Tetra Tech Inc (HI)
737 Bishop St, Suite 2340
Honolulu, Hawaii 96813
Tel: 808-441-6600
Email: Yvonne.parry@Tetratech.com

RE: HDOH Red Hill

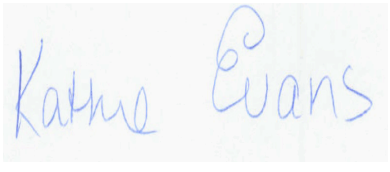
Work Order No.: 2201001

Dear Yvonne Parry:

Torrent Laboratory, Inc. received 3 sample(s) on December 31, 2021 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.



Kathie Evans
Project Manager

January 10, 2022
Date

Date: 1/10/2022

Client: Tetra Tech Inc (HI)

Project: HDOH Red Hill

Work Order: 2201001

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc

Methane analysis was sub-contracted to ELAP certified laboratory AAC. Sub-contract data will follow under a separate cover.

Torrent LABORATORY, INC.

Sample Result Summary

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

Date Received: 12/31/21
Date Reported: 01/10/22

ERH2307-RHMP13 (Zone 5) 2201001-001

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TOC	A5310B	1	0.40	2.0	19.0	mg/L

ERH2309-RHMW16 2201001-002

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TOC	A5310B	1	0.40	2.0	9.85	mg/L

ERH2311-RHMW12A 2201001-003

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TOC	A5310B	1	0.40	2.0	10.9	mg/L

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22 4:22:00PM
Prep Batch ID:	1138159	**Prep Analyst:**	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
N-Nitrosdimethylamine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Aniline	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Phenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2-Chlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
1,3-Dichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
1,4-Dichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Benzyl Alcohol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
1,2-Dichlorobenzene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Hexachloroethane	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Nitrobenzene	SW8270	1	0.900	18	ND		ug/L	01/03/22	22:23	TA	462669
Isophorone	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2-Nitrophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,4-Dimethylphenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Benzoic Acid	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,4-Dichlorophenol	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:23	TA	462669
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,6-Dichlorophenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Naphthalene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
4-Chloroaniline	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Hexachloro-1,3-butadiene	SW8270	1	0.450	18	ND		ug/L	01/03/22	22:23	TA	462669
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2-Methylnaphthalene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
1-Methylnaphthalene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2-Chloronaphthalene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
2-Nitroaniline	SW8270	1	0.900	9.0	ND		ug/L	01/03/22	22:23	TA	462669
1,4-Dinitrobenzene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Dimethyl phthalate	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
1,3-Dinitrobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Acenaphthylene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22 4:22:00PM
Prep Batch ID:	1138159	**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	ND		ug/L	01/03/22	22:23	TA	462669
1,2-Dinitrobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
3-Nitroaniline	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Acenaphthene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,4-Dinitrophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
4-Nitrophenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Dibenzofuran	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
2,4-Dinitrotoluene	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Diethylphthalate	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Fluorene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
4-Nitroaniline	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Diphenylamine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Azobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Hexachlorobenzene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Pentachlorophenol	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Phenanthrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Carbazole	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Di-n-butylphthalate	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Benzidine	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Benzyl butyl phthalate	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Benz[a]anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Chrysene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Di-n-octyl phthalate	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:23	TA	462669
Benzo[b]fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Benzo[k]fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Benzo[a]pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:23	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22	4:22:00PM
Prep Batch ID:	1138159	**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		**34.6**		%	01/03/22	22:23	TA	462669
Phenol-d6 (S)	SW8270		15 - 100		**19.6**		%	01/03/22	22:23	TA	462669
Nitrobenzene-d5 (S)	SW8270		30 - 100		**76.7**		%	01/03/22	22:23	TA	462669
2-Fluorobiphenyl (S)	SW8270		30 - 105		**83.4**		%	01/03/22	22:23	TA	462669
2,4,6-Tribromophenol (S)	SW8270		15 - 125		**88.7**		%	01/03/22	22:23	TA	462669
p-Terphenyl-d14 (S)	SW8270		30 - 125		**87.3**		%	01/03/22	22:23	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	3510_TPH	**Prep Batch Date/Time:**	1/4/22	10:32:00AM
Prep Batch ID:	1138163	**Prep Analyst:**	AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10	ND		mg/L	01/04/22	18:59	SN	462653
TPH as Motor Oil	SW8015B	1	0.11	0.40	ND		mg/L	01/04/22	18:59	SN	462653
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		**89.3**		%	01/04/22	18:59	SN	462653

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	3510_TPH SG	**Prep Batch Date/Time:**	1/5/22	9:20:00AM
Prep Batch ID:	1138164	**Prep Analyst:**	AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10	ND		mg/L	01/05/22	23:25	SN	462632
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40	ND		mg/L	01/05/22	23:25	SN	462632
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		**80.0**		%	01/05/22	23:25	SN	462632

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001B
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
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	**19.0**		mg/L	01/04/22	13:26	BJAY	462640

