COMPREHENSIVE STORM-WATER TESTING ON TTIL PRO-MAX 37 TPE

Page

- **2-3** VOA-624.1-WATER
- **4-5** SVOA-625.1-WATER
- **6-7** GCSVOA-608.3-WATER
- 8 METALS-WATER
- 9 WETCHEM-WATER
- 10 HPLC-IC-300.0-WATER
- 11 LCMS-537 (MODIFIED)-WATER



TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

_

VOA-624.1-WATER	7				
Client ID	NJAC 7:9C	SW	SWM-WP-20231218		
Lab Sample ID	GW QualStds		460-295056-		
Sampling Date	ClassII A	12/2	12/18/2023 09:30:0		
Matrix	Higher Values		· ·	Water	
Dilution Factor	0			1	
Unit	ug/l			ug/l	
		Result	Q	MDL	
WATER BY 624.1					
1,1,1-Trichloroethane	30	0.24	U	0.24	
1,1,2,2-Tetrachloroethane	1	0.37	U	0.37	
1,1,2-Trichloroethane	3	0.15	U	0.15	
1,1-Dichloroethane	50	0.26	U	0.26	
1,1-Dichloroethene	1	0.12	U	0.12	
1,2,4-Trichlorobenzene	9	0.37	U	0.37	
1,2-Dibromo-3-Chloropropane	0.02	0.38	U	0.38	
1,2-Dibromoethane	0.03	0.50	U	0.50	
1,2-Dichlorobenzene	600	0.19	U	0.19	
1,2-Dichloroethane	2	0.84	U	0.84	
1,2-Dichloropropane	1	0.35	U	0.35	
1,3-Dichlorobenzene	600	0.13	U	0.13	
1,4-Dichlorobenzene	75	0.18	U	0.18	
2-Butanone	300	1.9	U	1.9	
2-Hexanone	40	2.9	U	2.9	
4-Methyl-2-pentanone	NA 6000	2.7	U	2.7 5.0	
Acetone Benzene	1	0.43	U	0.43	
Bromodichloromethane	1	0.43	U	0.43	
Bromoform	4	0.54	U	0.54	
Bromomethane	10	0.45	U	0.45	
Carbon disulfide	700	0.16	U	0.45	
Carbon tetrachloride	1	0.21	Ŭ	0.21	
Chlorobenzene	50	0.38	U	0.38	
Chloroform	70	0.33	U	0.33	
Chloromethane	NA	0.43	U	0.43	
cis-1,2-Dichloroethene	70	0.22	U	0.22	
cis-1,3-Dichloropropene	NA	0.46	U	0.46	
Cyclohexane	NA	0.32	U	0.32	
Dibromochloromethane	1	0.13	U	0.13	
Dichlorodifluoromethane	1000	0.41	U	0.41	
Ethyl Chloride	5	0.32	U	0.32	
Ethylbenzene	700	0.30	U	0.30	
Freon TF	20000	0.31	U	0.31	
Isopropylbenzene	700	0.16	U	0.16	
Methyl acetate	7000	0.31	U	0.31	
Methylcyclohexane	NA	0.26	U	0.26	
Methylene Chloride	3	0.32	U	0.32	
MTBE	70	0.20	U	0.20	
Styrene	100	0.42	U	0.42	
Tetrachloroethene	1	0.25	U U	0.25	
Toluene trans-1,2-Dichloroethene	600 100	0.38	U	0.38	
trans-1,2-Dichloropropene	NA	0.24	U	0.24	
Trichloroethene	1	0.22	U	0.22	
Trichlorofluoromethane	2000	0.31	U	0.31	
Vinyl chloride	2000	0.14	U	0.14	
Xylenes, Total	1000	0.34	U	0.65	
Total Conc	NA	0.05		0.05	
Total Estimated Conc. (TICs)	NA	0.0*T			
		2.5 1			

*T There are no TICs reported for the sample

U : Indicates the analyte was analyzed for but not detected.

