

IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103 PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER: 1734240 PAGE 1

REPORT DATE: 09/06/22

DATE SAMPLED: 08/09/22 DATE RECEIVED: 08/10/22

FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER

SAMPLES FROM MLIRD

CASE NARRATIVE

Twenty nine water samples were received by the laboratory in good condition and analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of these samples. Sample data follows while QA/QC data is contained on the subsequent page.

SAMPLE DATA

SAMPLE ID (mg/L) (mg/L) (mg/L) (mg/CaCO3L) (mg/L) (ug/L) (ug/L) TS-1 0.011 <0.001 0.015 TS-2 0.040 0.009 1.65 TS-3 0.394 1.30 TS-4a 0.024 0.039 TS-4a 0.024 TS-5a 0.026 0.011 3.7 4.7 TS-5b 0.024 TS-6d 0.016 <0.001 <0.010 124 1.9 1.3 TS-6e 0.022 TS-7a 0.012 <0.010 2.1 1.2 TS-7b 0.013 TS-8a 0.030 <0.010 5.9 2.7 TS-9 0.484 <0.01		TOTAL-P	SRP	N03+N02	ALKALINITY	SODIUM	CHLOR_a	PHAEO_a
TS-1	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mgCaCO3/L)	(mg/L)	(ug/L)	(ug/L)
TS-3	TS-1	0.011	< 0.001	0.015				
TS-4a	TS-2	0.040	0.009	1.65				
TS-4d 0.024 TS-5a 0.026 0.011 3.7 4.7 TS-5b 0.024 TS-5d 0.024 TS-6a 0.016 <0.001 124 1.9 1.3 TS-6b 0.010 TS-6c 0.022 TS-6d 0.017 0.001 TS-7a 0.012	TS-3	0.394		1.30				
TS-5a 0.026 0.011 3.7 4.7 TS-5b 0.024 3.7 4.7 TS-5d 0.024 3.7 4.7 TS-6a 0.016 <0.001	TS-4a	0.024		0.039				
TS-5b	TS-4d	0.024						
TS-5d	TS-5a	0.026		0.011			3.7	4.7
TS-6a 0.016 <0.001	TS-5b	0.024						
TS-6b 0.010 Color of the property of	TS-5d	0.024						
TS-6c 0.022 TS-7a 0.012 <0.010 2.1 1.2 TS-7b 0.013 <0.010 2.1 1.2 TS-7d 0.011 <0.010 5.9 2.7 TS-8a 0.030 <0.010 5.9 2.7 TS-8d 0.027 2.7 <th< td=""><td>TS-6a</td><td>0.016</td><td>< 0.001</td><td>< 0.010</td><td>124</td><td></td><td>1.9</td><td>1.3</td></th<>	TS-6a	0.016	< 0.001	< 0.010	124		1.9	1.3
TS-6d 0.017 0.001 TS-7a 0.012 <0.010 2.1 1.2 TS-7b 0.013 TS-7d 0.011 TS-8a 0.030 <0.010 5.9 2.7 TS-8d 0.027 TS-9 0.484 <0.001 15.3 404 69.0 TS-11a 0.020 0.002 <0.010 123 4.3 3.2 TS-11b 0.019 TS-11c 0.023 TS-11d 0.024 TS-12a 0.021 <0.010 3.0 2.4 TS-12d 0.018 TS-14 0.108 0.087 1.35 162 13.5 TS-15a 0.018 TS-15b 0.022 TS-15c 0.026	TS-6b	0.010						
TS-7a 0.012 <0.010	TS-6c	0.022						
TS-7b 0.013 0.011 TS-7d 0.011 0.010 5.9 2.7 TS-8a 0.030 <0.010	TS-6d	0.017	0.001					
TS-7d 0.011 0.030 <0.010 5.9 2.7 TS-8d 0.027 0.027 0.027 0.027 0.027 0.027 0.028 0.028 0.028 0.028 0.028 0.029 0.002 0.010 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.018 0.018 0.018 0.018 0.010 0.028<	TS-7a	0.012		< 0.010			2.1	1.2
TS-8a 0.030 <0.010	TS-7b	0.013						
TS-8d 0.027 404 69.0 TS-9 0.484 <0.001	TS-7d	0.011						
TS-9 0.484 <0.001 15.3 404 69.0 TS-11a 0.020 0.002 <0.010 123 4.3 3.2 TS-11b 0.019 TS-11c 0.023 TS-11d 0.024 TS-12a 0.021 <0.010 3.0 2.4 TS-12d 0.018 TS-14 0.108 0.087 1.35 162 13.5 TS-15a 0.018 TS-15b 0.022 TS-15c 0.026	TS-8a	0.030		< 0.010			5.9	2.7
TS-11a 0.020 0.002 <0.010	TS-8d	0.027						
TS-11b 0.019 TS-11c 0.023 TS-11d 0.024 TS-12a 0.021 TS-12d 0.018 TS-14 0.108 0.087 1.35 162 13.5 TS-15a 0.018 <0.010 3.3 2.3 TS-15b 0.022 TS-15c 0.026	TS-9	0.484	< 0.001	15.3	404	69.0		
TS-11c 0.023 TS-11d 0.024 TS-12a 0.021 TS-12d 0.018 TS-14 0.108 0.087 1.35 162 13.5 TS-15a 0.018 <0.010 3.3 2.3 TS-15b 0.022 TS-15c 0.026	TS-11a	0.020	0.002	< 0.010	123		4.3	3.2
TS-11d 0.024 TS-12a 0.021 <0.010	TS-11b	0.019						
TS-12a 0.021 <0.010	TS-11c	0.023						
TS-12d 0.018 TS-14 0.108 TS-15a 0.018 TS-15b 0.022 TS-15c 0.026	TS-11d	0.024						
TS-14 0.108 0.087 1.35 162 13.5 TS-15a 0.018 <0.010 3.3 2.3 TS-15b 0.022	TS-12a	0.021		< 0.010			3.0	2.4
TS-15a 0.018 <0.010 3.3 2.3 TS-15b 0.022 TS-15c 0.026	TS-12d	0.018						
TS-15b 0.022 TS-15c 0.026	TS-14	0.108	0.087	1.35	162	13.5		
TS-15c 0.026	TS-15a	0.018		< 0.010			3.3	2.3
	TS-15b	0.022						
TS-15d 0.025	TS-15c	0.026						
	TS-15d	0.025						