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	5030VOC	**Prep Batch Date/Time:**	1/3/22 10:54:00AM
Prep Batch ID:	1138141	**Prep Analyst:**	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Chloromethane	SW8260B	1	0.17	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Vinyl Chloride	SW8260B	1	0.21	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Bromomethane	SW8260B	1	0.21	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Chloroethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Trichlorofluoromethane	SW8260B	1	0.19	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,1-Dichloroethene	SW8260B	1	0.14	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Freon 113	SW8260B	1	0.34	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Methylene Chloride	SW8260B	1	0.13	1.0	ND		ug/L	01/03/22	17:26	JZ	462575
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
MTBE	SW8260B	1	0.077	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
tert-Butanol	SW8260B	1	2.9	5.0	ND		ug/L	01/03/22	17:26	JZ	462575
DIPE	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,1-Dichloroethane	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
ETBE	SW8260B	1	0.064	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
2,2-Dichloropropane	SW8260B	1	0.094	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Bromochloromethane	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Chloroform	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Carbon Tetrachloride	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,1-Dichloropropene	SW8260B	1	0.19	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Benzene	SW8260B	1	0.065	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
TAME	SW8260B	1	0.072	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,2-Dichloroethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Trichloroethylene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Dibromomethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,2-Dichloropropane	SW8260B	1	0.089	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Bromodichloromethane	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Toluene	SW8260B	1	0.14	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Tetrachloroethylene	SW8260B	1	0.24	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Dibromochloromethane	SW8260B	1	0.18	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,3-Dichloropropane	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,2-Dibromoethane	SW8260B	1	0.079	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Chlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Ethylbenzene	SW8260B	1	0.20	0.50	ND		ug/L	01/03/22	17:26	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	5030VOC	**Prep Batch Date/Time:**	1/3/22 10:54:00AM
Prep Batch ID:	1138141	**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	ND		ug/L	01/03/22	17:26	JZ	462575
m,p-Xylene	SW8260B	1	0.39	1.0	ND		ug/L	01/03/22	17:26	JZ	462575
o-Xylene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Styrene	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Bromoform	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Isopropyl Benzene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
n-Propylbenzene	SW8260B	1	0.30	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
Bromobenzene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
2-Chlorotoluene	SW8260B	1	0.25	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
4-Chlorotoluene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
tert-Butylbenzene	SW8260B	1	0.26	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
sec-Butyl Benzene	SW8260B	1	0.30	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
p-Isopropyltoluene	SW8260B	1	0.27	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
n-Butylbenzene	SW8260B	1	0.27	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:26	JZ	462575
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0	ND		ug/L	01/03/22	17:26	JZ	462575
Hexachlorobutadiene	SW8260B	1	0.62	2.0	ND		ug/L	01/03/22	17:26	JZ	462575
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0	ND		ug/L	01/03/22	17:26	JZ	462575
Naphthalene	SW8260B	1	1.2	2.0	ND		ug/L	01/03/22	17:26	JZ	462575
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0	ND		ug/L	01/03/22	17:26	JZ	462575
(S) Dibromofluoromethane	SW8260B		61.2 - 131		**105**		%	01/03/22	17:26	JZ	462575
(S) Toluene-d8	SW8260B		75.1 - 127		**92.9**		%	01/03/22	17:26	JZ	462575
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		**94.1**		%	01/03/22	17:26	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2307-RHMP13 (Zone 5)	**Lab Sample ID:**	2201001-001C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 10:20		
SDG:			

Prep Method:	5030GRO	**Prep Batch Date/Time:**	1/3/22	10:54:00AM
Prep Batch ID:	1138156	**Prep Analyst:**	JZHAO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50	ND		ug/L	01/03/22	17:26	JZ	462575
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		**79.0**		%	01/03/22	17:26	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22 4:22:00PM
Prep Batch ID:	1138159	**Prep Analyst:**	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
N-Nitrosdimethylamine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Aniline	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Phenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2-Chlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
1,3-Dichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
1,4-Dichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Benzyl Alcohol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
1,2-Dichlorobenzene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Hexachloroethane	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Nitrobenzene	SW8270	1	0.900	18	ND		ug/L	01/03/22	22:52	TA	462669
Isophorone	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2-Nitrophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,4-Dimethylphenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Benzoic Acid	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,4-Dichlorophenol	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:52	TA	462669
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,6-Dichlorophenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Naphthalene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
4-Chloroaniline	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Hexachloro-1,3-butadiene	SW8270	1	0.450	18	ND		ug/L	01/03/22	22:52	TA	462669
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2-Methylnaphthalene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
1-Methylnaphthalene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2-Chloronaphthalene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
2-Nitroaniline	SW8270	1	0.900	9.0	ND		ug/L	01/03/22	22:52	TA	462669
1,4-Dinitrobenzene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Dimethyl phthalate	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
1,3-Dinitrobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Acenaphthylene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22 4:22:00PM
Prep Batch ID:	1138159	**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	ND		ug/L	01/03/22	22:52	TA	462669
1,2-Dinitrobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
3-Nitroaniline	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Acenaphthene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,4-Dinitrophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
4-Nitrophenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Dibenzofuran	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
2,4-Dinitrotoluene	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Diethylphthalate	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Fluorene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
4-Nitroaniline	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Diphenylamine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Azobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Hexachlorobenzene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Pentachlorophenol	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Phenanthrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Carbazole	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Di-n-butylphthalate	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Benzidine	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Benzyl butyl phthalate	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Benz[a]anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Chrysene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Di-n-octyl phthalate	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	22:52	TA	462669
Benzo[b]fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Benzo[k]fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Benzo[a]pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	22:52	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22	4:22:00PM
Prep Batch ID:	1138159	**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		**35.6**		%	01/03/22	22:52	TA	462669
Phenol-d6 (S)	SW8270		15 - 100		**20.2**		%	01/03/22	22:52	TA	462669
Nitrobenzene-d5 (S)	SW8270		30 - 100		**85.1**		%	01/03/22	22:52	TA	462669
2-Fluorobiphenyl (S)	SW8270		30 - 105		**92.5**		%	01/03/22	22:52	TA	462669
2,4,6-Tribromophenol (S)	SW8270		15 - 125		**99.7**		%	01/03/22	22:52	TA	462669
p-Terphenyl-d14 (S)	SW8270		30 - 125		**87.2**		%	01/03/22	22:52	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	3510_TPH	**Prep Batch Date/Time:**	1/4/22 10:32:00AM
Prep Batch ID:	1138163	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10	ND		mg/L	01/04/22	19:22	SN	462653
TPH as Motor Oil	SW8015B	1	0.11	0.40	ND		mg/L	01/04/22	19:22	SN	462653
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		**97.4**		%	01/04/22	19:22	SN	462653

