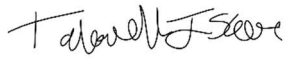



DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	Joint Base Pearl Harbor - Hickam	Project Name	Red-Hill-Incident
Data Reviewer (signature and date)	 Jan 22, 2022	Technical Reviewer (signature and date)	 Jan 23, 2022
Laboratory Report No.	2112332	Laboratory	Torrent Laboratory, Inc. - Milpitas, CA
Analyses	Semivolatile organic compounds (SVOC) by EPA SW-846 Method 8270 using selected ion monitoring, total petroleum hydrocarbons (TPH) by EPA SW-846 Method 8015B, TPH using silica gel (SG) by EPA SW-846 Method 8015B, total organic carbon (TOC) by SM 5310B, volatile organic compounds (VOC) by EPA SW-846 8260B, gasoline by EPA SW-846 Method 8260, methane by EPA RSK175, and per- and polyfluoroalkyl substances (PFAS) by Quality Systems Manual (QSM) 5.3 Table B-15		
Samples and Matrix	Nine groundwater samples		
Field Duplicate Pairs	None		
Field Blanks	None		

INTRODUCTION,

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No results were rejected for this data package. All results are usable with the qualifications described in this checklist.

Data completeness:

Within Criteria	Exceedance/Notes
N	The laboratory reported water method blanks and water laboratory control samples (LCS) for TPH diesel and motor oil and TPH diesel (SG) and motor oil (SG) in solid units of milligrams per kilogram (mg/Kg), not in water units of milligrams per liter (mg/L). The laboratory was contacted to review this issue, and the laboratory confirmed water method blank and LCS samples in units of mg/Kg are incorrect and the correct units are mg/L. The laboratory provided a revised laboratory report to correct the issue.

DATA VALIDATION CHECKLIST – STAGE 2A

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	<p>The cooler temperature and sample preservation (as applicable) were verified upon receipt of the samples. No custody seals were present on sample or shipping containers, but no qualifications were applied for this field oversight.</p> <p>The data user should note that lead scavenger (ethylene dibromide and ethylene dichloride) by EPA methods 8011/8260 was requested on the chain of custody (COC), but the laboratory reported both ethylene dibromide and ethylene dichloride results by VOC method 8260B, and no qualifications were applied for this variance. Also, the laboratory reported ethylene dibromide as 1,2-dibromoethane and ethylene dichloride as 1,2-dichloroethane.</p> <p>The chain of custody requested SVOC by EPA 8270 SIM. The laboratory SVOC prep method was called 3510_BNASIM, but the laboratory analysis method was called SW8270. The laboratory was contacted, and they confirmed the samples were analyzed via EPA 8270 SIM.</p> <p>The COC requested PFAS and ethanol's by EPA Method 537.1, but the laboratory analyzed the samples for PFAS by QSM 5.3 Table B-15. Additionally, the laboratory did not report PFAS ethanol analytes N-methyl perfluorooctane sulfonamidethanol or N-ethyl perfluorooctane sulfonamideoethanol. No qualifications were applied for these variances.</p> <p>All samples were subcontracted to the Atmospheric Analysis & Consulting Inc. for methane by EPA RSK 175, but the subcontracted results were attached to the laboratory report. The laboratory was contacted, and they provided a revised report to include the methane results from Atmospheric Analysis & Consulting Inc.</p>

Method blanks:

Within Criteria	Exceedance/Notes
N	<p>VOCs by 8260B</p> <ul style="list-style-type: none"> • Batch 1138056: The method blank contained 0.27 micrograms per liter (µg/L) of n-butylbenzene, however, no qualifications were applied because the n-butylbenzene sample results associated with this method blank were nondetect. • Batch 1138098: The method blank contained 0.27 µg/L of n-butylbenzene. No qualifications were applied to the n-butylbenzene result for sample ERH2281-RHMW02 because the concentration of n-butylbenzene exceeded the reporting limit and is equal to 10x the concentration of n-butylbenzene in the method blank. No qualifications were applied to the n-butylbenzene nondetect sample results associated with this method blank.

DATA VALIDATION CHECKLIST – STAGE 2A

Method blanks continued:

Within Criteria	Exceedance/Notes
N	<p>Gasoline by 8260B</p> <ul style="list-style-type: none"> Batch 1138099: The method blank contained 33 µg/L of gasoline, and the gasoline result for sample ERH2287-RHMW2254-01 (bail) and ERH2279-RHMW01R exceeded the reporting limit, but are less than 10x the concentration of gasoline in the method blank; therefore, the gasoline result for these samples were qualified as estimated, possibly biased high (flagged J_{+(B)}). No qualifications were applied to the gasoline results for samples ERH2291-Sumo Adit 3 or ERH2281-RHMW02 because the concentration of gasoline exceeded the reporting limits and was greater than 10x the concentration of gasoline in the method blank. <p>TPH by 8015B</p> <ul style="list-style-type: none"> Batch 1138120: The method blank contained 0.158 mg/L of motor oil, and the motor oil result for ERH2283-RHMW03 exceeded the reporting limit but is less than 10x the concentration of motor oil in the method blank; therefore, the motor oil result for sample ERH2283-RHMW03 was qualified as estimated, possibly biased high (flagged J_{+(B)}). No qualifications were applied to the motor oil nondetect results. <p>TOC by 5310</p> <ul style="list-style-type: none"> Batch 1138204: The method blank contained 0.42 mg/L of TOC; however, no qualifications were applied because the TOC results for all samples exceeded the reporting limit and are greater than 10x the concentration of TOC in the method blank.

Field blanks:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A

System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
N	<p>SVOC by 8270</p> <ul style="list-style-type: none"> ERH2291-Sump Adit 3: The base/neutral extractable surrogate nitrobenzene-d₅ had a 229% percent recovery exceed the 100% laboratory acceptance limit; therefore, the fluoranthene, pyrene, benzyl butyl phthalate, and bis(2-ethylhexyl)phthalate results for this sample were qualified as estimated, possibly biased high (flagged J+). No qualifications were applied to the base/neutral extractable nondetect results. <p>PFAS by QSM 5.3 Table B-15</p> <ul style="list-style-type: none"> Extracted internal standard (EIS) analytes were not presented in the laboratory report. While no qualifications were applied the data user should note EIS analytes were not evaluated.

MS/MSD:

Within Criteria	Exceedance/Notes
N	QSM 5.3 Table B-15 specifies one matrix spike and matrix spike duplicate (MS/MSD) to be analyzed per sample preparation batch. While no qualifications were applied, the data user should note the laboratory did not report any MS/MSD pair with the project sample.

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	The data user should note that the SVOC and VOC full analyte lists were not spiked in the laboratory control sample (LCS). The NFG requires all of the SVOC and VOC target analytes to be spiked in the LCS/LCSD, but no qualifications were applied because the laboratory achieved the method 8270 and 8260 requirements by spiking a representative subset of SVOC and VOC method-specified analytes (as opposed to all reported analytes) in the LCS/LCSD.

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	<p>While no qualifications were applied for sample dilutions, the data user should note the increased reporting limits.</p> <p>ERH2291-Sump Adit 3:</p> <ul style="list-style-type: none"> • Diesel, motor oil, diesel (SG), and motor oil (SG) were analyzed with 5-fold dilutions. • All VOCs and gasoline were analyzed with 4.2-fold dilutions. <p>ERH2281-RHMW02:</p> <ul style="list-style-type: none"> • The SVOC analytes naphthalene, 2-methylnaphthalene, 1-methylnaphthalene were analyzed with 5-fold dilutions. • Diesel, motor oil, diesel (SG), and motor oil (SG) were analyzed with 2-fold dilutions. • All VOCs and gasoline were analyzed with 4.2-fold dilutions.

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Analytes detected between the MDL and RL were not present. The nondetect sample results are reported at the reporting limit (identified as PQL [project quantitation limit] in the laboratory report) and qualified nondetect (flagged U).

