

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: BCOC

Name:

ClientProj: 4529

GTA ProjNo: 121420-4

Site Addr: O'ROURKE

Sampled By: JR/DH - COMPLIANCE

Date Rec: 12/14/2020

Time Rec: 10:25 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	GP-1 8'	12/11/2020	12:00 PM	SOIL
2	GP-2 4'	12/11/2020	12:31 PM	SOIL
3	GP-3 14'	12/11/2020	1:42 PM	SOIL
4	GP-1	12/11/2020	12:50 PM	WATER
5	GP-2	12/11/2020	1:05 PM	WATER
6	GP-3	12/11/2020	2:15 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
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PH: 231-929-0905

FAX: 231-929-0894

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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE
MI
SAMPLED BY: JR/DH - COMPLIANCE
SAMPLE SOIL

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 1
DATE SAMPLED: 12/11/2020
TIME SAMPLED: 12:00 PM
DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM
SAMPLE ID: GP-1 8'

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	12/11/2020	12/15/2020	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Methyl-t-Butyl Ether	ND	250					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					
1,2-Dibromoethane	ND	20					
1,2-Dichloroethane	ND	50					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED

LOD = LIMIT OF DETECTION

COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE
MI
SAMPLED BY: JR/DH - COMPLIANCE
SAMPLE SOIL

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 2
DATE SAMPLED: 12/11/2020
TIME SAMPLED: 12:31 PM
DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM
SAMPLE ID: GP-2 4'

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	12/11/2020	12/15/2020	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Methyl-t-Butyl Ether	ND	250					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					
1,2-Dibromoethane	ND	20					
1,2-Dichloroethane	ND	50					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE
MI
SAMPLED BY: JR/DH - COMPLIANCE
SAMPLE SOIL

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 3
DATE SAMPLED: 12/11/2020
TIME SAMPLED: 1:42 PM
DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM
SAMPLE ID: GP-3 14'

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	12/11/2020	12/15/2020	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Methyl-t-Butyl Ether	ND	250					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					
1,2-Dibromoethane	ND	20					
1,2-Dichloroethane	ND	50					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE
MI
SAMPLED BY: JR/DH - COMPLIANCE
SAMPLE WATER

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 4
DATE SAMPLED: 12/11/2020
TIME SAMPLED: 12:50 PM
DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM
SAMPLE ID: GP-1

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		12/15/2020	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					
1,2-Dibromoethane	ND	1.0					
1,2-Dichloroethane	ND	1.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE
MI
SAMPLED BY: JR/DH - COMPLIANCE
SAMPLE WATER

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 5
DATE SAMPLED: 12/11/2020
TIME SAMPLED: 1:05 PM
DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM
SAMPLE ID: GP-2

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		12/15/2020	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					
1,2-Dibromoethane	ND	1.0					
1,2-Dichloroethane	ND	1.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE
MI
SAMPLED BY: JR/DH - COMPLIANCE
SAMPLE WATER

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 6
DATE SAMPLED: 12/11/2020
TIME SAMPLED: 2:15 PM
DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM
SAMPLE ID: GP-3

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		12/15/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	2.8	1.0					
1,3,5-Trimethylbenzene	2.2	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					
1,2-Dibromoethane	ND	1.0					
1,2-Dichloroethane	ND	1.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE

SAMPLED BY: MI
JR/DH - COMPLIANCE

SAMPLE MATRIX: SOIL
SAMPLE ID: GP-1 8'

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 1

DATE SAMPLED: 12/11/2020
TIME SAMPLED: 12:00 PM

DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM

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>Completed</u>	<u>Prep Method</u>
Acenaphthene	ND	330	ug/Kg (PPB)	KC/TR	12/15/2020	12/18/2020	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					
2-Methylnaphthalene	ND	330					
Naphthalene	ND	330					
Phenanthrene	ND	330					
Pyrene	ND	330					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED

LOD = LIMIT OF DETECTION

COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE

SAMPLED BY: MI
JR/DH - COMPLIANCE

SAMPLE MATRIX: SOIL
SAMPLE ID: GP-2 4'

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 2

DATE SAMPLED: 12/11/2020
TIME SAMPLED: 12:31 PM

DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM

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>Completed</u>	<u>Prep Method</u>
Acenaphthene	ND	330	ug/Kg (PPB)	KC/TR	12/15/2020	12/18/2020	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					
2-Methylnaphthalene	ND	330					
Naphthalene	ND	330					
Phenanthrene	ND	330					
Pyrene	ND	330					