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	3510_TPH SG	**Prep Batch Date/Time:**	1/5/22	9:20:00AM
Prep Batch ID:	1138164	**Prep Analyst:**	AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10	ND		mg/L	01/05/22	23:48	SN	462632
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40	ND		mg/L	01/05/22	23:48	SN	462632
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		**111**		%	01/05/22	23:48	SN	462632

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002B
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
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	**9.85**		mg/L	01/04/22	13:26	BJAY	462640

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	5030VOC	**Prep Batch Date/Time:**	1/3/22 10:54:00AM
Prep Batch ID:	1138141	**Prep Analyst:**	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Chloromethane	SW8260B	1	0.17	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Vinyl Chloride	SW8260B	1	0.21	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Bromomethane	SW8260B	1	0.21	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Chloroethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Trichlorofluoromethane	SW8260B	1	0.19	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,1-Dichloroethene	SW8260B	1	0.14	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Freon 113	SW8260B	1	0.34	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Methylene Chloride	SW8260B	1	0.13	1.0	ND		ug/L	01/03/22	17:56	JZ	462575
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
MTBE	SW8260B	1	0.077	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
tert-Butanol	SW8260B	1	2.9	5.0	ND		ug/L	01/03/22	17:56	JZ	462575
DIPE	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,1-Dichloroethane	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
ETBE	SW8260B	1	0.064	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
2,2-Dichloropropane	SW8260B	1	0.094	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Bromochloromethane	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Chloroform	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Carbon Tetrachloride	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,1-Dichloropropene	SW8260B	1	0.19	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Benzene	SW8260B	1	0.065	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
TAME	SW8260B	1	0.072	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,2-Dichloroethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Trichloroethylene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Dibromomethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,2-Dichloropropane	SW8260B	1	0.089	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Bromodichloromethane	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Toluene	SW8260B	1	0.14	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Tetrachloroethylene	SW8260B	1	0.24	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Dibromochloromethane	SW8260B	1	0.18	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,3-Dichloropropane	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,2-Dibromoethane	SW8260B	1	0.079	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Chlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Ethylbenzene	SW8260B	1	0.20	0.50	ND		ug/L	01/03/22	17:56	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	5030VOC	**Prep Batch Date/Time:**	1/3/22 10:54:00AM
Prep Batch ID:	1138141	**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	ND		ug/L	01/03/22	17:56	JZ	462575
m,p-Xylene	SW8260B	1	0.39	1.0	ND		ug/L	01/03/22	17:56	JZ	462575
o-Xylene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Styrene	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Bromoform	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Isopropyl Benzene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
n-Propylbenzene	SW8260B	1	0.30	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
Bromobenzene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
2-Chlorotoluene	SW8260B	1	0.25	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
4-Chlorotoluene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
tert-Butylbenzene	SW8260B	1	0.26	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
sec-Butyl Benzene	SW8260B	1	0.30	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
p-Isopropyltoluene	SW8260B	1	0.27	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
n-Butylbenzene	SW8260B	1	0.27	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	17:56	JZ	462575
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0	ND		ug/L	01/03/22	17:56	JZ	462575
Hexachlorobutadiene	SW8260B	1	0.62	2.0	ND		ug/L	01/03/22	17:56	JZ	462575
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0	ND		ug/L	01/03/22	17:56	JZ	462575
Naphthalene	SW8260B	1	1.2	2.0	ND		ug/L	01/03/22	17:56	JZ	462575
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0	ND		ug/L	01/03/22	17:56	JZ	462575
(S) Dibromofluoromethane	SW8260B		61.2 - 131		**108**		%	01/03/22	17:56	JZ	462575
(S) Toluene-d8	SW8260B		75.1 - 127		**96.4**		%	01/03/22	17:56	JZ	462575
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		**96.3**		%	01/03/22	17:56	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2309-RHMW16	**Lab Sample ID:**	2201001-002C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 11:35		
SDG:			