DATA VALIDATION CHECKLIST – STAGE 2A

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

Other [target analyte identification]:

Within Criteria	Exceedance/Notes
N	<p>TPH by 8015B</p> <ul style="list-style-type: none"> The diesel result for sample ERH2287-RHMW2254-01 (bail), ERH2289-RHMW2254-01 (LF), ERH2291-Sump Adit 3, ERH2285-RHMW05, ERH22797-RHMW01R, and ERH2281-RHMW02 had contributions from unknown discrete peaks within the diesel quantification range; therefore, the diesel results for these samples were qualified as estimated (flagged J). The data user should note the laboratory's evaluation of the chromatography suggested the diesel pattern for samples ERH2287-RHMW2254-01 (bail), ERH2289-RHMW2254-01 (LF), ERH2291-Sump Adit 3, ERH22797-RHMW01R, and ERH2281-RHMW02 did not match the pattern of the diesel reference standard, and the laboratory stated the diesel pattern was weathered for these samples. <p>TPH by 8015B</p> <ul style="list-style-type: none"> The diesel (SG) result for sample ERH2287-RHMW2254-01 (bail), ERH2291-Sump Adit 3, ERH2285-RHMW05, and ERH2281-RHMW02 had contributions from unknown discrete peaks within the diesel quantification range; therefore, the diesel results for these samples were qualified as estimated (flagged J). The data user should note the laboratory's evaluation of the chromatography suggested a fuel other than diesel was present in samples ERH2287-RHMW2254-01 (bail), ERH2291-Sump Adit 3, and ERH2281-RHMW02 <p>Gasoline by 8260</p> <ul style="list-style-type: none"> The laboratory noted the sample's gasoline pattern did not match the reference gasoline standard pattern, and the reported concentration of gasoline was contributed from non-target hydrocarbons in the heavier gasoline quantitation range C5-C12 for samples ERH2287-RHMW2254-01 (bail), ERH2291-Sump Adit 3, ERH22797-RHMW01R, and ERH2281-RHMW02; therefore, the gasoline results for these samples were qualified as estimated (flagged J).

DATA VALIDATION CHECKLIST – STAGE 2A

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.



SAMPLE RESULTS

Report prepared for:

 Yvonne Parry
 Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21	4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/29/21	21:50	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/29/21	21:50	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/29/21	21:50	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	21:50	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		32.4		%	12/29/21	21:50	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		19.6		%	12/29/21	21:50	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		88.4		%	12/29/21	21:50	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		70.6		%	12/29/21	21:50	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		100.		%	12/29/21	21:50	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		69.0		%	12/29/21	21:50	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22	9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10	1.14 J	x	mg/L	01/03/22	18:56	SN	462602
TPH as Motor Oil	SW8015B	1	0.11	0.40 U	ND		mg/L	01/03/22	18:56	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		104		%	01/03/22	18:56	SN	462602

NOTE: x - Diesel result due to unknown organics within diesel quantified range, possibly weathered diesel



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method:	3510_TPH SG	Prep Batch Date/Time:	1/3/22 9:29:00AM
Prep Batch ID:	1138121	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10	0.571 J	x	mg/L	01/05/22	17:09	SN	462647
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40 U	ND		mg/L	01/05/22	17:09	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		95.7		%	01/05/22	17:09	SN	462647

NOTE: x - Diesel result due to unknown organics within diesel quantified range, possibly other type of fuel.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: TOC-W-P	Prep Batch Date/Time: 1/4/22 1:26:00PM
Prep Batch ID: 1138204	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	15.8		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/29/21 11:12:00AM
Prep Batch ID: 1138056	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Chloromethane	SW8260B	1	0.17	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Vinyl Chloride	SW8260B	1	0.21	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Bromomethane	SW8260B	1	0.21	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Chloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Trichlorofluoromethane	SW8260B	1	0.19	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,1-Dichloroethene	SW8260B	1	0.14	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Freon 113	SW8260B	1	0.34	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Methylene Chloride	SW8260B	1	0.13	1.0	U ND		ug/L	12/29/21	22:04	JZ	462490
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
MTBE	SW8260B	1	0.077	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
tert-Butanol	SW8260B	1	2.9	5.0	U ND		ug/L	12/29/21	22:04	JZ	462490
DIPE	SW8260B	1	0.12	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,1-Dichloroethane	SW8260B	1	0.12	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
ETBE	SW8260B	1	0.064	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
2,2-Dichloropropane	SW8260B	1	0.094	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Bromochloromethane	SW8260B	1	0.15	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Chloroform	SW8260B	1	0.12	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Carbon Tetrachloride	SW8260B	1	0.16	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,1-Dichloropropene	SW8260B	1	0.19	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Benzene	SW8260B	1	0.065	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
TAME	SW8260B	1	0.072	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,2-Dichloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Trichloroethylene	SW8260B	1	0.15	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Dibromomethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,2-Dichloropropane	SW8260B	1	0.089	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Bromodichloromethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Toluene	SW8260B	1	0.14	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Tetrachloroethylene	SW8260B	1	0.24	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Dibromochloromethane	SW8260B	1	0.18	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,3-Dichloropropane	SW8260B	1	0.22	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
1,2-Dibromoethane	SW8260B	1	0.079	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Chlorobenzene	SW8260B	1	0.16	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490
Ethylbenzene	SW8260B	1	0.20	0.50	U ND		ug/L	12/29/21	22:04	JZ	462490



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/29/21 11:12:00AM
Prep Batch ID: 1138056	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
m,p-Xylene	SW8260B	1	0.39	1.0 U	ND		ug/L	12/29/21	22:04	JZ	462490
o-Xylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
Styrene	SW8260B	1	0.11	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
Bromoform	SW8260B	1	0.076	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
Isopropyl Benzene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
n-Propylbenzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
Bromobenzene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,1,1,2-Tetrachloroethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
2-Chlorotoluene	SW8260B	1	0.25	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
4-Chlorotoluene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
tert-Butylbenzene	SW8260B	1	0.26	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
sec-Butyl Benzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
p-Isopropyltoluene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
n-Butylbenzene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0 U	ND		ug/L	12/29/21	22:04	JZ	462490
Hexachlorobutadiene	SW8260B	1	0.62	2.0 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0 U	ND		ug/L	12/29/21	22:04	JZ	462490
Naphthalene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/29/21	22:04	JZ	462490
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/29/21	22:04	JZ	462490
(S) Dibromofluoromethane	SW8260B		61.2 - 131		112		%	12/29/21	22:04	JZ	462490
(S) Toluene-d8	SW8260B		75.1 - 127		95.3		%	12/29/21	22:04	JZ	462490
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		93.0		%	12/29/21	22:04	JZ	462490



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: 5030GRO	Prep Batch Date/Time: 12/29/21 11:12:00AM
Prep Batch ID: 1138083	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50	83.5 J+(B)	x	ug/L	12/29/21	22:04	JZ	462490
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		88.8		%	12/29/21	22:04	JZ	462490

NOTE: x – Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons in the C5-C12 Gasoline quantitation range.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001E
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method:	PFAS-W-QSM 5.3	Prep Batch Date/Time:	12/29/21 3:02:00PM
Prep Batch ID:	1138049	Prep Analyst:	TOMA

