Grand Traverse Analytical, LLC

INDEPENDENT TESTING LAB
830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686
PH: 231-929-0905 FAX: 231-929-0894
www.gtanalytical.com

Company:	MACKINAC ENVIRONMENTAL	Site Addr:	BECKETT BUILDING
Name:			
ClientProj:	M19-3180		
		Sampled By:	BRAD JEFFERS/MET
GTA ProjNo:	010220-1	Date Rec:	1/2/2020
		Time Rec:	10:45 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	B-1	12/26/2020		WATER
2	B-2	12/30/2019		WATER
3	B-3	12/30/2019		WATER
4	B-3 @ 5-6'	12/26/2019		SOIL
5	B-1 @ 2-3'	12/26/2019		SOIL
6	B-2 @ 2-3'	12/26/2019		SOIL
7	B-3 @ 2-4'	12/26/2019		SOIL

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
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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	1
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/26/2020
		TIME SAMPLED:	
		DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	B-1		

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB) **Analyst=** MR **Date** **Date Completed=** 1/2/2020 **Prep** EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	ND	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROBENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROBENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROBENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROBENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROBENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.
LOD = LIMIT OF DETECTION.

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	2
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/30/2019
		TIME SAMPLED:	
		DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	B-2		

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB) **Analyst=** MR **Date** **Date Completed=** 1/2/2020 **Prep** EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	ND	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROBENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROBENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROBENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROBENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROBENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.
LOD = LIMIT OF DETECTION.

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	3
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/30/2019
		TIME SAMPLED:	
		DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	B-3		

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB) **Analyst=** MR **Date** **Date Completed=** 1/2/2020 **Prep** EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	ND	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROBENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROBENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROBENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROBENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROBENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.
LOD = LIMIT OF DETECTION.

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	4
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/26/2019
		TIME SAMPLED:	
		DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	SOIL		
SAMPLE ID:	B-3 @ 5-6'		

EPA 8260B VOLATILE ORGANICS

Units= ug/Kg (PPB) **Analyst=** MR **Date** 12/26/2019 **Date Completed=** 1/2/2020 **Prep** EPA 5035A

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	1,000	cis-1,3-DICHLOROPROPENE	ND	50
ALLYL CHLORIDE	ND	250	trans-1,3-DICHLOROPROPENE	ND	50
BENZENE	ND	50	DIETHYL ETHER	ND	200
BROMOBENZENE	ND	100	ETHYLBENZENE	ND	50
BROMOCHLOROMETHANE	ND	100	ETHYL METHACRYLATE	ND	250
BROMODICHLOROMETHANE	ND	50	HEXACHLOROBUTADIENE	ND	50
BROMOFORM	ND	100	HEXACHLOROETHANE	ND	250
BROMOMETHANE	ND	200	2-HEXANONE	ND	2,500
n-BUTYLBENZENE	ND	50	IDOMETHANE	ND	250
s-BUTYLBENZENE	ND	50	ISOPROPYLBENZENE	ND	50
t-BUTYLBENZENE	ND	50	ISOPROPYLTOLUENE	ND	50
CARBON DISULFIDE	ND	250	METHYL ACRYLATE	ND	250
CARBON TETRACHLORIDE	ND	50	METHYL ETHYL KETONE	ND	750
CHLOROBENZENE	ND	50	METHYL-t-BUTYL ETHER	ND	250
1-CHLOROBUTANE	ND	100	METHYLENE CHLORIDE	ND	100
CHLOROFORM	ND	50	METHYL METHACRYLATE	ND	250
CHLOROETHANE	ND	250	MIBK	ND	2,500
CHLOROMETHANE	ND	250	2-METHYLNAPHTHALENE	ND	250
2-CHLOROTOLUENE	ND	50	NAPHTHALENE	ND	250
4-CHLOROTOLUENE	ND	50	PENTACHLOROETHANE	ND	250
DIBROMOCHLOROMETHANE	ND	100	n-PROPYLBENZENE	ND	50
DIBROMOMETHANE	ND	250	STYRENE	ND	50
1,2-DIBROMOETHANE	ND	20	1,1,1,2-TETRACHLOROETHANE	ND	100
1,2-DICHLOROBENZENE	ND	50	1,1,2,2-TETRACHLOROETHANE	ND	50
1,3-DICHLOROBENZENE	ND	50	TETRACHLOROETHENE	ND	50
1,4-DICHLOROBENZENE	ND	50	TOLUENE	ND	50
t-1,4-DICHLORO-2-BUTENE	ND	50	1,2,3-TRICHLOROBENZENE	ND	50
DICHLORODIFLUOROMETHANE	ND	250	1,2,4-TRICHLOROBENZENE	ND	250
1,1-DICHLOROETHANE	ND	50	1,1,1-TRICHLOROETHANE	ND	50
1,2-DICHLOROETHANE	ND	50	1,1,2-TRICHLOROETHANE	ND	50
1,1-DICHLOROETHENE	ND	50	TRICHLOROETHENE	ND	50
cis-1,2-DICHLOROETHENE	ND	50	TRICHLORFLUOROMETHANE	ND	100
trans-1,2-DICHLOROETHENE	ND	50	1,2,3-TRICHLOROPROPANE	ND	100
1,2-DICHLOROPROPANE	ND	50	1,2,4-TRIMETHYLBENZENE	ND	50
1,3-DICHLOROPROPANE	ND	50	1,3,5-TRIMETHYLBENZENE	ND	50
2,2-DICHLOROPROPANE	ND	50	VINYL CHLORIDE	ND	40
1,1-DICHLOROPROPENE	ND	50	XYLENE (TOTAL)	ND	150