Prep Method:	5030GRO	**Prep Batch Date/Time:**	1/3/22	10:54:00AM
Prep Batch ID:	1138156	**Prep Analyst:**	JZHAO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50	ND		ug/L	01/03/22	17:56	JZ	462575
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		**87.5**		%	01/03/22	17:56	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22 4:22:00PM
Prep Batch ID:	1138159	**Prep Analyst:**	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Pyridine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
N-Nitrosdimethylamine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Aniline	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Phenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Bis(2-chloroethyl) ether	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2-Chlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
1,3-Dichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
1,4-Dichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Benzyl Alcohol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
1,2-Dichlorobenzene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2-Methylphenol (o-Cresol)	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Bis(2-chloroisopropyl)ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
3-/4-Methylphenol (p-/m-Cresol)	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
N-nitroso-di-n-propylamine	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Hexachloroethane	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Nitrobenzene	SW8270	1	0.900	18	ND		ug/L	01/03/22	23:22	TA	462669
Isophorone	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2-Nitrophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,4-Dimethylphenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Benzoic Acid	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Bis(2-Chloroethoxy)methane	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,4-Dichlorophenol	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	23:22	TA	462669
1,2,4-Trichlorobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,6-Dichlorophenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Naphthalene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
4-Chloroaniline	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Hexachloro-1,3-butadiene	SW8270	1	0.450	18	ND		ug/L	01/03/22	23:22	TA	462669
4-Chloro-3-methylphenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2-Methylnaphthalene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
1-Methylnaphthalene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Hexachlorocyclopentadiene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,4,6-Trichlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,4,5-Trichlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2-Chloronaphthalene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
2-Nitroaniline	SW8270	1	0.900	9.0	ND		ug/L	01/03/22	23:22	TA	462669
1,4-Dinitrobenzene	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Dimethyl phthalate	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
1,3-Dinitrobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Acenaphthylene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22 4:22:00PM
Prep Batch ID:	1138159	**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	ND		ug/L	01/03/22	23:22	TA	462669
1,2-Dinitrobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
3-Nitroaniline	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Acenaphthene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,4-Dinitrophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
4-Nitrophenol	SW8270	1	0.900	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Dibenzofuran	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
2,4-Dinitrotoluene	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,3,5,6-Tetrachlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
2,3,4,6-Tetrachlorophenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Diethylphthalate	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Fluorene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
4-Chlorophenyl phenyl ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
4-Nitroaniline	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
4,6-Dinitro-2-methylphenol	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Diphenylamine	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Azobenzene	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
4-Bromophenyl phenyl ether	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Hexachlorobenzene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Pentachlorophenol	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Phenanthrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Carbazole	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Di-n-butylphthalate	SW8270	1	0.450	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Benzidine	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Benzyl butyl phthalate	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Benz[a]anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
3,3-Dichlorobenzidine	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Chrysene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Bis(2-Ethylhexyl)phthalate	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Di-n-octyl phthalate	SW8270	1	0.180	3.6	ND		ug/L	01/03/22	23:22	TA	462669
Benzo[b]fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Benzo[k]fluoranthene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Benzo[a]pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Indeno[1,2,3-cd]pyrene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Dibenz[a,h]anthracene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669
Benzo[g,h,i]perylene	SW8270	1	0.180	0.54	ND		ug/L	01/03/22	23:22	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	3510_BNASIM	**Prep Batch Date/Time:**	1/3/22	4:22:00PM
Prep Batch ID:	1138159	**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		**47.0**		%	01/03/22	23:22	TA	462669
Phenol-d6 (S)	SW8270		15 - 100		**25.6**		%	01/03/22	23:22	TA	462669
Nitrobenzene-d5 (S)	SW8270		30 - 100		**83.0**		%	01/03/22	23:22	TA	462669
2-Fluorobiphenyl (S)	SW8270		30 - 105		**89.0**		%	01/03/22	23:22	TA	462669
2,4,6-Tribromophenol (S)	SW8270		15 - 125		**107**		%	01/03/22	23:22	TA	462669
p-Terphenyl-d14 (S)	SW8270		30 - 125		**79.3**		%	01/03/22	23:22	TA	462669

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	3510_TPH	**Prep Batch Date/Time:**	1/4/22	10:32:00AM
Prep Batch ID:	1138163	**Prep Analyst:**	AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.037	0.10	ND		mg/L	01/04/22	19:45	SN	462653
TPH as Motor Oil	SW8015B	1	0.11	0.40	ND		mg/L	01/04/22	19:45	SN	462653
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		**92.3**		%	01/04/22	19:45	SN	462653

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003A
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	3510_TPH SG	**Prep Batch Date/Time:**	1/5/22	9:20:00AM
Prep Batch ID:	1138164	**Prep Analyst:**	AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel (SG)	SW8015B	1	0.037	0.10	ND		mg/L	01/06/22	0:11	SN	462632
TPH as Motor Oil (SG)	SW8015B	1	0.11	0.40	ND		mg/L	01/06/22	0:11	SN	462632
			Acceptance Limits								
Pentacosane (S)	SW8015B		40 - 129		**85.8**		%	01/06/22	0:11	SN	462632

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003B
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
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	**10.9**		mg/L	01/04/22	13:26	BJAY	462640