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
4 2 FTS	QSM 5.3 Table B-15	1	2.74	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
6 2 FTS	QSM 5.3 Table B-15	1	2.37	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
8 2 FTS	QSM 5.3 Table B-15	1	3.09	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
10:2 Fluorotelomer sulfonic acid	QSM 5.3 Table B-15	1	1.37	5.00 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorobutanoic acid	QSM 5.3 Table B-15	1	2.14	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluoropentanoic acid	QSM 5.3 Table B-15	1	1.40	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorobutane sulfonic acid	QSM 5.3 Table B-15	1	3.49	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorohexanoic acid	QSM 5.3 Table B-15	1	1.29	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluoropentane sulfonic acid	QSM 5.3 Table B-15	1	1.61	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluoroheptanoic acid	QSM 5.3 Table B-15	1	3.48	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorohexane sulfonic acid (PFHxS)	QSM 5.3 Table B-15	1	2.91	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorooctanoic acid	QSM 5.3 Table B-15	1	2.37	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorononanoic acid	QSM 5.3 Table B-15	1	4.71	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluoroheptane sulfonic acid (PFHpS)	QSM 5.3 Table B-15	1	2.75	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorooctane sulfonic acid	QSM 5.3 Table B-15	1	3.49	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorodecanoic acid	QSM 5.3 Table B-15	1	4.18	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorononane sulfonic acid (PFNS)	QSM 5.3 Table B-15	1	3.20	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
NMeFOSAA	QSM 5.3 Table B-15	1	2.41	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
NEtFOSAA	QSM 5.3 Table B-15	1	2.90	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluoroundecanoic acid	QSM 5.3 Table B-15	1	2.37	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorodecane sulfonic acid (PFDS)	QSM 5.3 Table B-15	1	1.66	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorododecanoic acid	QSM 5.3 Table B-15	1	1.79	5.00 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorotridecanoic acid	QSM 5.3 Table B-15	1	1.31	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorotetradecanoic acid	QSM 5.3 Table B-15	1	1.74	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2287-RHMW2254-01 (bail)	Lab Sample ID:	2112332-001E
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:07		
SDG:			

Prep Method: PFAS-W-QSM 5.3	Prep Batch Date/Time: 12/29/21 3:02:00PM
Prep Batch ID: 1138049	Prep Analyst: TOMA

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Perfluorooctanesulfonamide	QSM 5.3 Table B-15	1	2.36	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorobutanesulfoamide	QSM 5.3 Table B-15	1	2.36	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Gen-X	QSM 5.3 Table B-15	1	3.95	15.0 U	ND		ng/L	12/29/21	19:34	MK	462593
ADONA	QSM 5.3 Table B-15	1	2.44	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
Perfluorohexanesulfoamide	QSM 5.3 Table B-15	1	4.50	10.0 U	ND		ng/L	12/29/21	19:34	MK	462593
9-CI-PF3ONS	QSM 5.3 Table B-15	1	1.55	5.00 U	ND		ng/L	12/29/21	19:34	MK	462593
11-CI-PF3OUdS	QSM 5.3 Table B-15	1	1.32	5.00 U	ND		ng/L	12/29/21	19:34	MK	462593



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/29/21	22:20	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/29/21	22:20	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/29/21	22:20	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:20	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		36.6		%	12/29/21	22:20	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		21.0		%	12/29/21	22:20	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		69.0		%	12/29/21	22:20	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		74.0		%	12/29/21	22:20	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		105		%	12/29/21	22:20	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		72.3		%	12/29/21	22:20	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22 9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10	0.192 J	x	mg/L	01/03/22	19:20	SN	462602
TPH as Motor Oil	SW8015B	1	0.11	0.40 U	ND		mg/L	01/03/22	19:20	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		100		%	01/03/22	19:20	SN	462602

NOTE: x - Diesel result due to unknown organics within diesel quantified range, possibly weathered diesel



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method:	3510_TPH SG	Prep Batch Date/Time:	1/3/22 9:29:00AM
Prep Batch ID:	1138121	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10 U	ND		mg/L	01/05/22	17:33	SN	462647
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40 U	ND		mg/L	01/05/22	17:33	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		110		%	01/05/22	17:33	SN	462647



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method:	TOC-W-P	Prep Batch Date/Time:	1/4/22	1:26:00PM
Prep Batch ID:	1138204	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	16.0		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/29/21 11:12:00AM
Prep Batch ID: 1138056	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Chloromethane	SW8260B	1	0.17	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Vinyl Chloride	SW8260B	1	0.21	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Bromomethane	SW8260B	1	0.21	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Chloroethane	SW8260B	1	0.11	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Trichlorofluoromethane	SW8260B	1	0.19	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,1-Dichloroethene	SW8260B	1	0.14	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Freon 113	SW8260B	1	0.34	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Methylene Chloride	SW8260B	1	0.13	1.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
MTBE	SW8260B	1	0.077	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
tert-Butanol	SW8260B	1	2.9	5.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
DIPE	SW8260B	1	0.12	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,1-Dichloroethane	SW8260B	1	0.12	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
ETBE	SW8260B	1	0.064	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
2,2-Dichloropropane	SW8260B	1	0.094	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Bromochloromethane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Chloroform	SW8260B	1	0.12	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Carbon Tetrachloride	SW8260B	1	0.16	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,1-Dichloropropene	SW8260B	1	0.19	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Benzene	SW8260B	1	0.065	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
TAME	SW8260B	1	0.072	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2-Dichloroethane	SW8260B	1	0.11	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Trichloroethylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Dibromomethane	SW8260B	1	0.11	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2-Dichloropropane	SW8260B	1	0.089	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Bromodichloromethane	SW8260B	1	0.076	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Toluene	SW8260B	1	0.14	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Tetrachloroethylene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Dibromochloromethane	SW8260B	1	0.18	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,3-Dichloropropane	SW8260B	1	0.22	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2-Dibromoethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Chlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Ethylbenzene	SW8260B	1	0.20	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/29/21 11:12:00AM
Prep Batch ID: 1138056	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
m,p-Xylene	SW8260B	1	0.39	1.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
o-Xylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Styrene	SW8260B	1	0.11	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Bromoform	SW8260B	1	0.076	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Isopropyl Benzene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
n-Propylbenzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
Bromobenzene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,1,1,2-Tetrachloroethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
2-Chlorotoluene	SW8260B	1	0.25	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
4-Chlorotoluene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
tert-Butylbenzene	SW8260B	1	0.26	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
sec-Butyl Benzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
p-Isopropyltoluene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
n-Butylbenzene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
Hexachlorobutadiene	SW8260B	1	0.62	2.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
Naphthalene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/29/21	22:33	JZ	462490
(S) Dibromofluoromethane	SW8260B		61.2 - 131		112		%	12/29/21	22:33	JZ	462490
(S) Toluene-d8	SW8260B		75.1 - 127		94.1		%	12/29/21	22:33	JZ	462490
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		96.4		%	12/29/21	22:33	JZ	462490



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2289-RHMW2254-01 (LF)	Lab Sample ID:	2112332-002C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:10		
SDG:			

Prep Method: 5030GRO	Prep Batch Date/Time: 12/29/21 11:12:00AM
Prep Batch ID: 1138083	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50 U	ND		ug/L	12/29/21	22:33	JZ	462490
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		83.2		%	12/29/21	22:33	JZ	462490



Talaith Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/29/21	22:49	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/29/21	22:49	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/29/21	22:49	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Fluoranthene	SW8270	1	0.180	0.54	0.781 J+		ug/L	12/29/21	22:49	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Pyrene	SW8270	1	0.180	0.54	1.12 J+		ug/L	12/29/21	22:49	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54	0.592 J+		ug/L	12/29/21	22:49	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6	4.53 J+	E	ug/L	12/29/21	22:49	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	22:49	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	22:49	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		31.5		%	12/29/21	22:49	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		20.5		%	12/29/21	22:49	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		229	S	%	12/29/21	22:49	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		72.3		%	12/29/21	22:49	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		113		%	12/29/21	22:49	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		73.0		%	12/29/21	22:49	TA	462618

NOTE: S-surrogate outside of control limits due to possible matrix interference
E=estimated concentration (slightly outside of calibration range).



