 03/10/22 12:44

Matrix: Water

Date Received: 03/11/22 09:40

## Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.031	U M	0.096	0.018	ug/L		03/17/22 11:35	03/18/22 14:57	1
2-Methylnaphthalene	0.077	U M	0.19	0.037	ug/L		03/17/22 11:35	03/18/22 14:57	1
Acenaphthene	0.031	U M	0.096	0.013	ug/L		03/17/22 11:35	03/18/22 14:57	1
Acenaphthylene	0.031	U M	0.048	0.0086	ug/L		03/17/22 11:35	03/18/22 14:57	1
Anthracene	0.077	U	0.096	0.021	ug/L		03/17/22 11:35	03/18/22 14:57	1
Benzo[a]anthracene	0.031	U	0.048	0.013	ug/L		03/17/22 11:35	03/18/22 14:57	1
Benzo[a]pyrene	0.031	U	0.096	0.011	ug/L		03/17/22 11:35	03/18/22 14:57	1
Benzo[b]fluoranthene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 14:57	1
Benzo[g,h,i]perylene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 14:57	1
Benzo[k]fluoranthene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 14:57	1
Chrysene	0.031	U	0.096	0.015	ug/L		03/17/22 11:35	03/18/22 14:57	1
Dibenz(a,h)anthracene	0.031	U	0.096	0.025	ug/L		03/17/22 11:35	03/18/22 14:57	1
Fluoranthene	0.031	U M	0.19	0.017	ug/L		03/17/22 11:35	03/18/22 14:57	1
Fluorene	0.031	U	0.096	0.016	ug/L		03/17/22 11:35	03/18/22 14:57	1
Indeno[1,2,3-cd]pyrene	0.031	U	0.048	0.013	ug/L		03/17/22 11:35	03/18/22 14:57	1
Naphthalene	0.077	U M	0.096	0.030	ug/L		03/17/22 11:35	03/18/22 14:57	1
Phenanthrene	0.077	U M	0.096	0.030	ug/L		03/17/22 11:35	03/18/22 14:57	1
Pyrene	0.077	U M	0.096	0.032	ug/L		03/17/22 11:35	03/18/22 14:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-methylnaphthalene-d10	52		40 - 140	03/17/22 11:35	03/18/22 14:57	1
Fluoranthene-d10 (Surr)	76		40 - 140	03/17/22 11:35	03/18/22 14:57	1
Terphenyl-d14	87		58 - 132	03/17/22 11:35	03/18/22 14:57	1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.29	U Q	0.38	0.086	ug/L		03/17/22 11:35	03/22/22 18:22	1
1,2-Dichlorobenzene	0.14	U	0.38	0.048	ug/L		03/17/22 11:35	03/22/22 18:22	1
1,3-Dichlorobenzene	0.086	U Q	0.38	0.038	ug/L		03/17/22 11:35	03/22/22 18:22	1
1,4-Dichlorobenzene	0.086	U	0.38	0.038	ug/L		03/17/22 11:35	03/22/22 18:22	1
2,4,5-Trichlorophenol	0.29	U	0.38	0.096	ug/L		03/17/22 11:35	03/22/22 18:22	1
2,4,6-Trichlorophenol	0.29	U	0.57	0.096	ug/L		03/17/22 11:35	03/22/22 18:22	1
2,4-Dichlorophenol	0.48	U	0.96	0.19	ug/L		03/17/22 11:35	03/22/22 18:22	1
2,4-Dimethylphenol	0.48	U	3.8	0.15	ug/L		03/17/22 11:35	03/22/22 18:22	1
2,4-Dinitrophenol	3.1	U	4.8	1.5	ug/L		03/17/22 11:35	03/22/22 18:22	1
2,4-Dinitrotoluene	0.29	U	0.96	0.096	ug/L		03/17/22 11:35	03/22/22 18:22	1
2,6-Dinitrotoluene	0.29	U	0.38	0.096	ug/L		03/17/22 11:35	03/22/22 18:22	1
2-Chloronaphthalene	0.14	U	0.96	0.067	ug/L		03/17/22 11:35	03/22/22 18:22	1
2-Chlorophenol	0.14	U	0.96	0.048	ug/L		03/17/22 11:35	03/22/22 18:22	1
2-Nitrophenol	0.14	U	0.96	0.067	ug/L		03/17/22 11:35	03/22/22 18:22	1
3,3'-Dichlorobenzidine	0.57	U	0.96	0.25	ug/L		03/17/22 11:35	03/22/22 18:22	1
4,6-Dinitro-2-methylphenol	1.1	U	1.9	0.53	ug/L		03/17/22 11:35	03/22/22 18:22	1
4-Bromophenyl phenyl ether	0.14	U	0.57	0.057	ug/L		03/17/22 11:35	03/22/22 18:22	1
4-Chloro-3-methylphenol	0.29	U	0.57	0.12	ug/L		03/17/22 11:35	03/22/22 18:22	1
4-Chlorophenyl phenyl ether	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 18:22	1
4-Nitrophenol	5.7	U	9.6	1.6	ug/L		03/17/22 11:35	03/22/22 18:22	1
Azobenzene	0.14	U	1.9	0.057	ug/L		03/17/22 11:35	03/22/22 18:22	1
<b>Bis(2-chloroethoxy)methane</b>	<b>0.27</b>	<b>J</b>	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 18:22	1
Bis(2-chloroethyl)ether	0.086	U	0.096	0.029	ug/L		03/17/22 11:35	03/22/22 18:22	1
Bis(2-ethylhexyl) phthalate	1.5	U	2.9	0.71	ug/L		03/17/22 11:35	03/22/22 18:22	1

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# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2744 (RHMW13-5)**