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	5030VOC	**Prep Batch Date/Time:**	1/3/22 10:54:00AM
Prep Batch ID:	1138141	**Prep Analyst:**	JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Chloromethane	SW8260B	1	0.17	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Vinyl Chloride	SW8260B	1	0.21	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Bromomethane	SW8260B	1	0.21	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Chloroethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Trichlorofluoromethane	SW8260B	1	0.19	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,1-Dichloroethene	SW8260B	1	0.14	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Freon 113	SW8260B	1	0.34	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Methylene Chloride	SW8260B	1	0.13	1.0	ND		ug/L	01/03/22	18:25	JZ	462575
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
MTBE	SW8260B	1	0.077	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
tert-Butanol	SW8260B	1	2.9	5.0	ND		ug/L	01/03/22	18:25	JZ	462575
DIPE	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,1-Dichloroethane	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
ETBE	SW8260B	1	0.064	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
2,2-Dichloropropane	SW8260B	1	0.094	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Bromochloromethane	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Chloroform	SW8260B	1	0.12	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Carbon Tetrachloride	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,1-Dichloropropene	SW8260B	1	0.19	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Benzene	SW8260B	1	0.065	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
TAME	SW8260B	1	0.072	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,2-Dichloroethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Trichloroethylene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Dibromomethane	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,2-Dichloropropane	SW8260B	1	0.089	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Bromodichloromethane	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Toluene	SW8260B	1	0.14	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Tetrachloroethylene	SW8260B	1	0.24	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Dibromochloromethane	SW8260B	1	0.18	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,3-Dichloropropane	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,2-Dibromoethane	SW8260B	1	0.079	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Chlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Ethylbenzene	SW8260B	1	0.20	0.50	ND		ug/L	01/03/22	18:25	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	5030VOC	**Prep Batch Date/Time:**	1/3/22 10:54:00AM
Prep Batch ID:	1138141	**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	ND		ug/L	01/03/22	18:25	JZ	462575
m,p-Xylene	SW8260B	1	0.39	1.0	ND		ug/L	01/03/22	18:25	JZ	462575
o-Xylene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Styrene	SW8260B	1	0.11	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Bromoform	SW8260B	1	0.076	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Isopropyl Benzene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
n-Propylbenzene	SW8260B	1	0.30	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
Bromobenzene	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
2-Chlorotoluene	SW8260B	1	0.25	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
4-Chlorotoluene	SW8260B	1	0.22	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
tert-Butylbenzene	SW8260B	1	0.26	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
sec-Butyl Benzene	SW8260B	1	0.30	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
p-Isopropyltoluene	SW8260B	1	0.27	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
n-Butylbenzene	SW8260B	1	0.27	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	01/03/22	18:25	JZ	462575
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0	ND		ug/L	01/03/22	18:25	JZ	462575
Hexachlorobutadiene	SW8260B	1	0.62	2.0	ND		ug/L	01/03/22	18:25	JZ	462575
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0	ND		ug/L	01/03/22	18:25	JZ	462575
Naphthalene	SW8260B	1	1.2	2.0	ND		ug/L	01/03/22	18:25	JZ	462575
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0	ND		ug/L	01/03/22	18:25	JZ	462575
(S) Dibromofluoromethane	SW8260B		61.2 - 131		**103**		%	01/03/22	18:25	JZ	462575
(S) Toluene-d8	SW8260B		75.1 - 127		**96.5**		%	01/03/22	18:25	JZ	462575
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		**97.0**		%	01/03/22	18:25	JZ	462575

Torrent LABORATORY, INC.

SAMPLE RESULTS

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

Date/Time Received: 12/31/21, 2:43 pm
Date Reported: 01/10/22

Client Sample ID:	ERH2311-RHMW12A	**Lab Sample ID:**	2201001-003C
Project Name/Location:	HDOH Red Hill	**Sample Matrix:**	Water
Project Number:	103S518817512		
Date/Time Sampled:	12/29/21 / 14:40		
SDG:			

Prep Method:	5030GRO	**Prep Batch Date/Time:**	1/3/22	10:54:00AM
Prep Batch ID:	1138156	**Prep Analyst:**	JZHAO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50	ND		ug/L	01/03/22	18:25	JZ	462575
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		**88.5**		%	01/03/22	18:25	JZ	462575

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2201001	**Prep Method:**	5030VOC	**Prep Date:**	01/03/22	**Prep Batch:**	1138141
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462575
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.26	0.50	ND	
Chloromethane	0.17	0.50	ND	
Vinyl Chloride	0.21	0.50	ND	
Bromomethane	0.21	0.50	ND	
Chloroethane	0.11	0.50	ND	
Trichlorofluoromethane	0.19	0.50	ND	
1,1-Dichloroethene	0.14	0.50	ND	
Freon 113	0.34	0.50	ND	
Methylene Chloride	0.13	1.0	ND	
trans-1,2-Dichloroethene	0.16	0.50	ND	
MTBE	0.077	0.50	ND	
tert-Butanol	2.9	5.0	ND	
DIPE	0.12	0.50	ND	
1,1-Dichloroethane	0.12	0.50	ND	
ETBE	0.064	0.50	ND	
cis-1,2-Dichloroethene	0.15	0.50	ND	
2,2-Dichloropropane	0.094	0.50	ND	
Bromochloromethane	0.15	0.50	ND	
Chloroform	0.12	0.50	ND	
Carbon Tetrachloride	0.16	0.50	ND	
1,1,1-Trichloroethane	0.16	0.50	ND	
1,1-Dichloropropene	0.19	0.50	ND	
Benzene	0.065	0.50	ND	
TAME	0.072	0.50	ND	
1,2-Dichloroethane	0.11	0.50	ND	
Trichloroethylene	0.15	0.50	ND	
Dibromomethane	0.11	0.50	ND	
1,2-Dichloropropane	0.089	0.50	ND	
Bromodichloromethane	0.076	0.50	ND	
cis-1,3-Dichloropropene	0.078	0.50	ND	
Toluene	0.14	0.50	ND	
Tetrachloroethylene	0.24	0.50	ND	
trans-1,3-Dichloropropene	0.22	0.50	ND	
1,1,2-Trichloroethane	0.076	0.50	ND	
Dibromochloromethane	0.18	0.50	ND	
1,3-Dichloropropane	0.22	0.50	ND	
1,2-Dibromoethane	0.079	0.50	ND	
Chlorobenzene	0.16	0.50	ND	
Ethylbenzene	0.20	0.50	ND	
1,1,1,2-Tetrachloroethane	0.087	0.50	ND	
m,p-Xylene	0.39	1.0	ND	
o-Xylene	0.15	0.50	ND	
Styrene	0.11	0.50	ND	
Bromoform	0.076	0.50	ND	
Isopropyl Benzene	0.22	0.50	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2201001	**Prep Method:**	5030VOC	**Prep Date:**	01/03/22	**Prep Batch:**	1138141
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462575
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
n-Propylbenzene	0.30	0.50	ND	
Bromobenzene	0.15	0.50	ND	
1,1,2,2-Tetrachloroethane	0.079	0.50	ND	
2-Chlorotoluene	0.25	0.50	ND	
1,3,5-Trimethylbenzene	0.24	0.50	ND	
1,2,3-Trichloropropane	0.15	0.50	ND	
4-Chlorotoluene	0.22	0.50	ND	
tert-Butylbenzene	0.26	0.50	ND	
1,2,4-Trimethylbenzene	0.23	0.50	ND	
sec-Butyl Benzene	0.30	0.50	ND	
p-Isopropyltoluene	0.27	0.50	ND	
1,3-Dichlorobenzene	0.17	0.50	ND	
1,4-Dichlorobenzene	0.18	0.50	ND	
n-Butylbenzene	0.27	0.50	0.27	
1,2-Dichlorobenzene	0.16	0.50	ND	
1,2-Dibromo-3-Chloropropane	0.76	2.0	ND	
Hexachlorobutadiene	0.62	2.0	ND	
1,2,4-Trichlorobenzene	0.93	2.0	ND	
Naphthalene	1.2	2.0	ND	
1,2,3-Trichlorobenzene	1.2	2.0	ND	
(S) Dibromofluoromethane			103	
(S) Toluene-d8			97.1	
(S) 4-Bromofluorobenzene			104	