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

COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE

SAMPLED BY: MI
JR/DH - COMPLIANCE

SAMPLE MATRIX: SOIL
SAMPLE ID: GP-3 14'

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 3

DATE SAMPLED: 12/11/2020
TIME SAMPLED: 1:42 PM

DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM

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>Completed</u>	<u>Prep Method</u>
Acenaphthene	ND	330	ug/Kg (PPB)	KC/TR	12/15/2020	12/18/2020	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					
2-Methylnaphthalene	ND	330					
Naphthalene	ND	330					
Phenanthrene	ND	330					
Pyrene	ND	330					

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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE

SAMPLED BY: MI
JR/DH - COMPLIANCE

SAMPLE MATRIX: WATER
SAMPLE ID: GP-1

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 4

DATE SAMPLED: 12/11/2020
TIME SAMPLED: 12:50 PM

DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM

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>Completed</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	12/15/2020	12/17/2020	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					
2-Methylnaphthalene	ND	5.0					
Naphthalene	ND	5.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED

LOD = LIMIT OF DETECTION

COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE

SAMPLED BY: MI
JR/DH - COMPLIANCE

SAMPLE MATRIX: WATER
SAMPLE ID: GP-2

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 5

DATE SAMPLED: 12/11/2020
TIME SAMPLED: 1:05 PM

DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM

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>Completed</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	12/15/2020	12/17/2020	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	3.8	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	3.8	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	7.0	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
2-Methylnaphthalene	ND	5.0					
Naphthalene	ND	5.0					
Phenanthrene	5.8	2.0					
Pyrene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
ND = NOT DETECTED
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COMPANY: BCOC
PROJECT NO: 4529
LOCATION: O'ROURKE

SAMPLED BY: MI
JR/DH - COMPLIANCE

SAMPLE MATRIX: WATER
SAMPLE ID: GP-3

GTA PROJECT NO: 121420-4
GTA SAMPLE NO: 6

DATE SAMPLED: 12/11/2020
TIME SAMPLED: 2:15 PM

DATE RECEIVED: 12/14/2020
TIME RECEIVED: 10:25 AM

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>Completed</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	12/15/2020	12/17/2020	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					
2-Methylnaphthalene	ND	5.0					
Naphthalene	ND	5.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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COMPANY: BCOC

NAME:

PROJECT NO: 4529

LOCATION: O'ROURKE

MI

GTA PROJECT NO: 121420-4

SAMPLED BY: JR/DH - COMPLIANCE

DATE SAMPLED: 12/11/2020

TIME SAMPLED: 12:00 PM

SAMPLE SOIL

DATE RECEIVED: 12/14/2020

TIME RECEIVED: 10:25 AM

MOISTURE

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
SAMPLE ID: GP-1 8'	% MOISTURE EPA 3550C	4.5	0.050	% OF SAMPLE	AS	12/14/2020
SAMPLE ID: GP-2 4'	% MOISTURE EPA 3550C	7.3	0.050	% OF SAMPLE	AS	12/14/2020
SAMPLE ID: GP-3 14'	% MOISTURE EPA 3550C	5.7	0.050	% OF SAMPLE	AS	12/14/2020

CHAIN OF CUSTODY

PROJECT NUMBER 4529	SITE NAME/ADDRESS O'Rourke's	COMPANY/NAME BLOC
SAMPLED BY Jim Rossi/Doug Hull	COMPANY Compliance	GTA PROJECT # 121420-4

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	GP-1 8'	12-11-20	12:00	Soil	Leaded Gasoline VOCs, PNAAs
2	GP-2 4'	12-11-20	12:31	Soil	" " " "
3	GP-3 14'	12-11-20	13:42	Soil	" " " "
4	GP-1	12-11-20	12:50	GW	" " " "
5	GP-2	12-11-20	13:05	GW	" " " "
6	GP-3	12-11-20	14:15	GW	" " " "

BILL TO:

REPORT TO:

10.3^{oc}
on ice

RELEASED BY Jim Rossi	DATE/TIME 12-14-20 10:25	RECEIVED BY Lisa Violante	DATE/TIME 12/14/2020 10:25

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