**Lab Sample ID: 580-111294-4**

**Date Collected: 03/10/22 12:44**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

**Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	0.14	U M Q	0.24	0.057	ug/L		03/17/22 11:35	03/22/22 18:22	1
Butyl benzyl phthalate	0.57	U	3.8	0.26	ug/L		03/17/22 11:35	03/22/22 18:22	1
Diethyl phthalate	0.29	U	0.96	0.14	ug/L		03/17/22 11:35	03/22/22 18:22	1
Dimethyl phthalate	0.14	U	0.57	0.057	ug/L		03/17/22 11:35	03/22/22 18:22	1
Di-n-butyl phthalate	0.48	U	2.9	0.18	ug/L		03/17/22 11:35	03/22/22 18:22	1
Di-n-octyl phthalate	0.29	U M Q	0.96	0.12	ug/L		03/17/22 11:35	03/22/22 18:22	1
Hexachlorobenzene	0.086	U	0.57	0.038	ug/L		03/17/22 11:35	03/22/22 18:22	1
Hexachlorobutadiene	0.14	U Q	0.96	0.057	ug/L		03/17/22 11:35	03/22/22 18:22	1
Hexachlorocyclopentadiene	0.29	U Q	0.96	0.13	ug/L		03/17/22 11:35	03/22/22 18:22	1
Hexachloroethane	0.14	U Q	0.96	0.048	ug/L		03/17/22 11:35	03/22/22 18:22	1
Isophorone	0.29	U	0.38	0.096	ug/L		03/17/22 11:35	03/22/22 18:22	1
m+p-Cresol	0.29	U Q	0.57	0.096	ug/L		03/17/22 11:35	03/22/22 18:22	1
Nitrobenzene	0.086	U	0.96	0.038	ug/L		03/17/22 11:35	03/22/22 18:22	1
N-Nitrosodimethylamine	0.57	U	1.9	0.25	ug/L		03/17/22 11:35	03/22/22 18:22	1
N-Nitrosodi-n-propylamine	0.086	U	0.38	0.057	ug/L		03/17/22 11:35	03/22/22 18:22	1
N-Nitrosodiphenylamine	0.14	U	0.96	0.067	ug/L		03/17/22 11:35	03/22/22 18:22	1
o-Cresol	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 18:22	1
Pentachlorophenol	0.96	U	9.6	0.49	ug/L		03/17/22 11:35	03/22/22 18:22	1
Phenol	0.57	U Q	0.96	0.34	ug/L		03/17/22 11:35	03/22/22 18:22	1
Pyrene	0.086	U	0.96	0.038	ug/L		03/17/22 11:35	03/22/22 18:22	1
Pyridine	3.1	U Q	9.6	1.0	ug/L		03/17/22 11:35	03/22/22 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	44		43 - 140	03/17/22 11:35	03/22/22 18:22	1
2-Fluorobiphenyl	62		44 - 119	03/17/22 11:35	03/22/22 18:22	1
2-Fluorophenol (Surr)	39		19 - 119	03/17/22 11:35	03/22/22 18:22	1
Nitrobenzene-d5 (Surr)	62		44 - 120	03/17/22 11:35	03/22/22 18:22	1
Phenol-d5 (Surr)	22		10 - 120	03/17/22 11:35	03/22/22 18:22	1
Terphenyl-d14	91		50 - 134	03/17/22 11:35	03/22/22 18:22	1

# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2745 (RHMW13-5)**

**Lab Sample ID: 580-111294-5**

**Date Collected: 03/10/22 11:05**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

**Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.031	U M	0.095	0.018	ug/L		03/17/22 11:35	03/18/22 15:16	1
2-Methylnaphthalene	0.076	U M	0.19	0.037	ug/L		03/17/22 11:35	03/18/22 15:16	1
Acenaphthene	0.031	U	0.095	0.013	ug/L		03/17/22 11:35	03/18/22 15:16	1
Acenaphthylene	0.031	U	0.048	0.0086	ug/L		03/17/22 11:35	03/18/22 15:16	1
Anthracene	0.076	U	0.095	0.021	ug/L		03/17/22 11:35	03/18/22 15:16	1
Benzo[a]anthracene	0.031	U	0.048	0.013	ug/L		03/17/22 11:35	03/18/22 15:16	1
Benzo[a]pyrene	0.031	U	0.095	0.011	ug/L		03/17/22 11:35	03/18/22 15:16	1
Benzo[b]fluoranthene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 15:16	1
Benzo[g,h,i]perylene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 15:16	1
Benzo[k]fluoranthene	0.031	U	0.048	0.011	ug/L		03/17/22 11:35	03/18/22 15:16	1
Chrysene	0.031	U	0.095	0.015	ug/L		03/17/22 11:35	03/18/22 15:16	1
Dibenz(a,h)anthracene	0.031	U	0.095	0.025	ug/L		03/17/22 11:35	03/18/22 15:16	1
Fluoranthene	0.031	U M	0.19	0.017	ug/L		03/17/22 11:35	03/18/22 15:16	1
Fluorene	0.031	U	0.095	0.016	ug/L		03/17/22 11:35	03/18/22 15:16	1
Indeno[1,2,3-cd]pyrene	0.031	U	0.048	0.013	ug/L		03/17/22 11:35	03/18/22 15:16	1
Naphthalene	0.076	U M	0.095	0.030	ug/L		03/17/22 11:35	03/18/22 15:16	1
Phenanthrene	0.076	U M	0.095	0.030	ug/L		03/17/22 11:35	03/18/22 15:16	1
Pyrene	0.076	U M	0.095	0.032	ug/L		03/17/22 11:35	03/18/22 15:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-methylnaphthalene-d10	57		40 - 140	03/17/22 11:35	03/18/22 15:16	1
Fluoranthene-d10 (Surr)	74		40 - 140	03/17/22 11:35	03/18/22 15:16	1
Terphenyl-d14	87		58 - 132	03/17/22 11:35	03/18/22 15:16	1