Work Order:	2201001	**Prep Method:**	5030GRO	**Prep Date:**	01/03/22	**Prep Batch:**	1138156
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462575
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	29	50	31	
(S) 4-Bromofluorobenzene			84.8	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2201001	**Prep Method:**	3510_BNASIM	**Prep Date:**	01/03/22	**Prep Batch:**	1138159
Matrix:	Water	**Analytical Method:**	SW8270	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462669
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Pyridine	0.45	3.6	ND	
N-Nitrosdimethylamine	0.45	3.6	ND	
Aniline	0.90	3.6	ND	
Phenol	0.45	3.6	ND	
Bis(2-chloroethyl) ether	0.90	3.6	ND	
2-Chlorophenol	0.45	3.6	ND	
1,3-Dichlorobenzene	0.45	3.6	ND	
1,4-Dichlorobenzene	0.45	3.6	ND	
Benzyl Alcohol	0.90	3.6	ND	
1,2-Dichlorobenzene	0.90	3.6	ND	
2-Methylphenol (o-Cresol)	0.90	3.6	ND	
Bis(2-chloroisopropyl)ether	0.45	3.6	ND	
3-/4-Methylphenol (p-/m-Cresol)	0.45	3.6	ND	
N-nitroso-di-n-propylamine	0.90	3.6	ND	
Hexachloroethane	0.45	3.6	ND	
Nitrobenzene	0.90	18	ND	
Isophorone	0.90	3.6	ND	
2-Nitrophenol	0.45	3.6	ND	
2,4-Dimethylphenol	0.90	3.6	ND	
Benzoic Acid	0.45	3.6	ND	
Bis(2-Chloroethoxy)methane	0.90	3.6	ND	
2,4-Dichlorophenol	0.18	3.6	ND	
1,2,4-Trichlorobenzene	0.45	3.6	ND	
2,6-Dichlorophenol	0.90	3.6	ND	
Naphthalene	0.18	0.54	ND	
4-Chloroaniline	0.18	3.6	ND	
Hexachloro-1,3-butadiene	0.45	18	ND	
4-Chloro-3-methylphenol	0.90	3.6	ND	
2-Methylnaphthalene	0.90	3.6	ND	
1-Methylnaphthalene	0.45	3.6	ND	
Hexachlorocyclopentadiene	0.45	3.6	ND	
2,4,6-Trichlorophenol	0.45	3.6	ND	
2,4,5-Trichlorophenol	0.45	3.6	ND	
2-Chloronaphthalene	0.18	0.54	ND	
2-Nitroaniline	0.90	9.0	ND	
1,4-Dinitrobenzene	0.90	3.6	ND	
Dimethyl phthalate	0.90	3.6	ND	
1,3-Dinitrobenzene	0.45	3.6	ND	
Acenaphthylene	0.18	0.54	ND	
2,6-Dinitrotoluene	0.45	3.6	ND	
1,2-Dinitrobenzene	0.45	3.6	ND	
3-Nitroaniline	0.45	3.6	ND	
Acenaphthene	0.45	3.6	ND	
2,4-Dinitrophenol	0.45	3.6	ND	
4-Nitrophenol	0.90	3.6	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2201001	**Prep Method:**	3510_BNASIM	**Prep Date:**	01/03/22	**Prep Batch:**	1138159
Matrix:	Water	**Analytical Method:**	SW8270	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462669
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dibenzofuran	0.18	0.54	ND	
2,4-Dinitrotoluene	0.18	3.6	ND	
2,3,5,6-Tetrachlorophenol	0.45	3.6	ND	
2,3,4,6-Tetrachlorophenol	0.45	3.6	ND	
Diethylphthalate	0.45	3.6	ND	
Fluorene	0.45	3.6	ND	
4-Chlorophenyl phenyl ether	0.45	3.6	ND	
4-Nitroaniline	0.45	3.6	ND	
4,6-Dinitro-2-methylphenol	0.45	3.6	ND	
Diphenylamine	0.45	3.6	ND	
Azobenzene	0.45	3.6	ND	
4-Bromophenyl phenyl ether	0.45	3.6	ND	
Hexachlorobenzene	0.18	0.54	ND	
Pentachlorophenol	0.18	0.54	ND	
Phenanthrene	0.18	0.54	ND	
Anthracene	0.18	0.54	ND	
Carbazole	0.18	0.54	ND	
Di-n-butylphthalate	0.45	3.6	ND	
Fluoranthene	0.18	0.54	ND	
Benzidine	0.18	0.54	ND	
Pyrene	0.18	0.54	ND	
Benzyl butyl phthalate	0.18	0.54	ND	
Benz[a]anthracene	0.18	0.54	ND	
3,3-Dichlorobenzidine	0.18	0.54	ND	
Chrysene	0.18	0.54	ND	
Bis(2-Ethylhexyl)phthalate	0.18	3.6	ND	
Di-n-octyl phthalate	0.18	3.6	ND	
Benzo[b]fluoranthene	0.18	0.54	ND	
Benzo[k]fluoranthene	0.18	0.54	ND	
Benzo[a]pyrene	0.18	0.54	ND	
Indeno[1,2,3-cd]pyrene	0.18	0.54	ND	
Dibenz[a,h]anthracene	0.18	0.54	ND	
Benzo[g,h,i]perylene	0.18	0.54	ND	
2-Fluorophenol (S)			42.1	
Phenol-d6 (S)			24.2	
Nitrobenzene-d5 (S)			79.0	
2-Fluorobiphenyl (S)			87.7	
2,4,6-Tribromophenol (S)			101	
p-Terphenyl-d14 (S)			93.7	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2201001	**Prep Method:**	3510_TPH	**Prep Date:**	01/04/22	**Prep Batch:**	1138163
Matrix:	Water	**Analytical Method:**	SW8015B	**Analyzed Date:**	1/5/2022	**Analytical Batch:**	462653
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Diesel	0.037	0.10	ND	
TPH as Motor Oil	0.11	0.40	ND	
Pentacosane (S)			75.6	