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method: 3510_TPH	Prep Batch Date/Time: 1/3/22 9:22:00AM
Prep Batch ID: 1138120	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	5	0.19	0.50	4.78 J	x	mg/L	01/04/22	9:09	SN	462602
TPH as Motor Oil	SW8015B	5	0.56	2.0 U	ND		mg/L	01/04/22	9:09	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		85.8		%	01/04/22	9:09	SN	462602

NOTE: x - Diesel result due to unknown organics within diesel quantified range, possibly weathered diesel



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method:	3510_TPH SG	Prep Batch Date/Time:	1/3/22 9:29:00AM
Prep Batch ID:	1138121	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	5	0.19	0.50	2.45 J	x	mg/L	01/05/22	17:56	SN	462647
TPH as Motor Oil (SG)	SW8015B	5	0.56	2.0 U	ND		mg/L	01/05/22	17:56	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		78.5		%	01/05/22	17:56	SN	462647

NOTE: x - Diesel result due to unknown organics within diesel quantified range; (possibly weathered diesel or other type of fuel).



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method:	TOC-W-P	Prep Batch Date/Time:	1/4/22	1:26:00PM
Prep Batch ID:	1138204	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	23.4		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Chloromethane	SW8260B	4.2	0.70	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Vinyl Chloride	SW8260B	4.2	0.87	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Bromomethane	SW8260B	4.2	0.89	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Chloroethane	SW8260B	4.2	0.48	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Trichlorofluoromethane	SW8260B	4.2	0.78	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,1-Dichloroethene	SW8260B	4.2	0.60	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Freon 113	SW8260B	4.2	1.4	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Methylene Chloride	SW8260B	4.2	0.55	4.2 U	ND		ug/L	12/30/21	14:17	JZ	462542
trans-1,2-Dichloroethene	SW8260B	4.2	0.68	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
MTBE	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
tert-Butanol	SW8260B	4.2	12	21 U	ND		ug/L	12/30/21	14:17	JZ	462542
DIPE	SW8260B	4.2	0.51	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,1-Dichloroethane	SW8260B	4.2	0.51	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
ETBE	SW8260B	4.2	0.27	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
cis-1,2-Dichloroethene	SW8260B	4.2	0.63	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
2,2-Dichloropropane	SW8260B	4.2	0.39	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Bromochloromethane	SW8260B	4.2	0.63	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Chloroform	SW8260B	4.2	0.51	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Carbon Tetrachloride	SW8260B	4.2	0.66	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,1,1-Trichloroethane	SW8260B	4.2	0.68	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,1-Dichloropropene	SW8260B	4.2	0.78	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Benzene	SW8260B	4.2	0.27	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
TAME	SW8260B	4.2	0.30	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2-Dichloroethane	SW8260B	4.2	0.46	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Trichloroethylene	SW8260B	4.2	0.61	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Dibromomethane	SW8260B	4.2	0.45	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2-Dichloropropane	SW8260B	4.2	0.37	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Bromodichloromethane	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
cis-1,3-Dichloropropene	SW8260B	4.2	0.33	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Toluene	SW8260B	4.2	0.60	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Tetrachloroethylene	SW8260B	4.2	1.00	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
trans-1,3-Dichloropropene	SW8260B	4.2	0.91	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,1,2-Trichloroethane	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Dibromochloromethane	SW8260B	4.2	0.76	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,3-Dichloropropane	SW8260B	4.2	0.91	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2-Dibromoethane	SW8260B	4.2	0.33	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Chlorobenzene	SW8260B	4.2	0.68	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Ethylbenzene	SW8260B	4.2	0.82	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	4.2	0.37	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
m,p-Xylene	SW8260B	4.2	1.7	4.2 U	ND		ug/L	12/30/21	14:17	JZ	462542
o-Xylene	SW8260B	4.2	0.65	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Styrene	SW8260B	4.2	0.46	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Bromoform	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Isopropyl Benzene	SW8260B	4.2	0.91	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
n-Propylbenzene	SW8260B	4.2	1.2	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
Bromobenzene	SW8260B	4.2	0.63	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,1,2,2-Tetrachloroethane	SW8260B	4.2	0.33	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
2-Chlorotoluene	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,3,5-Trimethylbenzene	SW8260B	4.2	1.0	2.1	2.5		ug/L	12/30/21	14:17	JZ	462542
1,2,3-Trichloropropane	SW8260B	4.2	0.61	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
4-Chlorotoluene	SW8260B	4.2	0.90	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
tert-Butylbenzene	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2,4-Trimethylbenzene	SW8260B	4.2	0.97	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
sec-Butyl Benzene	SW8260B	4.2	1.2	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
p-Isopropyltoluene	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,3-Dichlorobenzene	SW8260B	4.2	0.70	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,4-Dichlorobenzene	SW8260B	4.2	0.74	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
n-Butylbenzene	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2-Dichlorobenzene	SW8260B	4.2	0.67	2.1 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2-Dibromo-3-Chloropropane	SW8260B	4.2	3.2	8.4 U	ND		ug/L	12/30/21	14:17	JZ	462542
Hexachlorobutadiene	SW8260B	4.2	2.6	8.4 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2,4-Trichlorobenzene	SW8260B	4.2	3.9	8.4 U	ND		ug/L	12/30/21	14:17	JZ	462542
Naphthalene	SW8260B	4.2	5.1	8.4 U	ND		ug/L	12/30/21	14:17	JZ	462542
1,2,3-Trichlorobenzene	SW8260B	4.2	5.1	8.4 U	ND		ug/L	12/30/21	14:17	JZ	462542
(S) Dibromofluoromethane	SW8260B		61.2 - 131		105		%	12/30/21	14:17	JZ	462542
(S) Toluene-d8	SW8260B		75.1 - 127		96.6		%	12/30/21	14:17	JZ	462542
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		90.7		%	12/30/21	14:17	JZ	462542

NOTE: Reporting limits raised due to high level of end hydrocarbon compounds.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2291-Sump Adit 3	Lab Sample ID:	2112332-003C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 12:45		
SDG:			

Prep Method:	5030GRO	Prep Batch Date/Time:	12/30/21 11:30:00AM
Prep Batch ID:	1138099	Prep Analyst:	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	4.2	120	210	468 J	x	ug/L	12/30/21	14:17	JZ	462542
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		81.5		%	12/30/21	14:17	JZ	462542

NOTE: x – Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons to the C5-C12 range quantified as Gasoline.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/29/21	23:18	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/29/21	23:18	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/29/21	23:18	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:18	TA	462618



Talaith Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		31.2		%	12/29/21	23:18	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		24.5		%	12/29/21	23:18	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		68.7		%	12/29/21	23:18	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		72.1		%	12/29/21	23:18	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		101		%	12/29/21	23:18	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		73.6		%	12/29/21	23:18	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22 9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10 U	ND		mg/L	01/03/22	20:06	SN	462602
TPH as Motor Oil	SW8015B	1	0.11	0.40 U	ND		mg/L	01/03/22	20:06	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		95.4		%	01/03/22	20:06	SN	462602



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method:	3510_TPH SG	Prep Batch Date/Time:	1/3/22 9:29:00AM
Prep Batch ID:	1138121	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10 U	ND		mg/L	01/05/22	18:20	SN	462647
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40 U	ND		mg/L	01/05/22	18:20	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		102		%	01/05/22	18:20	SN	462647