**Method: 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.29	U Q	0.38	0.086	ug/L		03/17/22 11:35	03/22/22 18:45	1
1,2-Dichlorobenzene	0.14	U	0.38	0.048	ug/L		03/17/22 11:35	03/22/22 18:45	1
1,3-Dichlorobenzene	0.086	U Q	0.38	0.038	ug/L		03/17/22 11:35	03/22/22 18:45	1
1,4-Dichlorobenzene	0.086	U	0.38	0.038	ug/L		03/17/22 11:35	03/22/22 18:45	1
2,4,5-Trichlorophenol	0.29	U Q	0.38	0.095	ug/L		03/17/22 11:35	03/22/22 18:45	1
2,4,6-Trichlorophenol	0.29	U Q	0.57	0.095	ug/L		03/17/22 11:35	03/22/22 18:45	1
2,4-Dichlorophenol	0.48	U	0.95	0.19	ug/L		03/17/22 11:35	03/22/22 18:45	1
2,4-Dimethylphenol	0.48	U	3.8	0.15	ug/L		03/17/22 11:35	03/22/22 18:45	1
2,4-Dinitrophenol	3.1	U Q	4.8	1.5	ug/L		03/17/22 11:35	03/22/22 18:45	1
2,4-Dinitrotoluene	0.29	U	0.95	0.095	ug/L		03/17/22 11:35	03/22/22 18:45	1
2,6-Dinitrotoluene	0.29	U	0.38	0.095	ug/L		03/17/22 11:35	03/22/22 18:45	1
2-Chloronaphthalene	0.14	U	0.95	0.067	ug/L		03/17/22 11:35	03/22/22 18:45	1
2-Chlorophenol	0.14	U	0.95	0.048	ug/L		03/17/22 11:35	03/22/22 18:45	1
2-Nitrophenol	0.14	U	0.95	0.067	ug/L		03/17/22 11:35	03/22/22 18:45	1
3,3'-Dichlorobenzidine	0.57	U	0.95	0.25	ug/L		03/17/22 11:35	03/22/22 18:45	1
4,6-Dinitro-2-methylphenol	1.1	U Q	1.9	0.53	ug/L		03/17/22 11:35	03/22/22 18:45	1
4-Bromophenyl phenyl ether	0.14	U	0.57	0.057	ug/L		03/17/22 11:35	03/22/22 18:45	1
4-Chloro-3-methylphenol	0.29	U M Q	0.57	0.12	ug/L		03/17/22 11:35	03/22/22 18:45	1
4-Chlorophenyl phenyl ether	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 18:45	1
4-Nitrophenol	5.7	U Q	9.5	1.6	ug/L		03/17/22 11:35	03/22/22 18:45	1
Azobenzene	0.14	U	1.9	0.057	ug/L		03/17/22 11:35	03/22/22 18:45	1
Bis(2-chloroethoxy)methane	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 18:45	1
Bis(2-chloroethyl)ether	0.086	U M	0.095	0.029	ug/L		03/17/22 11:35	03/22/22 18:45	1
Bis(2-ethylhexyl) phthalate	1.5	U	2.9	0.71	ug/L		03/17/22 11:35	03/22/22 18:45	1

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# Client Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2745 (RHMW13-5)**

**Lab Sample ID: 580-111294-5**

**Date Collected: 03/10/22 11:05**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

**Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	0.14	U M Q	0.24	0.057	ug/L		03/17/22 11:35	03/22/22 18:45	1
Butyl benzyl phthalate	0.57	U	3.8	0.26	ug/L		03/17/22 11:35	03/22/22 18:45	1
Diethyl phthalate	0.29	U	0.95	0.14	ug/L		03/17/22 11:35	03/22/22 18:45	1
Dimethyl phthalate	0.14	U	0.57	0.057	ug/L		03/17/22 11:35	03/22/22 18:45	1
Di-n-butyl phthalate	0.48	U	2.9	0.18	ug/L		03/17/22 11:35	03/22/22 18:45	1
Di-n-octyl phthalate	0.29	U M Q	0.95	0.12	ug/L		03/17/22 11:35	03/22/22 18:45	1
Hexachlorobenzene	0.086	U	0.57	0.038	ug/L		03/17/22 11:35	03/22/22 18:45	1
Hexachlorobutadiene	0.14	U Q	0.95	0.057	ug/L		03/17/22 11:35	03/22/22 18:45	1
Hexachlorocyclopentadiene	0.29	U Q	0.95	0.13	ug/L		03/17/22 11:35	03/22/22 18:45	1
Hexachloroethane	0.14	U Q	0.95	0.048	ug/L		03/17/22 11:35	03/22/22 18:45	1
Isophorone	0.29	U	0.38	0.095	ug/L		03/17/22 11:35	03/22/22 18:45	1
m+p-Cresol	0.29	U Q	0.57	0.095	ug/L		03/17/22 11:35	03/22/22 18:45	1
Nitrobenzene	0.086	U	0.95	0.038	ug/L		03/17/22 11:35	03/22/22 18:45	1
N-Nitrosodimethylamine	0.57	U	1.9	0.25	ug/L		03/17/22 11:35	03/22/22 18:45	1
N-Nitrosodi-n-propylamine	0.086	U	0.38	0.057	ug/L		03/17/22 11:35	03/22/22 18:45	1
N-Nitrosodiphenylamine	0.14	U	0.95	0.067	ug/L		03/17/22 11:35	03/22/22 18:45	1
o-Cresol	0.14	U	0.57	0.048	ug/L		03/17/22 11:35	03/22/22 18:45	1
Pentachlorophenol	0.95	U Q	9.5	0.49	ug/L		03/17/22 11:35	03/22/22 18:45	1
Phenol	0.57	U Q	0.95	0.34	ug/L		03/17/22 11:35	03/22/22 18:45	1
Pyrene	0.086	U	0.95	0.038	ug/L		03/17/22 11:35	03/22/22 18:45	1
Pyridine	3.1	U Q	9.5	1.0	ug/L		03/17/22 11:35	03/22/22 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	39	Q	43 - 140	03/17/22 11:35	03/22/22 18:45	1
2-Fluorobiphenyl	62		44 - 119	03/17/22 11:35	03/22/22 18:45	1
2-Fluorophenol (Surr)	42		19 - 119	03/17/22 11:35	03/22/22 18:45	1
Nitrobenzene-d5 (Surr)	64		44 - 120	03/17/22 11:35	03/22/22 18:45	1
Phenol-d5 (Surr)	23		10 - 120	03/17/22 11:35	03/22/22 18:45	1
Terphenyl-d14	90		50 - 134	03/17/22 11:35	03/22/22 18:45	1

