



**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: IRONWOOD OIL COMPANY  
Name:  
ClientProj: 2001066.60  
GTA ProjNo: 020620-4

Site Addr: HOLIDAY STATION #181  
Sampled By: MARK STOVER/GCES  
Date Rec: 2/6/2020  
Time Rec: 4:35 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1	2/6/2020	10:30 AM	WATER
2	MW-2	2/6/2020	12:35 PM	WATER
3	MW-3S	2/6/2020	1:40 PM	WATER
4	MW-4R	2/6/2020		WATER
5	MW-3D	2/6/2020	1:10 PM	WATER
6	MW-5S	2/6/2020	11:45 AM	WATER
7	MW-5D	2/6/2020	11:15 AM	WATER
8	DUPLICATE	2/6/2020		WATER
9	FIELD BLANK	2/6/2020	2:25 PM	WATER
10	EQUIPMENT BLANK	2/6/2020	7:45 AM	WATER
11	TRIP BLANK	2/6/2020		WATER
12	MW-6	2/6/2020	2:20 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  
Ph: 231-929-0905  
Fx: 231-929-0894  
SP: 231-590-0291  
[kirk@gtanalytical.com](mailto:kirk@gtanalytical.com)



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FAX: 231-929-0894

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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-1

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 1  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 10:30 AM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
 ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION



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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-2

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 2  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 12:35 PM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-3S

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 3  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 1:40 PM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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FAX: 231-929-0894

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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-4R

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 4  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED:  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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 ND = NOT DETECTED, RESULT < LOD  
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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-3D

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 5  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 1:10 PM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-5S

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 6  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 11:45 AM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-5D

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 7  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 11:15 AM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
 ND = NOT DETECTED, RESULT < LOD  
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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: DUPLICATE

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 8  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED:  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
 ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION



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PH: 231-929-0905

FAX: 231-929-0894

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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: FIELD BLANK

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 9  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 2:25 PM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
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 LOD = LIMIT OF DETECTION



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PH: 231-929-0905

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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: EQUIPMENT BLANK

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 10  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 7:45 AM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
 ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION



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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: TRIP BLANK

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 11  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED:  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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 LOD = LIMIT OF DETECTION



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COMPANY: IRONWOOD OIL COMPANY  
 PROJECT NO: 2001066.60  
 LOCATION: HOLIDAY STATION #181  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-6

GTA PROJECT NO: 020620-4  
 GTA SAMPLE NO: 12  
 DATE SAMPLED: 2/6/2020  
 TIME SAMPLED: 2:20 PM  
 DATE RECEIVED: 2/6/2020  
 TIME RECEIVED: 4:35 PM

SAMPLED BY: MARK STOVER/GCES

**EPA 8260B VOLATILE ORGANICS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		2/8/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
 ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION

**CHAIN OF CUSTODY**

PROJECT NUMBER <i>2001066-60</i>	SITE NAME/ADDRESS <i>HOLIDAY STATION #181</i>	COMPANY/NAME <i>IRONWOOD OIL CO.</i>
SAMPLED BY <i>MARK STOVER</i>	COMPANY <i>G.C.E.S.</i>	GTA PROJECT # <i>020620-4</i>

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS	
1	MW-1	2-6-20	10:30	GW	BTEX, MTBE, 1,2,4-TMB,	
2	MW-2	↓	12:35	↓	1,3,5 TMB	
3	MW-3S		13:40		NAPHTHALENE	
4	MW-4R		1		2-METHYLNAP.	
5	MW-3d		13:10		↓	
6	MW-5S		11:45			
7	MW-5d		11:15			
8	DUPLICATE		—			
9	FIELD BLANK		14:25			PW
10	EQUIP. BLANK		0745			↓
11	TRIP BLANK		—			↓
12	MW-6	2-6-20	14:20	GW		

**BILL TO:** *G.C.E.S.*

**REPORT TO:**  
*DON CONWAY*

<b>RELEASED BY</b> <i>[Signature]</i>	<b>DATE/TIME</b> <i>2-6-20</i>	<b>RECEIVED BY</b> <i>[Signature]</i>	<b>DATE/TIME</b> <i>2/6/20 4:35</i> <i>rec 4.0°C</i>
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**REQUESTED TAT**  STANDARD  1 BUSINESS DAY  2 BUSINESS DAYS  3 BUSINESS DAYS