Work Order:	2201001	**Prep Method:**	3510_TPH SG	**Prep Date:**	01/05/22	**Prep Batch:**	1138164
Matrix:	Water	**Analytical Method:**	SW8015B	**Analyzed Date:**	1/5/2022	**Analytical Batch:**	462632
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Diesel (SG)	0.037	0.10	ND	
TPH as Motor Oil (SG)	0.11	0.40	ND	
Pentacosane (S)			79.4	

Work Order:	2201001	**Prep Method:**	TOC-W-P	**Prep Date:**	01/04/22	**Prep Batch:**	1138204
Matrix:	Water	**Analytical Method:**	A5310B	**Analyzed Date:**	1/4/2022	**Analytical Batch:**	462640
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TOC	0.40	2.0	0.42	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2201001	**Prep Method:**	5030VOC	**Prep Date:**	01/03/22	**Prep Batch:**	1138141
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462575
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.9	105	104	1.08	61.4 - 129	30	
Benzene	0.16	0.50	ND	17.9	119	115	3.34	66.9 - 140	30	
Trichloroethylene	0.15	0.50	ND	17.9	113	111	1.50	69.3 - 144	30	
Toluene	0.14	0.50	ND	17.9	121	120	0.930	76.6 - 123	30	
Chlorobenzene	0.16	0.50	ND	17.9	114	113	0.990	73.9 - 137	30	
(S) Dibromofluoromethane				17.9	113	110		61.2 - 131		
(S) Toluene-d8				17.9	114	116		75.1 - 127		
(S) 4-Bromofluorobenzene				17.9	106	104		64.1 - 120		

Work Order:	2201001	**Prep Method:**	5030GRO	**Prep Date:**	01/03/22	**Prep Batch:**	1138156
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462575
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	29	50	31	238	104	93.8	10.6	52.4 - 127	30	
(S) 4-Bromofluorobenzene				11.9	91.6	96.3		41.5 - 125		

Work Order:	2201001	**Prep Method:**	3510_BNASIM	**Prep Date:**	01/03/22	**Prep Batch:**	1138159
Matrix:	Water	**Analytical Method:**	SW8270	**Analyzed Date:**	1/3/2022	**Analytical Batch:**	462669
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Phenol	0.45	3.6	ND	2.000	25.7	24.9	3.16	15 - 95	30	
2-Chlorophenol	0.45	3.6	ND	2.000	61.5	57.2	7.59	15 - 105	30	
1,4-Dichlorobenzene	0.45	3.6	ND	2.000	67.2	71.5	6.50	35 - 105	30	
N-nitroso-di-n-propylamine	0.90	3.6	ND	2.000	89.9	91.7	1.65	40 - 115	30	
1,2,4-Trichlorobenzene	0.45	3.6	ND	2.000	75.2	79.5	5.83	45 - 110	30	
4-Chloro-3-methylphenol	0.90	3.6	ND	2.000	72.1	68.3	4.98	15 - 110	30	
Acenaphthene	0.18	0.54	ND	2.000	86.7	89.6	3.16	45 - 110	30	
4-Nitrophenol	0.90	3.6	ND	2.000	80.0	75.6	5.79	15 - 140	30	
2,4-Dinitrotoluene	0.18	0.54	ND	2.000	91.6	95.5	4.28	40 - 115	30	
Pentachlorophenol	0.18	0.54	ND	2.000	96.6	104	7.96	15 - 120	30	
Pyrene	0.18	0.54	ND	2.000	97.1	99.4	2.54	45 - 125	30	
2-Fluorophenol (S)				1111	43.7	40.6		15 - 105		
Phenol-d6 (S)				1111	25.0	23.5		15 - 100		
Nitrobenzene-d5 (S)				555.6	87.6	91.5		30 - 100		
2-Fluorobiphenyl (S)				555.6	96.4	98.2		30 - 105		
2,4,6-Tribromophenol (S)				1111	109	110		15 - 125		
p-Terphenyl-d14 (S)				555.6	91.2	91.5		30 - 125		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2201001	**Prep Method:**	3510_TPH	**Prep Date:**	01/04/22	**Prep Batch:**	1138163
Matrix:	Water	**Analytical Method:**	SW8015B	**Analyzed Date:**	1/5/2022	**Analytical Batch:**	462653
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.037	0.10	ND	1.0	95.5	90.0	5.93	52 - 115	30	
Pentacosane (S)				200	115	107		59 - 129		