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method: TOC-W-P	Prep Batch Date/Time: 1/4/22 1:26:00PM
Prep Batch ID: 1138204	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	26.7		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Chloromethane	SW8260B	1	0.17	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Vinyl Chloride	SW8260B	1	0.21	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Bromomethane	SW8260B	1	0.21	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Chloroethane	SW8260B	1	0.11	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Trichlorofluoromethane	SW8260B	1	0.19	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,1-Dichloroethene	SW8260B	1	0.14	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Freon 113	SW8260B	1	0.34	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Methylene Chloride	SW8260B	1	0.13	1.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
MTBE	SW8260B	1	0.077	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
tert-Butanol	SW8260B	1	2.9	5.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
DIPE	SW8260B	1	0.12	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,1-Dichloroethane	SW8260B	1	0.12	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
ETBE	SW8260B	1	0.064	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
2,2-Dichloropropane	SW8260B	1	0.094	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Bromochloromethane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Chloroform	SW8260B	1	0.12	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Carbon Tetrachloride	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,1-Dichloropropene	SW8260B	1	0.19	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Benzene	SW8260B	1	0.065	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
TAME	SW8260B	1	0.072	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2-Dichloroethane	SW8260B	1	0.11	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Trichloroethylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Dibromomethane	SW8260B	1	0.11	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2-Dichloropropane	SW8260B	1	0.089	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Bromodichloromethane	SW8260B	1	0.076	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Toluene	SW8260B	1	0.14	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Tetrachloroethylene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Dibromochloromethane	SW8260B	1	0.18	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,3-Dichloropropane	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2-Dibromoethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Chlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Ethylbenzene	SW8260B	1	0.20	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
m,p-Xylene	SW8260B	1	0.39	1.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
o-Xylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Styrene	SW8260B	1	0.11	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Bromoform	SW8260B	1	0.076	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Isopropyl Benzene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
n-Propylbenzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
Bromobenzene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
2-Chlorotoluene	SW8260B	1	0.25	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
4-Chlorotoluene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
tert-Butylbenzene	SW8260B	1	0.26	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
sec-Butyl Benzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
p-Isopropyltoluene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
n-Butylbenzene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
Hexachlorobutadiene	SW8260B	1	0.62	2.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
Naphthalene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	14:46	JZ	462542
(S) Dibromofluoromethane	SW8260B		61.2 - 131		105		%	12/30/21	14:46	JZ	462542
(S) Toluene-d8	SW8260B		75.1 - 127		95.3		%	12/30/21	14:46	JZ	462542
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		98.2		%	12/30/21	14:46	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2293-OWDFMW01	Lab Sample ID:	2112332-004C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 15:10		
SDG:			

Prep Method:	5030GRO	Prep Batch Date/Time:	12/30/21 11:30:00AM
Prep Batch ID:	1138099	Prep Analyst:	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50 U	ND		ug/L	12/30/21	14:46	JZ	462542
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		81.8		%	12/30/21	14:46	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/29/21	23:47	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/29/21	23:47	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/29/21	23:47	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/29/21	23:47	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		28.0		%	12/29/21	23:47	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		16.1		%	12/29/21	23:47	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		62.6		%	12/29/21	23:47	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		66.5		%	12/29/21	23:47	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		92.8		%	12/29/21	23:47	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		72.2		%	12/29/21	23:47	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22 9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10 U	ND		mg/L	01/03/22	20:30	SN	462602
TPH as Motor Oil	SW8015B	1	0.11	0.40 U	ND		mg/L	01/03/22	20:30	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		96.1		%	01/03/22	20:30	SN	462602



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method: 3510_TPH SG	Prep Batch Date/Time: 1/3/22 9:29:00AM
Prep Batch ID: 1138121	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10 U	ND		mg/L	01/05/22	18:43	SN	462647
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40 U	ND		mg/L	01/05/22	18:43	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		106		%	01/05/22	18:43	SN	462647



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method:	TOC-W-P	Prep Batch Date/Time:	1/4/22	1:26:00PM
Prep Batch ID:	1138204	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	10.5		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Chloromethane	SW8260B	1	0.17	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Vinyl Chloride	SW8260B	1	0.21	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Bromomethane	SW8260B	1	0.21	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Chloroethane	SW8260B	1	0.11	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Trichlorofluoromethane	SW8260B	1	0.19	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,1-Dichloroethene	SW8260B	1	0.14	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Freon 113	SW8260B	1	0.34	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Methylene Chloride	SW8260B	1	0.13	1.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
MTBE	SW8260B	1	0.077	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
tert-Butanol	SW8260B	1	2.9	5.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
DIPE	SW8260B	1	0.12	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,1-Dichloroethane	SW8260B	1	0.12	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
ETBE	SW8260B	1	0.064	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
2,2-Dichloropropane	SW8260B	1	0.094	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Bromochloromethane	SW8260B	1	0.15	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Chloroform	SW8260B	1	0.12	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Carbon Tetrachloride	SW8260B	1	0.16	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,1-Dichloropropene	SW8260B	1	0.19	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Benzene	SW8260B	1	0.065	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
TAME	SW8260B	1	0.072	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2-Dichloroethane	SW8260B	1	0.11	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Trichloroethylene	SW8260B	1	0.15	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Dibromomethane	SW8260B	1	0.11	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2-Dichloropropane	SW8260B	1	0.089	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Bromodichloromethane	SW8260B	1	0.076	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Toluene	SW8260B	1	0.14	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Tetrachloroethylene	SW8260B	1	0.24	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Dibromochloromethane	SW8260B	1	0.18	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,3-Dichloropropane	SW8260B	1	0.22	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2-Dibromoethane	SW8260B	1	0.079	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Chlorobenzene	SW8260B	1	0.16	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Ethylbenzene	SW8260B	1	0.20	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
m,p-Xylene	SW8260B	1	0.39	1.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
o-Xylene	SW8260B	1	0.15	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Styrene	SW8260B	1	0.11	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Bromoform	SW8260B	1	0.076	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Isopropyl Benzene	SW8260B	1	0.22	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
n-Propylbenzene	SW8260B	1	0.30	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
Bromobenzene	SW8260B	1	0.15	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,1,1,2-Tetrachloroethane	SW8260B	1	0.079	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
2-Chlorotoluene	SW8260B	1	0.25	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
4-Chlorotoluene	SW8260B	1	0.22	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
tert-Butylbenzene	SW8260B	1	0.26	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
sec-Butyl Benzene	SW8260B	1	0.30	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
p-Isopropyltoluene	SW8260B	1	0.27	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
n-Butylbenzene	SW8260B	1	0.27	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
Hexachlorobutadiene	SW8260B	1	0.62	2.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
Naphthalene	SW8260B	1	1.2	2.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0	U	ND	ug/L	12/30/21	15:16	JZ	462542
(S) Dibromofluoromethane	SW8260B		61.2 - 131			105	%	12/30/21	15:16	JZ	462542
(S) Toluene-d8	SW8260B		75.1 - 127			98.0	%	12/30/21	15:16	JZ	462542
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120			99.8	%	12/30/21	15:16	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2276-RHMW14 (Zone 03)	Lab Sample ID:	2112332-005C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:00		
SDG:			

Prep Method:	5030GRO	Prep Batch Date/Time:	12/30/21 11:30:00AM
Prep Batch ID:	1138099	Prep Analyst:	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50 U	ND		ug/L	12/30/21	15:16	JZ	462542
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		84.6		%	12/30/21	15:16	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/30/21	0:16	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/30/21	0:16	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/30/21	0:16	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618



Talaith Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:16	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618
Dibenz[ghi,j]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:16	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		29.2		%	12/30/21	0:16	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		17.8		%	12/30/21	0:16	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		64.3		%	12/30/21	0:16	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		66.8		%	12/30/21	0:16	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		107		%	12/30/21	0:16	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		71.9		%	12/30/21	0:16	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22 9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10	0.126 J	x	mg/L	01/03/22	20:53	SN	462602
TPH as Motor Oil	SW8015B	1	0.11	0.40 U	ND		mg/L	01/03/22	20:53	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		95.7		%	01/03/22	20:53	SN	462602

NOTE: x- Diesel result due to unknown organics and presence of discrete peaks within diesel quantified range



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method:	3510_TPH SG	Prep Batch Date/Time:	1/3/22	9:29:00AM
Prep Batch ID:	1138121	Prep Analyst:	NDUM	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10 U	ND		mg/L	01/05/22	19:07	SN	462647
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40 U	ND		mg/L	01/05/22	19:07	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		97.5		%	01/05/22	19:07	SN	462647