# QC Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 580-383995/1-A**  
**Matrix: Water**  
**Analysis Batch: 384146**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	0.30	U	0.40	0.090	ug/L		03/16/22 09:47	03/17/22 13:35	1
1,2-Dichlorobenzene	0.15	U	0.40	0.050	ug/L		03/16/22 09:47	03/17/22 13:35	1
1,3-Dichlorobenzene	0.090	U	0.40	0.040	ug/L		03/16/22 09:47	03/17/22 13:35	1
1,4-Dichlorobenzene	0.090	U	0.40	0.040	ug/L		03/16/22 09:47	03/17/22 13:35	1
2,4,5-Trichlorophenol	0.30	U	0.40	0.10	ug/L		03/16/22 09:47	03/17/22 13:35	1
2,4,6-Trichlorophenol	0.30	U	0.60	0.10	ug/L		03/16/22 09:47	03/17/22 13:35	1
2,4-Dichlorophenol	0.50	U	1.0	0.20	ug/L		03/16/22 09:47	03/17/22 13:35	1
2,4-Dimethylphenol	0.50	U	4.0	0.16	ug/L		03/16/22 09:47	03/17/22 13:35	1
2,4-Dinitrotoluene	0.30	U	1.0	0.10	ug/L		03/16/22 09:47	03/17/22 13:35	1
2,6-Dinitrotoluene	0.30	U	0.40	0.10	ug/L		03/16/22 09:47	03/17/22 13:35	1
2-Chloronaphthalene	0.15	U	1.0	0.070	ug/L		03/16/22 09:47	03/17/22 13:35	1
2-Chlorophenol	0.15	U	1.0	0.050	ug/L		03/16/22 09:47	03/17/22 13:35	1
2-Nitrophenol	0.15	U	1.0	0.070	ug/L		03/16/22 09:47	03/17/22 13:35	1
3,3'-Dichlorobenzidine	0.60	U	1.0	0.26	ug/L		03/16/22 09:47	03/17/22 13:35	1
4-Bromophenyl phenyl ether	0.15	U	0.60	0.060	ug/L		03/16/22 09:47	03/17/22 13:35	1
4-Chloro-3-methylphenol	0.30	U M	0.60	0.13	ug/L		03/16/22 09:47	03/17/22 13:35	1
4-Chlorophenyl phenyl ether	0.15	U	0.60	0.050	ug/L		03/16/22 09:47	03/17/22 13:35	1
4-Nitrophenol	6.0	U	10	1.7	ug/L		03/16/22 09:47	03/17/22 13:35	1
Azobenzene	0.15	U M	2.0	0.060	ug/L		03/16/22 09:47	03/17/22 13:35	1
Bis(2-chloroethoxy)methane	0.15	U	0.60	0.050	ug/L		03/16/22 09:47	03/17/22 13:35	1
Bis(2-chloroethyl)ether	0.090	U	0.10	0.030	ug/L		03/16/22 09:47	03/17/22 13:35	1
Bis(2-ethylhexyl) phthalate	1.6	U	3.0	0.74	ug/L		03/16/22 09:47	03/17/22 13:35	1
bis (2-chloroisopropyl) ether	0.15	U M	0.25	0.060	ug/L		03/16/22 09:47	03/17/22 13:35	1
Butyl benzyl phthalate	0.60	U	4.0	0.27	ug/L		03/16/22 09:47	03/17/22 13:35	1
Diethyl phthalate	0.30	U M	1.0	0.15	ug/L		03/16/22 09:47	03/17/22 13:35	1
Dimethyl phthalate	0.15	U	0.60	0.060	ug/L		03/16/22 09:47	03/17/22 13:35	1
Di-n-butyl phthalate	0.50	U	3.0	0.19	ug/L		03/16/22 09:47	03/17/22 13:35	1
Di-n-octyl phthalate	0.30	U M	1.0	0.13	ug/L		03/16/22 09:47	03/17/22 13:35	1
Hexachlorobenzene	0.090	U	0.60	0.040	ug/L		03/16/22 09:47	03/17/22 13:35	1
Hexachlorobutadiene	0.15	U	1.0	0.060	ug/L		03/16/22 09:47	03/17/22 13:35	1
Hexachlorocyclopentadiene	0.30	U	1.0	0.14	ug/L		03/16/22 09:47	03/17/22 13:35	1
Hexachloroethane	0.15	U	1.0	0.050	ug/L		03/16/22 09:47	03/17/22 13:35	1
Isophorone	0.30	U	0.40	0.10	ug/L		03/16/22 09:47	03/17/22 13:35	1
m+p-Cresol	0.30	U M	0.60	0.10	ug/L		03/16/22 09:47	03/17/22 13:35	1
Nitrobenzene	0.090	U M	1.0	0.040	ug/L		03/16/22 09:47	03/17/22 13:35	1
N-Nitrosodimethylamine	0.60	U	2.0	0.26	ug/L		03/16/22 09:47	03/17/22 13:35	1
N-Nitrosodi-n-propylamine	0.090	U	0.40	0.060	ug/L		03/16/22 09:47	03/17/22 13:35	1
N-Nitrosodiphenylamine	0.15	U	1.0	0.070	ug/L		03/16/22 09:47	03/17/22 13:35	1
o-Cresol	0.15	U M	0.60	0.050	ug/L		03/16/22 09:47	03/17/22 13:35	1
Pentachlorophenol	1.0	U	10	0.51	ug/L		03/16/22 09:47	03/17/22 13:35	1
Phenol	0.60	U	1.0	0.36	ug/L		03/16/22 09:47	03/17/22 13:35	1
Pyrene	0.090	U M	1.0	0.040	ug/L		03/16/22 09:47	03/17/22 13:35	1
Pyridine	3.2	U	10	1.1	ug/L		03/16/22 09:47	03/17/22 13:35	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	53		43 - 140	03/16/22 09:47	03/17/22 13:35	1
2-Fluorobiphenyl	72		44 - 119	03/16/22 09:47	03/17/22 13:35	1
2-Fluorophenol (Surr)	48		19 - 119	03/16/22 09:47	03/17/22 13:35	1

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# QC Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 580-383995/1-A**  
**Matrix: Water**  
**Analysis Batch: 384146**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Nitrobenzene-d5 (Surr)	76		44 - 120	03/16/22 09:47	03/17/22 13:35	1
Phenol-d5 (Surr)	31		10 - 120	03/16/22 09:47	03/17/22 13:35	1
Terphenyl-d14	98		50 - 134	03/16/22 09:47	03/17/22 13:35	1

