



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: M19-3097
GTA ProjNo: 072419-4

Site Addr: USCG STRAITS DRUM RECOVERY

Sampled By: MJR/MET
Date Rec: 7/24/2019
Time Rec: 10:45 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	DS-1	7/23/2019	10:30 AM	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

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COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M19-3097
LOCATION: USCG STRAITS DRUM RECOVERY

GTA PROJECT NO: 072419-4
GTA SAMPLE NO: 1

DATE SAMPLED: 7/23/2019
TIME SAMPLED: 10:30 AM
DATE RECEIVED: 7/24/2019
TIME RECEIVED: 10:45 AM

SAMPLED BY: MJR/MET

SAMPLE MATRIX: WATER

SAMPLE ID: DS-1

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 7/25/2019

Prep

EPA 5030B

Analyte	Concentration	LOD
ACETONE	ND	25
ALLYL CHLORIDE	ND	10
BENZENE	ND	1.0
BROMOBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0
BROMODICHLOROMETHANE	ND	1.0
BROMOFORM	ND	1.0
BROMOMETHANE	ND	1.0
n-BUTYLBENZENE	ND	1.0
s-BUTYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0
CARBON DISULFIDE	ND	5.0
CARBON TETRACHLORIDE	ND	1.0
CHLOROBEZENE	ND	1.0
1-CHLOROBUTANE	ND	1.0
CHLOROFORM	ND	1.0
CHLOROETHANE	ND	1.0
CHLOROMETHANE	ND	1.0
2-CHLOROTOLUENE	ND	1.0
4-CHLOROTOLUENE	ND	1.0
DIBROMOCHLOROMETHANE	ND	1.0
DIBROMOMETHANE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0
1,2-DICHLOROBENZENE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0
1,4-DICHLOROBENZENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10
DICHLORODIFLUOROMETHANE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0

Analyte	Concentration	LOD
cis-1,3-DICHLOROPROPENE	ND	1.0
trans-1,3-DICHLOROPROPENE	ND	1.0
DIETHYL ETHER	ND	10
ETHYLBENZENE	ND	1.0
ETHYL METHACRYLATE	ND	10
HEXACHLOROBUTADIENE	ND	1.0
HEXACHLOROETHANE	ND	10
2-HEXANONE	ND	10
IDOMETHANE	ND	10
ISOPROPYLBENZENE	ND	1.0
ISOPROPYLTOLUENE	ND	1.0
METHYL ACRYLATE	ND	10
METHYL ETHYL KETONE	ND	10
METHYL-t-BUTYL ETHER	ND	5.0
METHYLENE CHLORIDE	ND	1.0
METHYL METHACRYLATE	ND	10
MIBK	ND	10
2-METHYLNAPHTHALENE	ND	5.0
NAPHTHALENE	ND	5.0
PENTACHLOROETHANE	ND	10
n-PROPYLBENZENE	ND	1.0
STYRENE	ND	1.0
1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,1,2,2-TETRACHLOROETHANE	ND	1.0
TETRACHLOROETHENE	ND	1.0
TOLUENE	ND	1.0
1,2,3-TRICHLOROBENZENE	ND	1.0
1,2,4-TRICHLOROBENZENE	ND	1.0
1,1,1-TRICHLOROETHANE	ND	1.0
1,1,2-TRICHLOROETHANE	ND	1.0
TRICHLOROETHENE	ND	1.0
TRICHLORFLUOROMETHANE	ND	1.0
1,2,3-TRICHLOROPROPANE	ND	1.0
1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3,5-TRIMETHYLBENZENE	ND	1.0
VINYL CHLORIDE	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
PROJECT NO: M19-3097
LOCATION: USCG STRAITS DRUM RECOVERY

MI
SAMPLED BY: MJR/MET

SAMPLE ID: DS-1

GTA PROJECT NO: 072419-4
GTA SAMPLE NO: 1

DATE SAMPLED: 7/23/2019
TIME SAMPLED: 10:30 AM
DATE RECEIVED: 7/24/2019
TIME RECEIVED: 10:45 AM
SAMPLE MATRIX: WATER

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC TOTAL EPA 6020A	ND	0.0020	mg/L (PPM)	MR/TR	7/29/2019	EPA 3005A
BARIUM TOTAL EPA 6020A	0.17	0.0010	mg/L (PPM)	MR/TR	7/29/2019	EPA 3005A
CADMIUM TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR/TR	7/29/2019	EPA 3005A
CHROMIUM TOTAL EPA 6020A	0.0059	0.0020	mg/L (PPM)	MR/TR	7/29/2019	EPA 3005A
LEAD TOTAL EPA 6020A	1.4	0.0010	mg/L (PPM)	MR/TR	7/29/2019	EPA 3005A
MERCURY TOTAL EPA 7470A	ND	0.00020	mg/L (PPM)	MR/KR	7/25/2019	EPA 7470
SELENIUM TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR/TR	7/29/2019	EPA 3005A
SILVER TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR/TR	7/29/2019	EPA 3005A

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

DISS = DISSOLVED



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PROJECT NO: M19-3097
LOCATION: USCG STRAITS DRUM RECOVERY
MI
SAMPLE MATRIX: WATER
SAMPLE ID: DS-1

GTA PROJECT NO: 072419-4
GTA SAMPLE NO: 2
SAMPLED BY: MJR/MET
DATE SAMPLED: 7/23/2019
TIME SAMPLED: 30-Dec-1899
DATE RECEIVED: 7/24/2019
TIME RECEIVED: 10:45 AM

FLASHPOINT

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Complete</u>
FLASHPOINT/IGNITABILITY EPA 1010A	>200	50.0	DEGREE F	TR	7/30/2019

ND = NOT DETECTED
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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	072419-4
PROJECT NO:	M19-3097	GTA SAMPLE NO:	1
LOCATION:	USCG STRAITS DRUM RECOVERY	DATE RECEIVED:	7/24/2019
	MI	TIME RECEIVED:	10:45 AM
SAMPLED BY:	MJR/MET	DATE SAMPLED:	7/23/2019
		TIME SAMPLED:	10:30 AM
SAMPLE ID:	DS-1	SAMPLE MATRIX:	WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Complete</u>
pH EPA 150.1 - LAB	6.4	0.10	s.u.	KC	7/24/2019

ND = NOT DETECTED, RESULT < LOD
LOD = LIMIT OF DETECTION
s.u. = STANDARD pH UNITS REPORTED AT 25 C
DISS = DISSOLVED