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method:	TOC-W-P	Prep Batch Date/Time:	1/4/22	1:26:00PM
Prep Batch ID:	1138204	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	14.0		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Chloromethane	SW8260B	1	0.17	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Vinyl Chloride	SW8260B	1	0.21	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Bromomethane	SW8260B	1	0.21	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Chloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Trichlorofluoromethane	SW8260B	1	0.19	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,1-Dichloroethene	SW8260B	1	0.14	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Freon 113	SW8260B	1	0.34	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Methylene Chloride	SW8260B	1	0.13	1.0	U ND		ug/L	12/30/21	15:46	JZ	462542
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
MTBE	SW8260B	1	0.077	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
tert-Butanol	SW8260B	1	2.9	5.0	U ND		ug/L	12/30/21	15:46	JZ	462542
DIPE	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,1-Dichloroethane	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
ETBE	SW8260B	1	0.064	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
2,2-Dichloropropane	SW8260B	1	0.094	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Bromochloromethane	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Chloroform	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Carbon Tetrachloride	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,1-Dichloropropene	SW8260B	1	0.19	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Benzene	SW8260B	1	0.065	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
TAME	SW8260B	1	0.072	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,2-Dichloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Trichloroethylene	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Dibromomethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,2-Dichloropropane	SW8260B	1	0.089	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Bromodichloromethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Toluene	SW8260B	1	0.14	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Tetrachloroethylene	SW8260B	1	0.24	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Dibromochloromethane	SW8260B	1	0.18	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,3-Dichloropropane	SW8260B	1	0.22	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
1,2-Dibromoethane	SW8260B	1	0.079	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Chlorobenzene	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542
Ethylbenzene	SW8260B	1	0.20	0.50	U ND		ug/L	12/30/21	15:46	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
m,p-Xylene	SW8260B	1	0.39	1.0 U	ND		ug/L	12/30/21	15:46	JZ	462542
o-Xylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
Styrene	SW8260B	1	0.11	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
Bromoform	SW8260B	1	0.076	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
Isopropyl Benzene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
n-Propylbenzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
Bromobenzene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
2-Chlorotoluene	SW8260B	1	0.25	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
4-Chlorotoluene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
tert-Butylbenzene	SW8260B	1	0.26	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
sec-Butyl Benzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
p-Isopropyltoluene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
n-Butylbenzene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0 U	ND		ug/L	12/30/21	15:46	JZ	462542
Hexachlorobutadiene	SW8260B	1	0.62	2.0 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0 U	ND		ug/L	12/30/21	15:46	JZ	462542
Naphthalene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	15:46	JZ	462542
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	15:46	JZ	462542
(S) Dibromofluoromethane	SW8260B		61.2 - 131		107		%	12/30/21	15:46	JZ	462542
(S) Toluene-d8	SW8260B		75.1 - 127		95.8		%	12/30/21	15:46	JZ	462542
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		98.2		%	12/30/21	15:46	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2285-RHMW05	Lab Sample ID:	2112332-006C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 9:25		
SDG:			

Prep Method: 5030GRO	Prep Batch Date/Time: 12/30/21 11:30:00AM
Prep Batch ID: 1138099	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50 U	ND		ug/L	12/30/21	15:46	JZ	462542
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		82.3		%	12/30/21	15:46	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH22797-RHMW01R	Lab Sample ID:	2112332-007A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/30/21	0:46	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/30/21	0:46	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/30/21	0:46	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH22797-RHMW01R	Lab Sample ID:	2112332-007A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	0:46	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH22797-RHMW01R	Lab Sample ID:	2112332-007A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		26.9		%	12/30/21	0:46	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		16.2		%	12/30/21	0:46	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		68.4		%	12/30/21	0:46	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		73.8		%	12/30/21	0:46	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		91.4		%	12/30/21	0:46	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		73.6		%	12/30/21	0:46	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH22797-RHMW01R	Lab Sample ID:	2112332-007A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22 9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.042	0.11	0.281 J	x	mg/L	01/03/22	21:16	SN	462602
TPH as Motor Oil	SW8015B	1	0.13	0.45 U	ND		mg/L	01/03/22	21:16	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		96.7		%	01/03/22	21:16	SN	462602

NOTE: x - Diesel result due to unknown organics within diesel quantified range, possibly weathered diesel



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH22797-RHMW01R	Lab Sample ID:	2112332-007A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method: 3510_TPH SG	Prep Batch Date/Time: 1/3/22 9:29:00AM
Prep Batch ID: 1138121	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.042	0.11 U	ND		mg/L	01/05/22	19:30	SN	462647
TPH as Motor Oil (SG)	SW8015B	1	0.13	0.45 U	ND		mg/L	01/05/22	19:30	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		109		%	01/05/22	19:30	SN	462647



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2279-RHMW01R	Lab Sample ID:	2112332-007B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method:	TOC-W-P	Prep Batch Date/Time:	1/4/22	1:26:00PM
Prep Batch ID:	1138204	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	16.8		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2279-RHMW01R	Lab Sample ID:	2112332-007C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Chloromethane	SW8260B	1	0.17	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Vinyl Chloride	SW8260B	1	0.21	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Bromomethane	SW8260B	1	0.21	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Chloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Trichlorofluoromethane	SW8260B	1	0.19	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,1-Dichloroethene	SW8260B	1	0.14	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Freon 113	SW8260B	1	0.34	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Methylene Chloride	SW8260B	1	0.13	1.0	U ND		ug/L	12/30/21	16:16	JZ	462542
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
MTBE	SW8260B	1	0.077	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
tert-Butanol	SW8260B	1	2.9	5.0	U ND		ug/L	12/30/21	16:16	JZ	462542
DIPE	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,1-Dichloroethane	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
ETBE	SW8260B	1	0.064	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
2,2-Dichloropropane	SW8260B	1	0.094	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Bromochloromethane	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Chloroform	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Carbon Tetrachloride	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,1-Dichloropropene	SW8260B	1	0.19	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Benzene	SW8260B	1	0.065	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
TAME	SW8260B	1	0.072	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,2-Dichloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Trichloroethylene	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Dibromomethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,2-Dichloropropane	SW8260B	1	0.089	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Bromodichloromethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Toluene	SW8260B	1	0.14	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Tetrachloroethylene	SW8260B	1	0.24	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Dibromochloromethane	SW8260B	1	0.18	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,3-Dichloropropane	SW8260B	1	0.22	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
1,2-Dibromoethane	SW8260B	1	0.079	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Chlorobenzene	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542
Ethylbenzene	SW8260B	1	0.20	0.50	U ND		ug/L	12/30/21	16:16	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2279-RHMW01R	Lab Sample ID:	2112332-007C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
m,p-Xylene	SW8260B	1	0.39	1.0 U	ND		ug/L	12/30/21	16:16	JZ	462542
o-Xylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
Styrene	SW8260B	1	0.11	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
Bromoform	SW8260B	1	0.076	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
Isopropyl Benzene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
n-Propylbenzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
Bromobenzene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
2-Chlorotoluene	SW8260B	1	0.25	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
4-Chlorotoluene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
tert-Butylbenzene	SW8260B	1	0.26	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
sec-Butyl Benzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
p-Isopropyltoluene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
n-Butylbenzene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0 U	ND		ug/L	12/30/21	16:16	JZ	462542
Hexachlorobutadiene	SW8260B	1	0.62	2.0 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0 U	ND		ug/L	12/30/21	16:16	JZ	462542
Naphthalene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	16:16	JZ	462542
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	16:16	JZ	462542
(S) Dibromofluoromethane	SW8260B		61.2 - 131		109		%	12/30/21	16:16	JZ	462542
(S) Toluene-d8	SW8260B		75.1 - 127		93.7		%	12/30/21	16:16	JZ	462542
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		95.3		%	12/30/21	16:16	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2279-RHMW01R	Lab Sample ID:	2112332-007C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 11:50		
SDG:			