**Lab Sample ID: LCS 580-383995/2-A**  
**Matrix: Water**  
**Analysis Batch: 384146**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2,4-Trichlorobenzene	2.00	1.28		ug/L		64	29 - 116
1,2-Dichlorobenzene	2.00	1.17		ug/L		58	32 - 111
1,3-Dichlorobenzene	2.00	1.19		ug/L		59	28 - 110
1,4-Dichlorobenzene	2.00	1.14		ug/L		57	29 - 112
2,4,5-Trichlorophenol	2.00	1.55		ug/L		78	53 - 123
2,4,6-Trichlorophenol	2.00	1.74		ug/L		87	50 - 125
2,4-Dichlorophenol	2.00	1.69		ug/L		84	47 - 121
2,4-Dimethylphenol	2.00	1.57	J	ug/L		79	31 - 124
2,4-Dinitrotoluene	2.00	1.96		ug/L		98	57 - 128
2,6-Dinitrotoluene	2.00	1.93		ug/L		97	57 - 124
2-Chloronaphthalene	2.00	1.60		ug/L		80	40 - 116
2-Chlorophenol	2.00	1.64		ug/L		82	38 - 117
2-Nitrophenol	2.00	1.73		ug/L		87	47 - 123
3,3'-Dichlorobenzidine	4.00	3.89		ug/L		97	27 - 129
4-Bromophenyl phenyl ether	2.00	1.65		ug/L		82	55 - 124
4-Chloro-3-methylphenol	2.00	1.73		ug/L		87	52 - 119
4-Chlorophenyl phenyl ether	2.00	1.80		ug/L		90	53 - 121
4-Nitrophenol	4.00	6.0	U	ug/L		41	35 - 145
Azobenzene	2.00	1.68	J	ug/L		84	61 - 116
Bis(2-chloroethoxy)methane	2.00	1.62		ug/L		81	48 - 120
Bis(2-chloroethyl)ether	2.00	1.42		ug/L		71	43 - 118
Bis(2-ethylhexyl) phthalate	2.00	2.49	J	ug/L		124	55 - 135
bis (2-chloroisopropyl) ether	2.00	1.42		ug/L		71	37 - 130
Butyl benzyl phthalate	2.00	2.06	J	ug/L		103	53 - 134
Diethyl phthalate	2.00	1.99		ug/L		99	56 - 125
Dimethyl phthalate	2.00	2.10		ug/L		105	45 - 127
Di-n-butyl phthalate	2.00	1.83	J	ug/L		92	59 - 127
Di-n-octyl phthalate	2.00	2.21		ug/L		111	51 - 140
Hexachlorobenzene	2.00	1.56		ug/L		78	53 - 125
Hexachlorobutadiene	2.00	0.997	J	ug/L		50	22 - 124
Hexachlorocyclopentadiene	2.00	0.994	J	ug/L		50	20 - 125
Hexachloroethane	2.00	1.04		ug/L		52	21 - 115
Isophorone	2.00	1.64		ug/L		82	42 - 124
m+p-Cresol	2.00	1.15		ug/L		57	29 - 110
Nitrobenzene	2.00	1.56		ug/L		78	45 - 121
N-Nitrosodimethylamine	2.00	1.11	J	ug/L		56	45 - 125
N-Nitrosodi-n-propylamine	2.00	1.55		ug/L		77	49 - 119
N-Nitrosodiphenylamine	2.00	1.89		ug/L		95	51 - 123
o-Cresol	2.00	1.46		ug/L		73	30 - 117

# QC Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 580-383995/2-A**  
**Matrix: Water**  
**Analysis Batch: 384146**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	4.00	1.55	J	ug/L		39	35 - 138
Phenol	2.00	0.826	J M	ug/L		41	13 - 120
Pyrene	2.00	1.65		ug/L		82	57 - 126
Pyridine	4.00	1.33	J	ug/L		33	20 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	84		43 - 140
2-Fluorobiphenyl	79		44 - 119
2-Fluorophenol (Surr)	50		19 - 119
Nitrobenzene-d5 (Surr)	81		44 - 120
Phenol-d5 (Surr)	32		10 - 120
Terphenyl-d14	96		50 - 134

**Lab Sample ID: LCSD 580-383995/3-A**  
**Matrix: Water**  
**Analysis Batch: 384146**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	2.00	0.993	Q	ug/L		50	29 - 116	25	20
1,2-Dichlorobenzene	2.00	0.999		ug/L		50	32 - 111	15	20
1,3-Dichlorobenzene	2.00	0.933	Q	ug/L		47	28 - 110	24	20
1,4-Dichlorobenzene	2.00	0.926		ug/L		46	29 - 112	20	20
2,4,5-Trichlorophenol	2.00	1.59		ug/L		79	53 - 123	2	20
2,4,6-Trichlorophenol	2.00	1.56		ug/L		78	50 - 125	11	20
2,4-Dichlorophenol	2.00	1.64		ug/L		82	47 - 121	3	20
2,4-Dimethylphenol	2.00	1.57	J	ug/L		79	31 - 124	0	20
2,4-Dinitrotoluene	2.00	1.81		ug/L		90	57 - 128	8	20
2,6-Dinitrotoluene	2.00	1.74		ug/L		87	57 - 124	11	20
2-Chloronaphthalene	2.00	1.43		ug/L		71	40 - 116	12	20
2-Chlorophenol	2.00	1.75		ug/L		88	38 - 117	6	20
2-Nitrophenol	2.00	1.67		ug/L		84	47 - 123	3	20
3,3'-Dichlorobenzidine	4.00	4.14		ug/L		103	27 - 129	6	20
4-Bromophenyl phenyl ether	2.00	1.64		ug/L		82	55 - 124	1	20
4-Chloro-3-methylphenol	2.00	1.61		ug/L		81	52 - 119	7	20
4-Chlorophenyl phenyl ether	2.00	1.64		ug/L		82	53 - 121	9	20
4-Nitrophenol	4.00	6.0	U	ug/L		41	35 - 145	0	20
Azobenzene	2.00	1.69	J	ug/L		84	61 - 116	1	20
Bis(2-chloroethoxy)methane	2.00	1.65		ug/L		83	48 - 120	2	20
Bis(2-chloroethyl)ether	2.00	1.52		ug/L		76	43 - 118	7	20
Bis(2-ethylhexyl) phthalate	2.00	2.49	J	ug/L		125	55 - 135	0	20
bis (2-chloroisopropyl) ether	2.00	1.47		ug/L		73	37 - 130	3	20
Butyl benzyl phthalate	2.00	2.03	J	ug/L		101	53 - 134	2	20
Diethyl phthalate	2.00	1.92		ug/L		96	56 - 125	3	20
Dimethyl phthalate	2.00	1.96		ug/L		98	45 - 127	7	20
Di-n-butyl phthalate	2.00	1.88	J	ug/L		94	59 - 127	3	20
Di-n-octyl phthalate	2.00	2.16		ug/L		108	51 - 140	3	20
Hexachlorobenzene	2.00	1.64		ug/L		82	53 - 125	5	20
Hexachlorobutadiene	2.00	0.666	J Q	ug/L		33	22 - 124	40	20