ND = NOT DETECTED, RESULT IS <LOD.
LOD = LIMIT OF DETECTION.

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	1
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/26/2020
		TIME SAMPLED:	
	MI	DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	B-1		

PNA EPA 8270D (SIM)

Analysis	Concentration	LOD	Units	Analyst	Date Extracted	Date Complete	Prep Method
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	1/2/2020	1/7/2020	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.

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	2
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/30/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	B-2		

PNA EPA 8270D (SIM)

Analysis	Concentration	LOD	Units	Analyst	Date Extracted	Date Complete	Prep Method
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	1/2/2020	1/7/2020	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.

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	3
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/30/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	B-3		

PNA EPA 8270D (SIM)

Analysis	Concentration	LOD	Units	Analyst	Date Extracted	Date Complete	Prep Method
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	1/2/2020	1/7/2020	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.

Grand Traverse Analytical, LLC
INDEPENDENT TESTING LAB
830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686
PH: 231-929-0905 FAX: 231-929-0894
www.gtanalytical.com

COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	4
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/26/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	1/2/2020
SAMPLED BY:	BRAD JEFFERS/MET	TIME RECEIVED:	10:45 AM
SAMPLE MATRIX:	SOIL		
SAMPLE ID:	B-3 @ 5-6'		

PNA EPA 8270D (SIM)

Analysis	Concentration	LOD	Units	Analyst	Date Extracted	Date Complete	Prep Method
Acenaphthene	ND	330	ug/Kg (PPB)	KC/TR	1/3/2020	1/7/2020	EPA 3550B
Acenaphthylene	ND	330					
Anthracene	ND	330					
Benzo(a)anthracene	ND	330					
Benzo(b)fluoranthene	ND	330					
Benzo(k)fluoranthene	ND	330					
Benzo(a)pyrene	ND	330					
Benzo(ghi)perylene	ND	330					
2-Chloronaphthalene	ND	330					
Chrysene	ND	330					
Dibenz(ah)anthracene	ND	330					
Fluoranthene	ND	330					
Fluorene	ND	330					
Indeno(123-cd)pyrene	ND	330					
Phenanthrene	ND	330					
Pyrene	ND	330					

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	5
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/26/2019
		TIME SAMPLED:	
		DATE RECEIVED:	1/2/2020
	MI	TIME RECEIVED:	10:45 AM
SAMPLED BY:	BRAD JEFFERS/MET	SAMPLE MATRIX:	SOIL

SAMPLE ID: **B-1 @ 2-3'**

METALS

Analysis	Concentration	LOD	Units	Analyst	Date Completed	Digestion Method
ARSENIC TOTAL EPA 6020A	1.1	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	70	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	ND	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	7.0	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
LEAD TOTAL EPA 6020A	62	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.18	0.023	mg/Kg (PPM)	MR	1/9/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	0.75	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA3050B
SILVER TOTAL EPA 6020A	ND	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA3050B

