

06/25/2021

Report #: 283.03.0621

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Report: MIB and geosmin analysis

REPORT RESULTS

Samples Received: 06/24/2021

Samples Analyzed: 06/24/2021

The samples were shipped to our laboratory in 40 mL glass vials sealed with Teflon lids. Upon their arrival at EPS, they were refrigerated at 4°C until sample preparation. All samples were measured in duplicate (i.e., two separate aliquots of water withdrawn from each vial) via Solid Phase Microextraction (SPME)/Gas Chromatography/Mass Spectrometer (GC/MS) using method 6040 D of the Standard Methods for the Examination of Water and Wastewater 22nd Edition.

Herein, the averaged concentrations for your samples are displayed in Table 1, with detailed measurements in the quality control (QC) section of the report. The method detection limit (MDL) for both MIB and geosmin is 0.5 nanograms per liter (ng/L). The method reporting limit (MRL) is 1.0 nanogram per liter (ng/L).

Table 1. MIB and geosmin concentration

Sample ID	Date	Time	MIB (ng/L)	Geosmin (ng/L)
05558300	06/23	1200	86.2	3.5
05553700	06/23	1600	9.4	3.2

< Below MRL

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at 904.645.7775.

Finalized by: Rick Loftis Date: 06/25/2021

QC Report

Sample ID	MIB (ng/L)		Geosmin (ng/L)		% RSD	
	1	2	1	2	MIB	Geosmin
5558300	81.52	90.90	3.54	3.53	7.7	0.2
5553700	9.51	9.20	3.11	3.32	2.3	4.6

< Below MRL; % RSD control limit is $\pm 20\%$

References

MIB Standards	Found (ng/L)	% recovery
Blank	< 1.0	NA
10 ng/L	9.81	98
50 ng/L	50.47	101
100 ng/L	106.41	106

< Below MRL; MRL = 1.0 ng/L; Recovery control limit is $\pm 20\%$

Geosmin Standards	Found (ng/L)	% recovery
Blank	< 1.0	NA
5 ng/L	4.54	91

< Below MRL; MRL = 1.0 ng/L; Recovery control limit is $\pm 20\%$