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# QC Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 580-383995/3-A**  
**Matrix: Water**  
**Analysis Batch: 384146**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorocyclopentadiene	2.00	0.706	J Q	ug/L		35	20 - 125	34	20
Hexachloroethane	2.00	0.752	J Q	ug/L		38	21 - 115	33	20
Isophorone	2.00	1.63		ug/L		82	42 - 124	1	20
m+p-Cresol	2.00	1.44	Q	ug/L		72	29 - 110	22	20
Nitrobenzene	2.00	1.64		ug/L		82	45 - 121	5	20
N-Nitrosodimethylamine	2.00	1.06	J	ug/L		53	45 - 125	5	20
N-Nitrosodi-n-propylamine	2.00	1.58		ug/L		79	49 - 119	2	20
N-Nitrosodiphenylamine	2.00	1.96		ug/L		98	51 - 123	3	20
o-Cresol	2.00	1.59		ug/L		80	30 - 117	9	20
Pentachlorophenol	4.00	1.83	J	ug/L		46	35 - 138	17	20
Phenol	2.00	0.664	J Q	ug/L		33	13 - 120	22	20
Pyrene	2.00	1.66		ug/L		83	57 - 126	1	20
Pyridine	4.00	1.78	J Q	ug/L		44	20 - 125	29	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2,4,6-Tribromophenol (Surr)	87		43 - 140
2-Fluorobiphenyl	73		44 - 119
2-Fluorophenol (Surr)	51		19 - 119
Nitrobenzene-d5 (Surr)	77		44 - 120
Phenol-d5 (Surr)	41	M	10 - 120
Terphenyl-d14	103		50 - 134

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) - RA

**Lab Sample ID: MB 580-383995/1-A**  
**Matrix: Water**  
**Analysis Batch: 384624**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol - RA	3.2	U	5.0	1.6	ug/L		03/16/22 09:47	03/22/22 13:51	1
4,6-Dinitro-2-methylphenol - RA	1.2	U	2.0	0.55	ug/L		03/16/22 09:47	03/22/22 13:51	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr) - RA	60		43 - 140	03/16/22 09:47	03/22/22 13:51	1
2-Fluorobiphenyl - RA	69		44 - 119	03/16/22 09:47	03/22/22 13:51	1
2-Fluorophenol (Surr) - RA	50		19 - 119	03/16/22 09:47	03/22/22 13:51	1
Nitrobenzene-d5 (Surr) - RA	79		44 - 120	03/16/22 09:47	03/22/22 13:51	1
Phenol-d5 (Surr) - RA	31		10 - 120	03/16/22 09:47	03/22/22 13:51	1
Terphenyl-d14 - RA	108		50 - 134	03/16/22 09:47	03/22/22 13:51	1

**Lab Sample ID: LCS 580-383995/2-A**  
**Matrix: Water**  
**Analysis Batch: 384624**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrophenol - RA	4.00	2.96	J M	ug/L		74	23 - 143
4,6-Dinitro-2-methylphenol - RA	4.00	3.21		ug/L		80	44 - 137

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# QC Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) - RA (Continued)

**Lab Sample ID: LCS 580-383995/2-A**  
**Matrix: Water**  
**Analysis Batch: 384624**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr) - RA	90		43 - 140
2-Fluorobiphenyl - RA	76		44 - 119
2-Fluorophenol (Surr) - RA	53		19 - 119
Nitrobenzene-d5 (Surr) - RA	90		44 - 120
Phenol-d5 (Surr) - RA	36		10 - 120
Terphenyl-d14 - RA	111		50 - 134

**Lab Sample ID: LCSD 580-383995/3-A**  
**Matrix: Water**  
**Analysis Batch: 384624**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 383995**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
2,4-Dinitrophenol - RA	4.00	3.15	J M	ug/L		79	23 - 143	6	20
4,6-Dinitro-2-methylphenol - RA	4.00	3.10		ug/L		78	44 - 137	3	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr) - RA	81		43 - 140
2-Fluorobiphenyl - RA	81		44 - 119
2-Fluorophenol (Surr) - RA	53		19 - 119
Nitrobenzene-d5 (Surr) - RA	89		44 - 120
Phenol-d5 (Surr) - RA	37		10 - 120
Terphenyl-d14 - RA	102		50 - 134

## Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

**Lab Sample ID: MB 580-384177/1-A**  
**Matrix: Water**  
**Analysis Batch: 384301**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 384177**

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1-Methylnaphthalene	0.032	U M	0.10	0.019	ug/L		03/17/22 11:35	03/18/22 13:02	1
2-Methylnaphthalene	0.080	U M	0.20	0.039	ug/L		03/17/22 11:35	03/18/22 13:02	1
Acenaphthene	0.032	U M	0.10	0.014	ug/L		03/17/22 11:35	03/18/22 13:02	1
Acenaphthylene	0.032	U	0.050	0.0090	ug/L		03/17/22 11:35	03/18/22 13:02	1
Anthracene	0.080	U M	0.10	0.022	ug/L		03/17/22 11:35	03/18/22 13:02	1
Benzo[a]anthracene	0.032	U	0.050	0.014	ug/L		03/17/22 11:35	03/18/22 13:02	1
Benzo[a]pyrene	0.032	U	0.10	0.011	ug/L		03/17/22 11:35	03/18/22 13:02	1
Benzo[b]fluoranthene	0.032	U	0.050	0.011	ug/L		03/17/22 11:35	03/18/22 13:02	1
Benzo[g,h,i]perylene	0.032	U	0.050	0.012	ug/L		03/17/22 11:35	03/18/22 13:02	1
Benzo[k]fluoranthene	0.032	U	0.050	0.012	ug/L		03/17/22 11:35	03/18/22 13:02	1
Chrysene	0.032	U	0.10	0.016	ug/L		03/17/22 11:35	03/18/22 13:02	1
Dibenz(a,h)anthracene	0.032	U	0.10	0.026	ug/L		03/17/22 11:35	03/18/22 13:02	1
Fluoranthene	0.032	U	0.20	0.018	ug/L		03/17/22 11:35	03/18/22 13:02	1
Fluorene	0.032	U	0.10	0.017	ug/L		03/17/22 11:35	03/18/22 13:02	1
Indeno[1,2,3-cd]pyrene	0.032	U	0.050	0.014	ug/L		03/17/22 11:35	03/18/22 13:02	1
Naphthalene	0.080	U M	0.10	0.031	ug/L		03/17/22 11:35	03/18/22 13:02	1
Phenanthrene	0.080	U M	0.10	0.031	ug/L		03/17/22 11:35	03/18/22 13:02	1