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DISS = DISSOLVED

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	6
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/26/2019
		TIME SAMPLED:	
		DATE RECEIVED:	1/2/2020
	MI	TIME RECEIVED:	10:45 AM
SAMPLED BY:	BRAD JEFFERS/MET	SAMPLE MATRIX:	SOIL

SAMPLE ID: **B-2 @ 2-3'**

METALS

Analysis	Concentration	LOD	Units	Analyst	Date Completed	Digestion Method
ARSENIC TOTAL EPA 6020A	1.2	0.35	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	38	0.35	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	ND	0.35	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	5.6	0.35	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
LEAD TOTAL EPA 6020A	28	0.35	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.11	0.023	mg/Kg (PPM)	MR	1/9/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	0.57	0.35	mg/Kg (PPM)	MR	1/8/2020	EPA3050B
SILVER TOTAL EPA 6020A	ND	0.35	mg/Kg (PPM)	MR	1/8/2020	EPA3050B

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	010220-1
		GTA SAMPLE NO:	7
PROJECT NO:	M19-3180		
LOCATION:	BECKETT BUILDING	DATE SAMPLED:	12/26/2019
		TIME SAMPLED:	
		DATE RECEIVED:	1/2/2020
	MI	TIME RECEIVED:	10:45 AM
SAMPLED BY:	BRAD JEFFERS/MET	SAMPLE MATRIX:	SOIL

SAMPLE ID: **B-3 @ 2-4'**

METALS

Analysis	Concentration	LOD	Units	Analyst	Date Completed	Digestion Method
ARSENIC TOTAL EPA 6020A	7.5	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	190	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	ND	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	13	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
LEAD TOTAL EPA 6020A	520	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.42	0.024	mg/Kg (PPM)	MR	1/9/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	ND	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA3050B
SILVER TOTAL EPA 6020A	ND	0.36	mg/Kg (PPM)	MR	1/8/2020	EPA3050B

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COMPANY: MACKINAC ENVIRONMENTAL
NAME:
PROJECT NO: M19-3180

LOCATION: BECKETT BUILDING
MI

GTA PROJECT NO: 010220-1
SAMPLED BY: BRAD JEFFERS/MET

DATE SAMPLED: 12/26/2019
TIME SAMPLED:

SAMPLE MATRIX: SOIL

DATE RECEIVED: 1/2/2020
TIME RECEIVED: 10:45 AM

MOISTURE

No: Analysis	Concentration	LOD	Units	Analyst	Date Complete
SAMPLE ID: B-3 @ 5-6'					
% MOISTURE EPA 3550C	32	0.050	% OF SAMPLE	AS	1/2/2020
SAMPLE ID: B-1 @ 2-3'					
% MOISTURE EPA 3550C	8.7	0.050	% OF SAMPLE	AS	1/2/2020
SAMPLE ID: B-2 @ 2-3'					
% MOISTURE EPA 3550C	9.0	0.050	% OF SAMPLE	AS	1/2/2020
SAMPLE ID: B-3 @ 2-4'					
% MOISTURE EPA 3550C	24	0.050	% OF SAMPLE	AS	1/2/2020

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CHAIN OF CUSTODY

PROJECT NUMBER	SITE NAME/ADDRESS	COMPANY/NAME
M19-3180	Beckett Building	

SAMPLED BY	COMPANY	GTA PROJECT #
Brad Jeffers	MET	010220-1

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	B-1	12/26/19		GW	VOC, PNA
2	B-2	12/30/19		GW	
3	B-3	12/30/19		GW	
4	B-3 @ 5-6'	12/26/19		soil	
5	B-1 @ 2-3'				RCRA Metals
6	B-2 @ 2-3'				
7	B-3 @ 2-4'				

BILL TO: MET
PO Box 485
St. Ignace, MI 49781

REPORT TO: metesault.com

RELEASED BY	DATE/TIME	RECEIVED BY	DATE/TIME
Brad Jeffers	12/30/19 @ 12:00	A. Clark	1/2/20 10:45
		rec 0.5°C on ice	

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