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

VOA-624.1-WATER					
Client ID	NJAC 7:9C	SW	M-W	P-20231218	
Lab Sample ID	GW QualStds		460-295056-2		
Sampling Date	ClassII A	12/1	12/18/2023 09:30:00		
Matrix	Higher Values		Water		
Dilution Factor			1		
Unit	ug/l		ug/l		
		Result	Q	MDL	

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

SVOA-625.1-WATER					
Client ID	NJAC 7:9C	SW	SWM-WP-2023121 460-295056-		
Lab Sample ID	GW QualStds ClassII A	12/*	12/18/2023 09:30:		
Sampling Date Matrix	Higher Values	12/.	12/18/2023 03:30: Wat		
Dilution Factor	inglier values			1	
Unit	ug/l			ug/l	
		Result	Q	MDL	
WATER BY 625.1					
2,2'-oxybis[1-chloropropane]	300	0.63	U	0.63	
2,4,5-Trichlorophenol	700	0.85	U	0.85	
2,4,6-Trichlorophenol	20	0.70	U	0.70	
2,4-Dichlorophenol	20	1.2	U	1.2	
2,4-Dimethylphenol	100	0.66	U	0.66	
2,4-Dinitrophenol 2,4-Dinitrotoluene	40 NA	13 1.0	U	13 1.0	
2,6-Dinitrotoluene	NA	1.0	U	1.0	
2-Chloronaphthalene	600	1.4	U	1.4	
2-Chlorophenol	40	0.38	U	0.38	
2-Methylnaphthalene	30	1.1	U	1.1	
2-Methylphenol	50	0.67	U	0.67	
2-Nitroaniline	NA	0.47	U	0.47	
2-Nitrophenol	NA	1.9	U	1.9	
3,3'-Dichlorobenzidine	30	3.3	U	3.3	
3-Nitroaniline	NA	2.5	U	2.5	
4,6-Dinitro-2-methylphenol	0.7	7.1	U	7.1	
4-Bromophenyl phenyl ether	NA	0.75	U	0.75	
4-Chloro-3-methylphenol 4-Chloroaniline	100	1.2 1.9	U	1.2 1.9	
	30 NA	1.9	U	1.9	
4-Chlorophenyl phenyl ether 4-Methylphenol	50	0.76	U	0.76	
4-Nitroaniline	NA	1.3	U	1.3	
4-Nitrophenol	NA	1.7	U	1.7	
Acenaphthene	400	1.1	U	1.1	
Acenaphthylene	100	0.82	U	0.82	
Acetophenone	700	2.5	U	2.5	
Anthracene	2000	1.3	U	1.3	
Atrazine	3	1.2	U	1.2	
Benzaldehyde	NA	2.1	U	2.1	
Benzo[a]anthracene	0.1	0.59	U	0.59	
Benzo[a]pyrene	0.1	0.68	U	0.68 1.4	
Benzo[b]fluoranthene Benzo[g,h,i]perylene	100	1.4	U	1.4	
Benzo[k]fluoranthene	0.5	0.67	U	0.67	
Bis(2-chloroethoxy)methane	NA	0.64	U	0.64	
Bis(2-chloroethyl)ether	7	0.69	U	0.69	
Bis(2-ethylhexyl) phthalate	3	1.0	U	1.0	
Butyl benzyl phthalate	100	0.85	U	0.85	
Caprolactam	4000	2.8	U	2.8	
Carbazole	NA	0.68	U	0.68	
Chrysene	5	0.91	U	0.91	
Dibenz(a,h)anthracene	0.3	0.74	U	0.74	
Dibenzofuran	NA	1.1	U	1.1	
Diethyl phthalate Dimethyl phthalate	6000	0.98	U U	0.98	
Di-n-butyl phthalate	100 700	1.6 0.75	U	1.6 0.75	
Di-n-octyl phthalate	100	1.4	U	1.4	
Diphenyl	400	1.2	U	1.2	
Fluoranthene	300	0.84	U	0.84	
Fluorene	300	0.91	U	0.91	
Hexachlorobenzene	0.02	0.91	U	0.91	
Hexachlorobutadiene	1	0.44	U	0.44	
Hexachlorocyclopentadiene	40	1.7	U	1.7	
Hexachloroethane	7	1.2	U	1.2	
Indeno[1,2,3-cd]pyrene	0.2	1.3	U	1.3	
Isophorone	40	1.9	U	1.9	
Naphthalene	300	1.1	U	1.1	
Nitrobenzene	6 10	1.6 0.98	U	1.6 0.98	
N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine	10	0.98	U	0.98	
	10	0.89	U	0.69	

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

SVOA-625.1-WATER				
Client ID	NJAC 7:9C	SW	M-W	P-20231218
Lab Sample ID	GW QualStds		46	50-295056-1
Sampling Date	ClassII A	12/2	18/20	23 09:30:00
Matrix	Higher Values		Wate	
Dilution Factor				1
Unit	ug/l		ug	
		Result	Q	MDL
Pentachlorophenol	0.3	7.1	U	7.1
Phenanthrene	100	1.5	U	1.5
Phenol	2000	1.2	U	1.2
Pyrene	200	1.6	U	1.6
Total Conc	NA			

U : Indicates the analyte was analyzed for but not detected.