Prep Method:	5030GRO	Prep Batch Date/Time:	12/30/21 11:30:00AM
Prep Batch ID:	1138099	Prep Analyst:	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50	52.8 J+(B)	x	ug/L	12/30/21	16:16	JZ	462542
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		85.2		%	12/30/21	16:16	JZ	462542

NOTE: x – Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons to the C5-C12 range quantified as Gasoline.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/30/21	1:15	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/30/21	1:15	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/30/21	1:15	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618



Talaith Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:15	TA	462618
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		27.6		%	12/30/21	1:15	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		23.1		%	12/30/21	1:15	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Nitrobenzene-d5 (S)	SW8270		30 - 100		74.8		%	12/30/21	1:15	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		72.5		%	12/30/21	1:15	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		89.0		%	12/30/21	1:15	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		70.4		%	12/30/21	1:15	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Naphthalene	SW8270	5	0.900	2.7	7.99		ug/L	01/04/22	17:06	TA	462618
2-Methylnaphthalene	SW8270	5	4.50	18 U	ND		ug/L	01/04/22	17:06	TA	462618
1-Methylnaphthalene	SW8270	5	2.25	18 U	ND		ug/L	01/04/22	17:06	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22 9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	2	0.074	0.20	2.21 J	x	mg/L	01/04/22	15:26	SN	462602
TPH as Motor Oil	SW8015B	2	0.22	0.80 U	ND		mg/L	01/04/22	15:26	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		92.6		%	01/04/22	15:26	SN	462602

NOTE: x - Diesel result due to unknown organics within diesel quantified range, possibly weathered diesel



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method: 3510_TPH SG	Prep Batch Date/Time: 1/3/22 9:29:00AM
Prep Batch ID: 1138121	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	2	0.074	0.20	0.239 J	x	mg/L	01/05/22	19:54	SN	462647
TPH as Motor Oil (SG)	SW8015B	2	0.22	0.80 U	ND		mg/L	01/05/22	19:54	SN	462647
Acceptance Limits											
Pentacosane (S)	SW8015B		40 - 129		106		%	01/05/22	19:54	SN	462647

NOTE: x - Diesel result due to unknown organics within diesel quantified range, possibly other type of fuel.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method:	TOC-W-P	Prep Batch Date/Time:	1/4/22	1:26:00PM
Prep Batch ID:	1138204	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	45.7		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Chloromethane	SW8260B	4.2	0.70	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Vinyl Chloride	SW8260B	4.2	0.87	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Bromomethane	SW8260B	4.2	0.89	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Chloroethane	SW8260B	4.2	0.48	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Trichlorofluoromethane	SW8260B	4.2	0.78	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,1-Dichloroethene	SW8260B	4.2	0.60	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Freon 113	SW8260B	4.2	1.4	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Methylene Chloride	SW8260B	4.2	0.55	4.2 U	ND		ug/L	12/30/21	16:46	JZ	462542
trans-1,2-Dichloroethene	SW8260B	4.2	0.68	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
MTBE	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
tert-Butanol	SW8260B	4.2	12	21 U	ND		ug/L	12/30/21	16:46	JZ	462542
DIPE	SW8260B	4.2	0.51	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,1-Dichloroethane	SW8260B	4.2	0.51	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
ETBE	SW8260B	4.2	0.27	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
cis-1,2-Dichloroethene	SW8260B	4.2	0.63	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
2,2-Dichloropropane	SW8260B	4.2	0.39	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Bromochloromethane	SW8260B	4.2	0.63	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Chloroform	SW8260B	4.2	0.51	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Carbon Tetrachloride	SW8260B	4.2	0.66	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,1,1-Trichloroethane	SW8260B	4.2	0.68	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,1-Dichloropropene	SW8260B	4.2	0.78	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Benzene	SW8260B	4.2	0.27	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
TAME	SW8260B	4.2	0.30	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,2-Dichloroethane	SW8260B	4.2	0.46	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Trichloroethylene	SW8260B	4.2	0.61	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Dibromomethane	SW8260B	4.2	0.45	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,2-Dichloropropane	SW8260B	4.2	0.37	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Bromodichloromethane	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
cis-1,3-Dichloropropene	SW8260B	4.2	0.33	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Toluene	SW8260B	4.2	0.60	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Tetrachloroethylene	SW8260B	4.2	1.00	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
trans-1,3-Dichloropropene	SW8260B	4.2	0.91	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,1,2-Trichloroethane	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Dibromochloromethane	SW8260B	4.2	0.76	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,3-Dichloropropane	SW8260B	4.2	0.91	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,2-Dibromoethane	SW8260B	4.2	0.33	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Chlorobenzene	SW8260B	4.2	0.68	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Ethylbenzene	SW8260B	4.2	0.82	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	4.2	0.37	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
m,p-Xylene	SW8260B	4.2	1.7	4.2 U	ND		ug/L	12/30/21	16:46	JZ	462542
o-Xylene	SW8260B	4.2	0.65	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Styrene	SW8260B	4.2	0.46	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Bromoform	SW8260B	4.2	0.32	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
Isopropyl Benzene	SW8260B	4.2	0.91	2.1	2.3		ug/L	12/30/21	16:46	JZ	462542
n-Propylbenzene	SW8260B	4.2	1.2	2.1	2.8		ug/L	12/30/21	16:46	JZ	462542
Bromobenzene	SW8260B	4.2	0.63	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,1,2,2-Tetrachloroethane	SW8260B	4.2	0.33	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
2-Chlorotoluene	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,3,5-Trimethylbenzene	SW8260B	4.2	1.0	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,2,3-Trichloropropane	SW8260B	4.2	0.61	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
4-Chlorotoluene	SW8260B	4.2	0.90	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
tert-Butylbenzene	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,2,4-Trimethylbenzene	SW8260B	4.2	0.97	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
sec-Butyl Benzene	SW8260B	4.2	1.2	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
p-Isopropyltoluene	SW8260B	4.2	1.1	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,3-Dichlorobenzene	SW8260B	4.2	0.70	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,4-Dichlorobenzene	SW8260B	4.2	0.74	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
n-Butylbenzene	SW8260B	4.2	1.1	2.1	2.7		ug/L	12/30/21	16:46	JZ	462542
1,2-Dichlorobenzene	SW8260B	4.2	0.67	2.1 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,2-Dibromo-3-Chloropropane	SW8260B	4.2	3.2	8.4 U	ND		ug/L	12/30/21	16:46	JZ	462542
Hexachlorobutadiene	SW8260B	4.2	2.6	8.4 U	ND		ug/L	12/30/21	16:46	JZ	462542
1,2,4-Trichlorobenzene	SW8260B	4.2	3.9	8.4 U	ND		ug/L	12/30/21	16:46	JZ	462542
Naphthalene	SW8260B	4.2	5.1	8.4	140		ug/L	12/30/21	16:46	JZ	462542
1,2,3-Trichlorobenzene	SW8260B	4.2	5.1	8.4 U	ND		ug/L	12/30/21	16:46	JZ	462542
(S) Dibromofluoromethane	SW8260B		61.2 - 131		106		%	12/30/21	16:46	JZ	462542
(S) Toluene-d8	SW8260B		75.1 - 127		93.4		%	12/30/21	16:46	JZ	462542
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		94.3		%	12/30/21	16:46	JZ	462542

NOTE: Reporting limits raised due to high level of end hydrocarbon compounds.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2281-RHMW02	Lab Sample ID:	2112332-008C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 13:55		
SDG:			

Prep Method:	5030GRO	Prep Batch Date/Time:	12/30/21 11:30:00AM
Prep Batch ID:	1138099	Prep Analyst:	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	4.2	120	210	604 J	x	ug/L	12/30/21	16:46	JZ	462542
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		85.8		%	12/30/21	16:46	JZ	462542