Work Order:	2201001	**Prep Method:**	3510_TPH SG	**Prep Date:**	01/05/22	**Prep Batch:**	1138164
Matrix:	Water	**Analytical Method:**	SW8015B	**Analyzed Date:**	1/5/2022	**Analytical Batch:**	462632
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel (SG)	0.037	0.10	ND	1.0	66.6	74.1	10.7	42 - 115	30	
TPH as Motor Oil (SG)			ND	200				40 - 129		

Work Order:	2201001	**Prep Method:**	TOC-W-P	**Prep Date:**	01/04/22	**Prep Batch:**	1138204
Matrix:	Water	**Analytical Method:**	A5310B	**Analyzed Date:**	1/4/2022	**Analytical Batch:**	462640
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TOC	0.40	2.0	0.42	10	95.9	96.7	0.831	80 - 120	20	

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg/m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Tetra Tech Inc (HI)

Project Name: HDOH Red Hill

Work Order No.: 2201001

Date and Time Received: 12/31/2021 2:43:00PM

Received By: PS

Physically Logged By: Katherene Evans

Checklist Completed By: Katherene Evans

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes			
Container/Temp Blank temperature in compliance?	Yes	Temperature:	4.0	°C
Water-VOA vials have zero headspace?	Yes			
Water-pH acceptable upon receipt?	N/A			

pH Checked by: na

pH Adjusted by: na

Comments:

Torrent LABORATORY, INC.

Login Summary Report

Client ID: TL5162 Tetra Tech Inc (HI)
Project Name: HDOH Red Hill
Project # : 103S518817512
Report Due Date: 1/10/2022

QC Level: II
TAT Requested: 5+ day:5
Date Received: 12/31/2021
Time Received: 2:43 pm

Comments:

Work Order # : ***2201001***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
2201001-001A	ERH2307-RHMP13 (Zone 5)	12/29/21 10:20	Water	02/12/22			SVOC_W_SIMFull TPHDOSG_W_8015B TPHDO_W_8015B(M)	
2201001-001B	ERH2307-RHMP13 (Zone 5)	12/29/21 10:20	Water	02/12/22			TOC_5310B	
2201001-001C	ERH2307-RHMP13 (Zone 5)	12/29/21 10:20	Water	02/12/22			VOC_W_8260B VOC_W_GRO	
2201001-001D	ERH2307-RHMP13 (Zone 5)	12/29/21 10:20	Water	02/12/22			Sub_RSK-175	Yes
2201001-002A	ERH2309-RHMW16	12/29/21 11:35	Water	02/12/22			SVOC_W_SIMFull TPHDOSG_W_8015B TPHDO_W_8015B(M)	
2201001-002B	ERH2309-RHMW16	12/29/21 11:35	Water	02/12/22			TOC_5310B	
2201001-002C	ERH2309-RHMW16	12/29/21 11:35	Water	02/12/22			VOC_W_8260B VOC_W_GRO	
2201001-002D	ERH2309-RHMW16	12/29/21 11:35	Water	02/12/22			Sub_RSK-175	Yes
2201001-003A	ERH2311-RHMW12A	12/29/21 14:40	Water	02/12/22			SVOC_W_SIMFull TPHDOSG_W_8015B TPHDO_W_8015B(M)	
2201001-003B	ERH2311-RHMW12A	12/29/21 14:40	Water	02/12/22			TOC_5310B	
2201001-003C	ERH2311-RHMW12A	12/29/21 14:40	Water	02/12/22			VOC_W_8260B VOC_W_GRO	
2201001-003D	ERH2311-RHMW12A	12/29/21 14:40	Water	02/12/22			Sub_RSK-175	Yes

Torrent LABORATORY, INC.

CHAIN-OF-CUSTODY RECORD

2201001

TETRA TECH

Client Name/Account #: TetraTech, Inc.

Address: 737 Bishop St., Suite 2340

City/State/Zip: Honolulu, HI 96813

Project Manager: Yvonne Parry

Telephone Number: 808.393.8829 email yvonne.parry@tetratech.com

Sampler Name: (Print) Jason Turban, Anay Schende

Sampler Signature

Report To: Yvonne Parry

Invoice To: Yvonne Parry

Project ID: HDOH Red Hill

Project #: 103S518817512

	Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Multi-incremental Sample	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (VOA; Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass(Yellow Label)	Preservative: None (1-L Amber)	Preservative: Other (one MeOH VOA)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: Analyses pending	TPH-G EPA 8260	TPH-D,O EPA 8015	TPH-sgc EPA 3630/8015	VOCs EPA 8260	SVOC EPA 8270 SIM	TOC EPA9060A	METHANE RSK175M	LEAD SCAVENGER EPA 8011/8260			RUSH TAT (Pre-Schedule)	Standard TAT	SAMPLER	
001	ERH2307 - RHMP13 (Zone 5)	12/29/21	1020	9	X			X		6				3		X							X	X	X	X	X	X	X					X	JT	
002	ERH2309 - RHMW16	12/29/21	1135	9	X			X		6				3		X							X	X	X	X	X	X	X					X	AS	
003	ERH2311 - RHMW12A	12/29/21	1440	9	X			X		6				3		X							X	X	X	X	X	X	X					X	AS	

Special Instructions:

Method of Shipment: FEDEX

Laboratory Comments:

Temperature Upon Receipt: 4°C

VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
Eric Jensen	12/20/2021	1330		12/21	17:45
Relinquished by:	Date	Time	Received by Laboratory:	Date	Time

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