Lab Contact: Jill Miller Senior Project Manager (484)802-0929

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

-				
GCSVOA-608.3-WATER				
Client ID	NJAC 7:9C	SWM-WP-20231218		
Lab Sample ID	GW QualStds	460-295056-1		
Sampling Date	ClassII A	12/18/2023 09:30:00		
Matrix	Higher Values	Water		
Dilution Factor		10		
Unit	ug/l	ug/l		
		Result	Q	MDL
WATER BY 608.3				
4,4'-DDD	0.1	0.040	U	0.040
4,4'-DDE	0.1	0.020	U	0.020
4,4'-DDT	0.1	0.040	U	0.040
Aldrin	0.04	0.030	U	0.030
alpha-BHC	0.02	0.13	U	0.13
Aroclor 1016	NA	1.4	U	1.4
Aroclor 1221	NA	1.4	U	1.4
Aroclor 1232	NA	1.4	U	1.4
Aroclor 1242	NA	1.4	U	1.4
Aroclor 1248	NA	1.4	U	1.4
Aroclor 1254	NA	0.69	U	0.69
Aroclor 1260	NA	0.69	U	0.69
Aroclor 1262	NA	0.69	U	0.69
Aroclor 1268	NA	0.69	U	0.69
beta-BHC	0.04	0.13	U	0.13
Chlordane	NA	2.2	U	2.2
delta-BHC	NA	0.020	U	0.020
Dieldrin	0.03	0.080	U	0.080
Endosulfan I	40	0.23	U	0.23
Endosulfan II	40	0.060	U	0.060
Endosulfan sulfate	40	0.060	U	0.060
Endrin	2	0.25	U	0.25
Endrin aldehyde	NA	0.030	U	0.030
Endrin ketone	NA	0.14	U	0.14
gamma-BHC (Lindane)	0.03	0.030	U	0.030
Heptachlor	0.05	0.080	U	0.080
Heptachlor epoxide	0.2	0.040	U	0.040
Methoxychlor	40	0.36	U	0.36
Toxaphene	2	0.35	U	0.35

U : Indicates the analyte was analyzed for but not detected.

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

METALS-WATER

IVIE TALS-VVATER				
Matrix	Higher Values		W	
Unit				
		Result	Q	MDL
WATER BY 200.8(UG/L)				
Aluminum	200	345		19.8
Antimony	6	0.65	U	0.65
Arsenic	3	6.0		0.66
Barium	6000	5.3		1.3
Beryllium	1	0.23	U	0.23
Cadmium	4	0.54	U	0.54
Calcium	NA	18000		86.2
Chromium	70	1.4	U	1.4
Cobalt	100	0.48	U	0.48
Copper	1300	6.3		1.1
Iron	300	455		20.6
Lead	5	0.56	J	0.53
Magnesium	NA	7110		34.1
Manganese	50	13.1		0.98
Nickel	100	1.5	U	1.5
Potassium	NA	5120		92.1
Selenium	40	1.0	U	1.0
Silver	40	0.27	U	0.27
Sodium	50000	13500		282
Thallium	2	0.17	U	0.17
Vanadium	NA	8.2		1.8
Zinc	2000	12.0	J	6.6

WATER BY 245.1(UG/L)				
Mercury	2	0.091	U	0.091

Highlighted Concentrations shown in bold type face exceed limits

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

WETCHEM-WATER				
Matrix	Higher Values			Water
		Result	Q	MDL
WATER BY 2540D-2015				
Total Suspended Solids (mg/l)	NA	5.5		2.5
WATER BY 335.4				
Cyanide, Total (mg/l)	0.1	0.029		0.0040
WATER BY SM 2540C				
Total Dissolved Solids (mg/l)	500	198		2.5
WATER BY SM 4500 H+ B				
pH (su)	NA	8.5	HF	
Temperature (degrees c)	NA	20.9	HF	
WATER BY SM 4500 P E				
Orthophosphate as P (mg/l)	NA	0.018	J	0.0050