NOTE: x – Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons to the C5-C12 range quantified as Gasoline.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
N-Nitrosdimethylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Aniline	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Phenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2-Chlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
1,3-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
1,4-Dichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Benzyl Alcohol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
1,2-Dichlorobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Hexachloroethane	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Nitrobenzene	SW8270	1	0.900	18 U	ND		ug/L	12/30/21	1:44	TA	462618
Isophorone	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2-Nitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,4-Dimethylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Benzoic Acid	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,4-Dichlorophenol	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,6-Dichlorophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Naphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
4-Chloroaniline	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Hexachloro-1,3-butadiene	SW8270	1	0.450	18 U	ND		ug/L	12/30/21	1:44	TA	462618
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2-Methylnaphthalene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
1-Methylnaphthalene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2-Chloronaphthalene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
2-Nitroaniline	SW8270	1	0.900	9.0 U	ND		ug/L	12/30/21	1:44	TA	462618
1,4-Dinitrobenzene	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Dimethyl phthalate	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
1,3-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Acenaphthylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618



Talaith Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method: 3510_BNASIM	Prep Batch Date/Time: 12/29/21 4:17:00PM
Prep Batch ID: 1138070	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,6-Dinitrotoluene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
1,2-Dinitrobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
3-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Acenaphthene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,4-Dinitrophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
4-Nitrophenol	SW8270	1	0.900	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Dibenzofuran	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
2,4-Dinitrotoluene	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Diethylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Fluorene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
4-Nitroaniline	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Diphenylamine	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Azobenzene	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Hexachlorobenzene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Pentachlorophenol	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Phenanthrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Carbazole	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Di-n-butylphthalate	SW8270	1	0.450	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Benzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Benzyl butyl phthalate	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Benz[a]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Chrysene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Di-n-octyl phthalate	SW8270	1	0.180	3.6 U	ND		ug/L	12/30/21	1:44	TA	462618
Benzo[b]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Benzo[k]fluoranthene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Benzo[a]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618
Dibenz[ghi,perylene	SW8270	1	0.180	0.54 U	ND		ug/L	12/30/21	1:44	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method:	3510_BNASIM	Prep Batch Date/Time:	12/29/21 4:17:00PM
Prep Batch ID:	1138070	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Acceptance Limits											
2-Fluorophenol (S)	SW8270		15 - 105		31.3		%	12/30/21	1:44	TA	462618
Phenol-d6 (S)	SW8270		15 - 100		25.0		%	12/30/21	1:44	TA	462618
Nitrobenzene-d5 (S)	SW8270		30 - 100		65.0		%	12/30/21	1:44	TA	462618
2-Fluorobiphenyl (S)	SW8270		30 - 105		66.4		%	12/30/21	1:44	TA	462618
2,4,6-Tribromophenol (S)	SW8270		15 - 125		92.5		%	12/30/21	1:44	TA	462618
p-Terphenyl-d14 (S)	SW8270		30 - 125		71.9		%	12/30/21	1:44	TA	462618



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	1/3/22 9:22:00AM
Prep Batch ID:	1138120	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10	0.247 J	x	mg/L	01/03/22	22:03	SN	462602
TPH as Motor Oil	SW8015B	1	0.11	0.40	0.672 J+(B)		mg/L	01/03/22	22:03	SN	462602
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		97.7		%	01/03/22	22:03	SN	462602

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range slightly heavier than diesel quantified as diesel.



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009A
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method:	3510_TPH SG	Prep Batch Date/Time:	1/3/22 9:29:00AM
Prep Batch ID:	1138121	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10 U	ND		mg/L	01/05/22	20:17	SN	462647
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40 U	ND		mg/L	01/05/22	20:17	SN	462647
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		108		%	01/05/22	20:17	SN	462647



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for: Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am
Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009B
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method:	TOC-W-P	Prep Batch Date/Time:	1/4/22	1:26:00PM
Prep Batch ID:	1138204	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TOC	A5310B	1	0.40	2.0	71.7		mg/L	01/04/22	13:26	BJAY	462640



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Chloromethane	SW8260B	1	0.17	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Vinyl Chloride	SW8260B	1	0.21	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Bromomethane	SW8260B	1	0.21	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Chloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Trichlorofluoromethane	SW8260B	1	0.19	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,1-Dichloroethene	SW8260B	1	0.14	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Freon 113	SW8260B	1	0.34	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Methylene Chloride	SW8260B	1	0.13	1.0	U ND		ug/L	12/30/21	17:15	JZ	462542
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
MTBE	SW8260B	1	0.077	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
tert-Butanol	SW8260B	1	2.9	5.0	U ND		ug/L	12/30/21	17:15	JZ	462542
DIPE	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,1-Dichloroethane	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
ETBE	SW8260B	1	0.064	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
2,2-Dichloropropane	SW8260B	1	0.094	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Bromochloromethane	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Chloroform	SW8260B	1	0.12	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Carbon Tetrachloride	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,1-Dichloropropene	SW8260B	1	0.19	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Benzene	SW8260B	1	0.065	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
TAME	SW8260B	1	0.072	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,2-Dichloroethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Trichloroethylene	SW8260B	1	0.15	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Dibromomethane	SW8260B	1	0.11	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,2-Dichloropropane	SW8260B	1	0.089	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Bromodichloromethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Toluene	SW8260B	1	0.14	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Tetrachloroethylene	SW8260B	1	0.24	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Dibromochloromethane	SW8260B	1	0.18	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,3-Dichloropropane	SW8260B	1	0.22	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
1,2-Dibromoethane	SW8260B	1	0.079	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Chlorobenzene	SW8260B	1	0.16	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542
Ethylbenzene	SW8260B	1	0.20	0.50	U ND		ug/L	12/30/21	17:15	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/30/21 11:03:00AM
Prep Batch ID: 1138098	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
m,p-Xylene	SW8260B	1	0.39	1.0 U	ND		ug/L	12/30/21	17:15	JZ	462542
o-Xylene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
Styrene	SW8260B	1	0.11	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
Bromoform	SW8260B	1	0.076	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
Isopropyl Benzene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
n-Propylbenzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
Bromobenzene	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
2-Chlorotoluene	SW8260B	1	0.25	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
4-Chlorotoluene	SW8260B	1	0.22	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
tert-Butylbenzene	SW8260B	1	0.26	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
sec-Butyl Benzene	SW8260B	1	0.30	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
p-Isopropyltoluene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
n-Butylbenzene	SW8260B	1	0.27	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0 U	ND		ug/L	12/30/21	17:15	JZ	462542
Hexachlorobutadiene	SW8260B	1	0.62	2.0 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0 U	ND		ug/L	12/30/21	17:15	JZ	462542
Naphthalene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	17:15	JZ	462542
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0 U	ND		ug/L	12/30/21	17:15	JZ	462542
(S) Dibromofluoromethane	SW8260B		61.2 - 131		111		%	12/30/21	17:15	JZ	462542
(S) Toluene-d8	SW8260B		75.1 - 127		94.2		%	12/30/21	17:15	JZ	462542
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		98.6		%	12/30/21	17:15	JZ	462542



Talaidh Isaacs 01/22/2022

SAMPLE RESULTS

Report prepared for:

Yvonne Parry
Tetra Tech Inc (HI)

Date/Time Received: 12/29/21, 10:35 am

Date Reported: 01/06/22

Client Sample ID:	ERH2283-RHMW03	Lab Sample ID:	2112332-009C
Project Name/Location:	HDOH Red Hill	Sample Matrix:	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/27/21 / 16:05		
SDG:			

Prep Method: 5030GRO	Prep Batch Date/Time: 12/30/21 11:30:00AM
Prep Batch ID: 1138099	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50 U	ND		ug/L	12/30/21	17:15	JZ	462542
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		96.0		%	12/30/21	17:15	JZ	462542