

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: MACKINAC ENVIRONMENTAL
Name:
ClientProj: M93-237
GTA ProjNo: 050219-4

Site Addr: PARADISE

Sampled By: MJR/MET

Date Rec: 5/2/2019

Time Rec: 12:15 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-9	4/25/2019		WATER
2	VW-1	4/25/2019		WATER
3	MW-10	4/25/2019		WATER
4	VW-2	4/25/2019		WATER
5	MW-11	4/25/2019		WATER
6	MW-3	4/25/2019		WATER
7	MW-5	4/25/2019		WATER
8	VW-3	4/25/2019		WATER
9	MW-6	4/25/2019		WATER
10	MW-7	4/25/2019		WATER
11	MW-2	4/25/2019		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
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COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-9

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 1
DATE SAMPLED: 4/25/2019
TIME SAMPLED:
DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM
SAMPLED BY: MJR/MET

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	2.5	1.0	ug/L (PPB)	MR		5/3/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	1.1	1.0					
Xylene(Total)	14	3.0					
1,2,4-Trimethylbenzene	240	1.0					
1,3,5-Trimethylbenzene	34	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: MACKINAC ENVIRONMENTAL

PROJECT NO: M93-237
LOCATION: PARADISE

MI

SAMPLE MATRIX: WATER
SAMPLE ID: VW-1GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 2DATE SAMPLED: 4/25/2019
TIME SAMPLED:
DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLED BY: MJR/MET

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		5/3/2019	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:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	050219-4
PROJECT NO:	M93-237	GTA SAMPLE NO:	3
LOCATION:	PARADISE	DATE SAMPLED:	4/25/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	5/2/2019
		TIME RECEIVED:	12:15 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-10	SAMPLED BY:	MJR/MET

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	4.1	1.0	ug/L (PPB)	MR		5/3/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	6.9	1.0					
1,3,5-Trimethylbenzene	1.9	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE
MI
SAMPLE MATRIX: WATER
SAMPLE ID: VW-2

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 4
DATE SAMPLED: 4/25/2019
TIME SAMPLED:
DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM
SAMPLED BY: MJR/MET

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		5/3/2019	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: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-11

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 5
DATE SAMPLED: 4/25/2019
TIME SAMPLED:
DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM
SAMPLED BY: MJR/MET

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		5/3/2019	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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LOD = LIMIT OF DETECTION

COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	050219-4
PROJECT NO:	M93-237	GTA SAMPLE NO:	6
LOCATION:	PARADISE	DATE SAMPLED:	4/25/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	5/2/2019
		TIME RECEIVED:	12:15 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-3	SAMPLED BY:	MJR/MET

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		5/3/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	10	1.0					
1,3,5-Trimethylbenzene	27	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M93-237
LOCATION: PARADISE

MI

SAMPLE MATRIX: WATER
SAMPLE ID: MW-5GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 7DATE SAMPLED: 4/25/2019
TIME SAMPLED:
DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLED BY: MJR/MET

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		5/3/2019	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: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE
MI
SAMPLE MATRIX: WATER
SAMPLE ID: VW-3

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 8
DATE SAMPLED: 4/25/2019
TIME SAMPLED:
DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM
SAMPLED BY: MJR/MET

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		5/3/2019	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:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	050219-4
PROJECT NO:	M93-237	GTA SAMPLE NO:	9
LOCATION:	PARADISE	DATE SAMPLED:	4/25/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	5/2/2019
		TIME RECEIVED:	12:15 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-6	SAMPLED BY:	MJR/MET

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		5/3/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	18	1.0					
1,3,5-Trimethylbenzene	80	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-7

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 10
DATE SAMPLED: 4/25/2019
TIME SAMPLED:
DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM
SAMPLED BY: MJR/MET

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		5/3/2019	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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LOD = LIMIT OF DETECTION

COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	050219-4
PROJECT NO:	M93-237	GTA SAMPLE NO:	11
LOCATION:	PARADISE	DATE SAMPLED:	4/25/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	5/2/2019
		TIME RECEIVED:	12:15 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-2	SAMPLED BY:	MJR/MET

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		5/3/2019	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: MACKINAC ENVIRONMENTAL

PROJECT NO: M93-237
LOCATION: PARADISE

SAMPLED BY: MI
MJR/MET

SAMPLE MATRIX: WATER
SAMPLE ID: MW-9

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 1

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/5/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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LOD = LIMIT OF DETECTION.

COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M93-237
LOCATION: PARADISE

SAMPLED BY: MI
MJR/MET

SAMPLE MATRIX: WATER
SAMPLE ID: VW-1

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 2

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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LOD = LIMIT OF DETECTION.

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 3

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: MW-10

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 4

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: VW-2

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 5

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: MW-11

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 6

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: MW-3

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 7

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: MW-5

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M93-237
LOCATION: PARADISE

SAMPLED BY: MI
MJR/MET

SAMPLE MATRIX: WATER
SAMPLE ID: VW-3

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 8

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 9

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: MW-6

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 10

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: MW-7

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M93-237
LOCATION: PARADISE

GTA PROJECT NO: 050219-4
GTA SAMPLE NO: 11

DATE SAMPLED: 4/25/2019
TIME SAMPLED:

SAMPLED BY: MI
MJR/MET

DATE RECEIVED: 5/2/2019
TIME RECEIVED: 12:15 PM

SAMPLE MATRIX: WATER
SAMPLE ID: MW-2

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	5/2/2019	5/6/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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

CHAIN OF CUSTODY

PROJECT NUMBER M43-237	SITE NAME/ADDRESS Paradise	COMPANY/NAME
SAMPLED BY MJR	COMPANY MET	GTA PROJECT # 050219-4

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW-9	4-25-19		GW	ULG & PNA
2	VW-1				
3	MW-10				
4	VW-2				
5	MW-11				
6	MW-3				
7	MW-5				
8	VW-3				
9	MW-6				
10	MW-7				
11	MW-2				
					Shipped on ice

BILL TO:

REPORT TO:

RELEASED BY [Signature]	DATE/TIME 5-1-2019	RECEIVED BY [Signature]	DATE/TIME 5/2/19 12:15
			REC

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