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# QC Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

**Lab Sample ID: MB 580-384177/1-A**  
**Matrix: Water**  
**Analysis Batch: 384301**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 384177**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.080	U	0.10	0.033	ug/L		03/17/22 11:35	03/18/22 13:02	1

  

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-methylnaphthalene-d10	61		40 - 140	03/17/22 11:35	03/18/22 13:02	1
Fluoranthene-d10 (Surr)	76		40 - 140	03/17/22 11:35	03/18/22 13:02	1
Terphenyl-d14	93		58 - 132	03/17/22 11:35	03/18/22 13:02	1

**Lab Sample ID: LCS 580-384177/2-A**  
**Matrix: Water**  
**Analysis Batch: 384301**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 384177**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	2.00	1.28		ug/L		64	41 - 115
2-Methylnaphthalene	2.00	1.24		ug/L		62	39 - 114
Acenaphthene	2.00	1.32		ug/L		66	48 - 114
Acenaphthylene	2.00	1.25		ug/L		62	35 - 121
Anthracene	2.00	1.45		ug/L		73	53 - 119
Benzo[a]anthracene	2.00	1.67		ug/L		83	59 - 120
Benzo[a]pyrene	2.00	1.55		ug/L		78	53 - 120
Benzo[b]fluoranthene	2.00	1.65		ug/L		82	53 - 126
Benzo[g,h,i]perylene	2.00	1.82		ug/L		91	44 - 128
Benzo[k]fluoranthene	2.00	1.75		ug/L		87	54 - 125
Chrysene	2.00	1.58		ug/L		79	57 - 120
Dibenz(a,h)anthracene	2.00	1.83	M	ug/L		91	44 - 131
Fluoranthene	2.00	1.60		ug/L		80	58 - 120
Fluorene	2.00	1.38		ug/L		69	50 - 118
Indeno[1,2,3-cd]pyrene	2.00	1.77	M	ug/L		88	48 - 130
Naphthalene	2.00	1.27		ug/L		64	43 - 114
Phenanthrene	2.00	1.46		ug/L		73	53 - 115
Pyrene	2.00	1.60		ug/L		80	53 - 121

  

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-methylnaphthalene-d10	61		40 - 140
Fluoranthene-d10 (Surr)	78		40 - 140
Terphenyl-d14	87		58 - 132

**Lab Sample ID: LCSD 580-384177/3-A**  
**Matrix: Water**  
**Analysis Batch: 384301**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 384177**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	2.00	1.13		ug/L		57	41 - 115	13	20
2-Methylnaphthalene	2.00	1.10		ug/L		55	39 - 114	12	20
Acenaphthene	2.00	1.22		ug/L		61	48 - 114	9	20
Acenaphthylene	2.00	1.14		ug/L		57	35 - 121	9	20
Anthracene	2.00	1.36		ug/L		68	53 - 119	7	20
Benzo[a]anthracene	2.00	1.58		ug/L		79	59 - 120	5	20
Benzo[a]pyrene	2.00	1.53		ug/L		77	53 - 120	1	20

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# QC Sample Results

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

**Lab Sample ID: LCSD 580-384177/3-A**  
**Matrix: Water**  
**Analysis Batch: 384301**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 384177**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[b]fluoranthene	2.00	1.65		ug/L		82	53 - 126	0	20
Benzo[g,h,i]perylene	2.00	1.78		ug/L		89	44 - 128	2	20
Benzo[k]fluoranthene	2.00	1.68		ug/L		84	54 - 125	4	20
Chrysene	2.00	1.42		ug/L		71	57 - 120	11	20
Dibenz(a,h)anthracene	2.00	1.77	M	ug/L		89	44 - 131	3	20
Fluoranthene	2.00	1.52		ug/L		76	58 - 120	5	20
Fluorene	2.00	1.27		ug/L		63	50 - 118	9	20
Indeno[1,2,3-cd]pyrene	2.00	1.77	M	ug/L		89	48 - 130	0	20
Naphthalene	2.00	1.15		ug/L		57	43 - 114	11	20
Phenanthrene	2.00	1.35		ug/L		68	53 - 115	7	20
Pyrene	2.00	1.52		ug/L		76	53 - 121	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-methylnaphthalene-d10	57		40 - 140
Fluoranthene-d10 (Surr)	75		40 - 140
Terphenyl-d14	86		58 - 132

# Lab Chronicle

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Client Sample ID: ERH2692 (OWDFMW01)**

**Lab Sample ID: 580-111294-1**

**Date Collected: 03/10/22 10:05**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E		1	384725	03/22/22 17:10	W1T	FGS SEA
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E SIM		1	384301	03/18/22 13:59	TL1	FGS SEA

**Client Sample ID: ERH2772 (Equipment Blank)**

**Lab Sample ID: 580-111294-2**

**Date Collected: 03/10/22 11:42**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E		1	384725	03/22/22 17:34	W1T	FGS SEA
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E SIM		1	384301	03/18/22 14:18	TL1	FGS SEA

**Client Sample ID: ERH2743 (RHMW13-5)**

**Lab Sample ID: 580-111294-3**

**Date Collected: 03/10/22 09:15**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E		1	384725	03/22/22 17:58	W1T	FGS SEA
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E SIM		1	384301	03/18/22 14:38	TL1	FGS SEA

**Client Sample ID: ERH2744 (RHMW13-5)**

**Lab Sample ID: 580-111294-4**

**Date Collected: 03/10/22 12:44**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E		1	384725	03/22/22 18:22	W1T	FGS SEA
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E SIM		1	384301	03/18/22 14:57	TL1	FGS SEA

