



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: IRONWOOD OIL COMPANY
Name:
ClientProj: 2001066.60
GTA ProjNo: 090619-3

Site Addr: HOLIDAY STATION #181
Sampled By: MARK STOVER/GCES
Date Rec: 9/6/2019
Time Rec: 12:30 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1	9/5/2019	11:20 AM	WATER
2	MW-2	9/5/2019	2:30 PM	WATER
3	MW-3S	9/5/2019	2:00 PM	WATER
4	MW-3D	9/5/2019	1:35 PM	WATER
5	MW-4R	9/5/2019	3:35 PM	WATER
6	MW-5S	9/5/2019	12:50 PM	WATER
7	MW-5D	9/5/2019	12:10 PM	WATER
8	MW-6	9/5/2019	3:00 PM	WATER
9	DUPLICATE	9/5/2019		WATER
10	FIELD BLANK	9/5/2019	2:15 PM	WATER
11	EQUIPMENT BLANK	9/5/2019	9:15 AM	WATER
12	TRIP BLANK	9/5/2019		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 L 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



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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: 090619-3
GTA SAMPLE NO: 1
DATE SAMPLED: 9/5/2019
TIME SAMPLED: 11:20 AM
DATE RECEIVED: 9/6/2019
TIME RECEIVED: 12:30 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		9/9/2019	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: 090619-3
 GTA SAMPLE NO: 2
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 2:30 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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-3S

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 3
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 2:00 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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-3D

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 4
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 1:35 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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-4R

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 5
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 3:35 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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: 090619-3
 GTA SAMPLE NO: 6
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 12:50 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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-5D

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 7
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 12:10 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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-6

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 8
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 3:00 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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: DUPLICATE

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 9
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED:
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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: FIELD BLANK

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 10
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 2:15 PM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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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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: EQUIPMENT BLANK

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 11
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED: 9:15 AM
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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

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

GTA PROJECT NO: 090619-3
 GTA SAMPLE NO: 12
 DATE SAMPLED: 9/5/2019
 TIME SAMPLED:
 DATE RECEIVED: 9/6/2019
 TIME RECEIVED: 12:30 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		9/9/2019	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

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>090619-3</i>

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	<i>MW-1</i>	<i>9-5-19</i>	<i>11:20</i>	<i>GW</i>	<i>BTEX, MTBE, 1,2,4-TMB</i>
2	<i>MW-2</i>		<i>14:30</i>		<i>1,3,5 TMB</i>
3	<i>MW-3S</i>		<i>14:00</i>		<i>NAPTHALENE</i>
4	<i>MW-3d</i>		<i>13:35</i>		<i>2-METHYLNAP.</i>
5	<i>MW-4R</i>		<i>15:35</i>		
6	<i>MW-5S</i>		<i>12:50</i>		
7	<i>MW-5d</i>		<i>12:10</i>		
8	<i>MW-6</i>		<i>15:00</i>		
9	<i>DUPLICATE</i>		<i>—</i>	<i>↓</i>	
10	<i>FIELD BLANK</i>		<i>14:15</i>	<i>PW</i>	
11	<i>EQUIP. BLANK</i>		<i>0915</i>	<i>↓</i>	
12	<i>TRIP BLANK</i>		<i>—</i>	<i>↓</i>	
					<i>Rec 5.7°C</i>

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

REPORT TO:
DON CONWAY

RELEASED BY	DATE/TIME	RECEIVED BY	DATE/TIME
<i>[Signature]</i>	<i>9-5-19</i>	<i>G.C.E.S. FRIDGE</i>	<i>9-5-19 16:45</i>
<i>[Signature]</i>	<i>9-6-19</i>	<i>[Signature]</i>	<i>9-6-19 12:30P</i>

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