	CONDUCTIVITY	TOTAL-N	
SAMPLE ID	(umhos/cm)	(mg/L)	
TS-1	148		
TS-2		1.86	
TS-6a		0.286	
TS-9	1035		
TS-11a		0.449	
TS-14	359	1.62	



IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103 PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER: 1734240 PAGE 2

REPORT DATE: 09/06/22

DATE SAMPLED: 08/09/22 **DATE RECEIVED:** 08/10/22

FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER

SAMPLES FROM MLIRD

QA/QC DATA

QC PARAMETER	TOTAL-P	SRP	N03+N02	ALKALINITY	SODIUM	CHLOR_a	PHAEO_a
	(mg/L)	(mg/L)	(mg/L)	(mgCaCO3/L)	(mg/L)	(ug/L)	(ug/L)
METHOD	SM18 4500PF	SM18 4500PF	SM184500N03F	SM18 2320B	EPA 200.7	SM1810200H	SM1810200H
DATE ANALYZED	08/15/22	08/12/22	08/11/22	08/10/22	08/16/22	08/29/22	08/29/22
REPORTING LIMIT	0.002	0.001	0.010	1.00	0.500	0.1	0.1
DI DI IGATE							
DUPLICATE							
SAMPLE ID	TS-15d	ВАТСН	TS-15a	ВАТСН	BATCH	TS-15a	TS-15a
ORIGINAL	0.025	< 0.001	< 0.010	21.8	5.75	3.3	2.3
DUPLICATE	0.029	< 0.001	< 0.010	21.7	5.72	3.0	2.4
RPD	14.18%	NC	NC	0.46%	0.55%	10.53%	4.32%
				•			
SPIKE SAMPLE							
SAMPLE ID	TS-15d	BATCH	TS-15a		BATCH		
ORIGINAL	0.025	< 0.001	< 0.010		5.75		
SPIKED SAMPLE	0.079	0.020	0.209		17.5		
SPIKE ADDED	0.050	0.020	0.200		10.0		
% RECOVERY	108.78%	100.85%	104.68%	NA	117.22%	NA	NA
QC CHECK							
FOUND	0.092	0.040	0.420	101	10.9		
TRUE	0.094	0.039	0.408	100	10.0		
% RECOVERY	97.87%	102.56%	102.83%	101.00%	109.31%	NA	NA
BLANK	< 0.002	< 0.010	< 0.010	NA	< 0.500	NA	NA

RPD = RELATIVE PERCENT DIFFERENCE.

amen Hodemsh

NA = NOT APPLICABLE OR NOT AVAILABLE.

NC = NOT CALCULABLE DUE TO ONE OR MORE VALUES BEING BELOW THE DETECTION LIMIT.

OR = RECOVERY NOT CALCULABLE DUE TO SPIKE SAMPLE OUT OF RANGE OR SPIKE TOO LOW RELATIVE TO SAMPLE CONCENTRATION.

SUBMITTED BY:

Damien Gadomski Project Manager