**Client Sample ID: ERH2745 (RHMW13-5)**

**Lab Sample ID: 580-111294-5**

**Date Collected: 03/10/22 11:05**

**Matrix: Water**

**Date Received: 03/11/22 09:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E		1	384725	03/22/22 18:45	W1T	FGS SEA
Total/NA	Prep	3510C			384177	03/17/22 11:35	ASL	FGS SEA
Total/NA	Analysis	8270E SIM		1	384301	03/18/22 15:16	TL1	FGS SEA

# Lab Chronicle

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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# Accreditation/Certification Summary

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

## Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2236	01-19-25

- 1
- 2
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# Sample Summary

Client: AECOM  
Project/Site: Red Hill NOI GW

Job ID: 580-111294-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-111294-1	ERH2692 (OWDFMW01)	Water	03/10/22 10:05	03/11/22 09:40
580-111294-2	ERH2772 (Equipment Blank)	Water	03/10/22 11:42	03/11/22 09:40
580-111294-3	ERH2743 (RHMW13-5)	Water	03/10/22 09:15	03/11/22 09:40
580-111294-4	ERH2744 (RHMW13-5)	Water	03/10/22 12:44	03/11/22 09:40
580-111294-5	ERH2745 (RHMW13-5)	Water	03/10/22 11:05	03/11/22 09:40

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580-111294 Chain of Custody

# Chain of Custody Record

Sampler: <i>Nicolette Lawlor</i>		Lab PM: Elaine Walker		Carrier Tracking No(s): FedEx		COC No: EURO202203-24																																																																			
Phone: <i>916-835-6425</i>		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: Page 1 of 1																																																																			
Company: AECOM		PWSID:		Analysis Requested																																																																					
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract		<div style="text-align: center; font-size: 2em; font-weight: bold;">MN</div> <div style="text-align: center; font-size: 1.5em;">3/10/22</div>																																																																					
City: Honolulu		TAT Requested (days): Rush - ASAP																																																																							
State, Zip: Hawaii 96813		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																																																																							
Phone: 808-521-3051 (direct: 808-529-7283) (alternate: 808-356-5373)		PO #:																																																																							
Email: alethea.ramos@aecom.com (alternate: margie.pascua@aecom.com)		WO #:																																																																							
Project Name: CV18F0126		Project #: 60571032		<div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">Field Filtered Sample (Yes or No)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">Perform MS/MSD (Yes or No)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">SVOCs (full suite) by 8270D (Nap, 1-2-Mathynap, PAH) by 8270DSIM</div>																																																																					
Site: RH		SSOW#:																																																																							
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Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SVOCs (full suite) by 8270D (Nap, 1-2-Mathynap, PAH) by 8270DSIM	Total Number of containers																																																																	
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Special Instructions/Note:		Therm. ID: <b>A3</b> Cor: <b>1.9</b> ° Unc: <b>1.9</b> °																																																																							
		Cooler Desc: <b>LB</b> FedEx: <b>P.O</b>																																																																							
		Packing: <b>Bub</b> UPS:																																																																							
		Cust. Seal: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Lab Cour:																																																																							
		Blue Ice: <b>Wet</b> , Dry, None Other:																																																																							

### Possible Hazard Identification

Non-Hazard
  Flammable
  Skin Irritant
  Poison B
  Unknown
  Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Prelim data (Level 1or2)=see TAT above. DoD Stage 4 report standard TAT. AECOM EQUIS EDD.

### Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client
  Disposal By Lab
  Archive For \_\_\_\_\_ Months

Special Instructions/QC Requirements: DOD QSM project.

Empty Kit Relinquished by:

Relinquished by:  
*Margie Nutter*

Date/Time:  
3/10/22 1330

Company:  
AECOM

Received by:  
*[Signature]*

Date/Time:  
3/11/22 0940

Company:  
EF45

Relinquished by:

Date/Time:

Company:

Received by:

Date/Time:

Company:

Custody Seals Intact:  
 Yes  No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

**Eurofins FGS, Seattle**

5755 8th Street East  
Tacoma, WA 98424

**Chain of Custody Record**

eurofins Environment Testing America

<b>Client Information</b>					Sampler: <i>Sarah Walker</i>		Lab PM: Elaine Walker		Carrier Tracking No(s): FedEx		COC No: EURO202203-36NOI		
Client Contact: Alethea Ramos (alternate: Margie Pascua)					Phone: <i>478473-0578</i>		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: Page 1 of 1		
Company: AECOM					FWSID:		<b>Analysis Requested</b>					Job #:	
Address: 1001 Bishop St. Suite 1600					Due Date Requested: see subcontract							Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) SVOCs (full suite) by 8270D (Nap, 1,2-Methylnap, PAH) by 8270DSIM	
City: Honolulu					TAT Requested (days): <b>Rush - ASAP</b>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Total Number of containers		Special Instructions/Note:		
State, Zip: Hawaii 96813					PO #:		WO #:						Other:
Phone: 808-521-3051 (direct: 808-529-7283) (alternate: 808-356-5373)					Project #:		Project #:		Special Instructions/Note:				
Email: alethea.ramos@aecom.com (alternate: margie.pascua@aecom.com)					SSOW#:		SSOW#:				Special Instructions/Note:		
Project Name: CV18F0126									Special Instructions/Note:				
Site: RH											Special Instructions/Note:		
Sample Identification					Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, Seawater, D=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)				Total Number of containers
					<b>Preservation Code:</b>								
ERH2743 (RHMW13-5)					3/10/22	0915	G	W	N	✓		x	
ERH2744 (RHMW13-5)					3/10/22	1244	G	W	N	✓		x	
ERH2745 (RHMW13-5)					3/10/22	1105	G	W	N	✓		x	

Therm. ID: **A3** Cor: **0.3°** Unc: **0.3°**  
 Cooler Dsc: **LB** FedEx: **P.O**  
 Packing: **Bub** UPS: \_\_\_\_\_  
 Cust. Seal: Yes / No Lab Cour: \_\_\_\_\_  
 Blue Ice: **Wet** Dry: None Other: \_\_\_\_\_

*W*  
*3/10/22*

# Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-111294-1

**Login Number: 111294**

**List Source: Eurofins Seattle**

**List Number: 1**

**Creator: Greene, Ashton R**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

