



**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

[www.gtanalytical.com](http://www.gtanalytical.com)

Company: HRF EXPLORATION & PRODUCTION  
Name:  
ClientProj: 13.052  
GTA ProjNo: 120822-6

Site Addr: S. RUST 10C  
Sampled By: MT/KWB - HURON  
Date Rec: 12/8/2022  
Time Rec: 12:25 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	TW-1	12/5/2022	1:34 PM	WATER
2	TW-2	12/5/2022	12:25 PM	WATER
3	TW-3	12/5/2022	1:06 PM	WATER
4	TW-4	12/5/2022	12:45 PM	WATER
5	TW-5	12/5/2022	12:00 PM	WATER
6	TW-6	12/5/2022	1:21 PM	WATER
7	TW-7	12/5/2022	1:45 PM	WATER
8	TW-8	12/5/2022	2:04 PM	WATER
9	TW-9	12/5/2022	1:56 PM	WATER
10	MW-2	12/5/2022	2:24 PM	WATER
11	MW-3	12/5/2022	3:28 PM	WATER
12	MW-4	12/5/2022	3:15 PM	WATER
13	MW-5	12/5/2022	3:05 PM	WATER
14	MW-6	12/5/2022	3:50 PM	WATER
15	MW-7	12/5/2022	2:54 PM	WATER
16	MW-8	12/5/2022	3:37 PM	WATER

ELECTRONIC SIGNATURE REPORT. This is a final report for the following pages of data for the samples specified above. All analysis was performed by the methods stated and all quality control measures required were completed. All quality control information is available upon request.

*Kirk Chase*

Kirk L. Chase/Chemist  
Grand Traverse Analytical  
830 Robinwood Court  
Traverse City, MI 49686  
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SP: 231-590-0291  
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COMPANY: HRF EXPLORATION & PRODUCTION  
PROJECT NO: 13.052  
LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
GTA SAMPLE NO: 1

DATE SAMPLED: 12/5/2022  
TIME SAMPLED: 1:34 PM  
DATE RECEIVED: 12/8/2022  
TIME RECEIVED: 12:25 PM

MI  
SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: TW-1 CHLORIDE EPA 300.0	120	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
LOD = LIMIT OF DETECTION  
s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 2

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 12:25 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: TW-2 CHLORIDE EPA 300.0	310	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 3

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 1:06 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: TW-3	CHLORIDE EPA 300.0	690	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C  
 MI  
 SAMPLED BY: MT/KWB - HURON

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 4  
 DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 12:45 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: TW-4	CHLORIDE EPA 300.0	160	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
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COMPANY: HRF EXPLORATION & PRODUCTION  
PROJECT NO: 13.052  
LOCATION: S. RUST 10C  
MI  
SAMPLED BY: MT/KWB - HURON

GTA PROJECT NO: 120822-6  
GTA SAMPLE NO: 5  
DATE SAMPLED: 12/5/2022  
TIME SAMPLED: 12:00 PM  
DATE RECEIVED: 12/8/2022  
TIME RECEIVED: 12:25 PM

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: TW-5	CHLORIDE EPA 300.0	12	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
LOD = LIMIT OF DETECTION  
s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 6

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 1:21 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: TW-6	CHLORIDE EPA 300.0	270	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 7

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 1:45 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: TW-7	CHLORIDE EPA 300.0	66	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 8  
 DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 2:04 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: TW-8	CHLORIDE EPA 300.0	1,000	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 9

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 1:56 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: TW-9	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 10  
 DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 2:24 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: MW-2	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 11

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 3:28 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: MW-3	CHLORIDE EPA 300.0	79	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
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COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 12  
 DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 3:15 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

SAMPLED BY: MI  
 MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: MW-4	CHLORIDE EPA 300.0	530	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 13

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 3:05 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: MW-5	CHLORIDE EPA 300.0	120	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 14  
 DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 3:50 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: MW-6	CHLORIDE EPA 300.0	280	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C  
 MI  
 SAMPLED BY: MT/KWB - HURON

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 15  
 DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 2:54 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: MW-7	CHLORIDE EPA 300.0	59	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HRF EXPLORATION & PRODUCTION  
 PROJECT NO: 13.052  
 LOCATION: S. RUST 10C

GTA PROJECT NO: 120822-6  
 GTA SAMPLE NO: 16

DATE SAMPLED: 12/5/2022  
 TIME SAMPLED: 3:37 PM  
 DATE RECEIVED: 12/8/2022  
 TIME RECEIVED: 12:25 PM

MI  
 SAMPLED BY: MT/KWB - HURON

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: MW-8	CHLORIDE EPA 300.0	15	10	mg/L (PPM)	KC/TR	12/14/2022	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

**CHAIN OF CUSTODY**

PROJECT NUMBER: 13.052  
 SITE NAME/ADDRESS: S RUSTIOC  
 COMPANY/NAME: HRF Exploration & Production  
 SAMPLED BY: MT # KWB  
 COMPANY: Huron Engineering & Surveying  
 GTA PROJECT #: 120822-6

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS	
1	TW 1	12/5/22	1:34 p	GW	Chloride FC ms/cm 0.87	
2	TW 2	↓	12:25 p	↓	↓	
3	TW 3		1:06 p			1.9
4	TW 4		12:45 p			2.4
5	TW 5		12:00 p			1.0
6	TW 6		1:21 p			0.39
7	TW 7		1:45 p			1.3
8	TW 8		2:04 p			0.63
9	TW 9		1:56 p			3.3
10	MW 2		2:24 p			0.43
11	MW 3		3:28 p			0.49
12	MW 4		3:15 p			0.79
13	MW 5		3:05 p			2.0
14	MW 6		3:50 p			0.95
15	MW 7		2:54 p			1.2
16	MW 8		3:37 p			0.69

Bill & Report Kim.Wallis-Burke@Huronesi.com

RELEASED BY: Amberly Wallis Burke  
 DATE/TIME: [blank]  
 RECEIVED BY: Alpena UPS  
 DATE/TIME: 12/7/22 pm  
 12/8/22 12:25

REQUESTED TAT  STANDARD  1 BUSINESS DAY  2 BUSINESS DAYS  3 BUSINESS DAYS