HF : Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time. J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

HPLC-IC-300.0-WATER					
Client ID	NJAC 7:9C	SW	M-W	P-20231218	
Lab Sample ID	GW QualStds		460-295056-2		
Sampling Date	ClassII A	12/1	12/18/2023 09:30:00		
Matrix	Higher Values		Water		
Dilution Factor			1		
Unit	mg/l		mg/l		
		Result	Q	MDL	
WATER BY 300.0					
Nitrate as N	10	0.23		0.070	

Lab Contact: Jill Miller Senior Project Manager (484)802-0929

TTII PRO-MAX 37 TPE Storm Water Testing (testing derived from installed material) Lab Job ID: 460-295056-1 Job Description: Stormwater

LCMS-537 (MODIFIED)-WATER

NJAC 7:9C	SW	SWM-WP-20231218		
GW QualStds		46	50-295056-1	
ClassII A	12/2	18/20	23 09:30:00	
Higher Values		Water		
		1		
ng/l		ng/		
	Result	Q	MDL	
NA	0.60	J	0.19	
NA	0.65	J	0.44	
NA	1.05	J	0.36	
	GW QualStds ClassII A Higher Values ng/l	GW QualStds GW QualStds ClassII A 12/2 Higher Values ng/l Result NA 0.60 NA 0.65	GW QualStds 44 GClassII A 12/18/20 Higher Values 12/18/20 ng/l Result Q NA 0.60 J NA 0.65 J	

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Lab Contact: Jill Miller Senior Project Manager (484)802-0929

https://acwi.gov/monitoring/webinars/mp sl ga services intro rls 012517.pdf

"Method detection limit," or "MDL," means the minimum measured concentration of a substance that can be reported with 99% confidence that **the measured concentration is distinguishable frou** method blank results. The MDL is generated according to the procedure specified in the latest revision of 40 CFR Part 136, Appendix B.

"Limit of detection" or "LOD" means the lowest concentration or amount of analyte that can be identified, measured and reported with confidence that the concentration is not a false positive value. The department considers the LOD to be equivalent to the method detection limit.

Method Detection Limit

• 40 CFR Appendix B to Part 136 - Definition and Procedure for the

Determination of the Method Detection Limit - Revision 2

o Google: e-CFR title 40 part 136, go to App. B

• Definition: The method detection limit (MDL) is defined as the minimum

measured concentration of a substance that can be reported with 99%

confidence that the measured concentration is distinguishable from

method blank results. (EPA 821-R-16-006 December 2016)

• The MDL for an analytical procedure may vary as a function of sample

type. The procedure requires a complete, specific, and well-defined

analytical method. It is essential that all sample processing steps of the

analytical method be included in the determination of the method

detection limit.

The smallest concentration (or amount) of analyte, that can be reported by a laboratory is called the reporting limit. It must be said that different agencies use slightly different definitions of reported by a laboratory is called the reporting limit.

Eurofins Environment Testi Eurofins Edison

TTII PRO-MAX 37 TPE Storm Water Te (testing derived from installed materia Lab Job ID: 460-295056-1 Job Description: Stormwater

LCMS-537 (MODIFIED)-WATER
Client ID
Lab Sample ID
Sampling Date
Matrix
Dilution Factor
Unit

WATER BY 537 (MODIFIED)

Perfluorononanoic acid (PFNA) Perfluorooctanesulfonic acid (PFOS) Perfluorooctanoic acid (PFOA)

J : Result is less than the RL but greater thar

Lab Contact: Jill Miller Senior Project Manager (484)802-0929

https://acwi.gov/monitoring/webinars/mp sl ga services intro rls 012517.pdf

"Method detection limit," or "MDL," means method blank results. The MDL is generate "Limit of detection" or "LOD" means the lov The department considers the LOD to be eq

Method Detection Limit

40 CFR Appendix B to Part 136 - Definition Determination of the Method Detection Lin o Google: e-CFR title 40 part 136, go to App
Definition: The method detection limit (M measured concentration of a substance tha confidence that the measured concentratio method blank results. (EPA 821-R-16-006 Di
The MDL for an analytical procedure may type. The procedure requires a complete, sp analytical method. It is essential that all sar analytical method be included in the detern detection limit.

The smallest concentration (or amount) of orting limits: