



# IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

PHONE: (206) 632-2715 FAX: (206) 632-2417

<b>CASE FILE NUMBER:</b>	<b>1741559</b>	<b>PAGE 1</b>
<b>REPORT DATE:</b>	<b>08/08/23</b>	
<b>DATE SAMPLED:</b>	<b>07/19/23</b>	<b>DATE RECEIVED: 07/20/23</b>
<b>FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER</b>		
<b>SAMPLES FROM MLIRD</b>		

## 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	TOTAL-P (mg/L)	SRP (mg/L)	N03+N02 (mg/L)	ALKALINITY (mgCaCO3/L)	SODIUM (mg/L)	CHLOR_a (ug/L)	PHAEO_a (ug/L)
TS-1	0.006	0.001	0.108				
TS-2	0.044	0.009	1.33				
TS-3	0.133		2.84				
TS-4a	0.055		0.113				
TS-4d	0.062						
TS-5a	0.045		0.051			18	7.6
TS-5b	0.046						
TS-5d	0.052						
TS-6a	0.018	0.001	<0.010	112		11	2.0
TS-6b	0.016						
TS-6c	0.015						
TS-6d	0.035	<0.001					
TS-7a	0.019		<0.010			6.4	2.9
TS-7b	0.021						
TS-7d	0.026						
TS-8a	0.043		0.032			29	8.2
TS-8d	0.045						
TS-9	0.089	0.056	13.5	399	60.2		
TS-11a	0.037	0.003	0.020	105		6.4	14
TS-11b	0.037						
TS-11c	0.038						
TS-11d	0.046						
TS-12a	0.062		0.047			30	5.8
TS-12d	0.065						
TS-14	0.153	0.096	1.14	158	16.8		
TS-15a	0.034		<0.010			20	4.8
TS-15b	0.038						
TS-15c	0.033						
TS-15d	0.035						

SAMPLE ID	CONDUCTIVITY (umhos/cm)	TOTAL-N (mg/L)
TS-1	153	
TS-2		2.21
TS-6a		0.513
TS-9	1072	
TS-11a		0.727
TS-14	350	1.97



# IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

PHONE: (206) 632-2715    FAX: (206) 632-2417

<b>CASE FILE NUMBER:</b>	<b>1741559</b>	<b>PAGE 2</b>
<b>REPORT DATE:</b>	08/08/23	
<b>DATE SAMPLED:</b>	07/19/23	<b>DATE RECEIVED:</b> 07/20/23
<b>FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER</b>		
<b>SAMPLES FROM MLIRD</b>		

**QA/QC DATA**

QC PARAMETER	TOTAL-P (mg/L)	SRP (mg/L)	N03+N02 (mg/L)	ALKALINITY (mgCaCO3/L)	SODIUM (mg/L)	CHLOR_a (ug/L)	PHAEO_a (ug/L)
METHOD	SM18 4500PF	SM18 4500PF	SM184500N03F	SM18 2320B	EPA 200.7	SM1810200H	SM1810200H
DATE ANALYZED	07/31/23	07/21/23	07/21/23	07/25/23	08/01/23	07/28/23	07/28/23
REPORTING LIMIT	0.002	0.001	0.010	1.00	0.500	0.1	0.1
DUPLICATE							
SAMPLE ID	TS-15d	TS-11a	TS-15a	TS-14	BATCH	BATCH	BATCH
ORIGINAL	0.035	0.003	<0.010	158	12.0	2.1	1.5
DUPLICATE	0.034	0.003	<0.010	158	12.1	1.8	1.5
RPD	1.29%	2.43%	NC	0.00%	0.89%	15.38%	5.94%
SPIKE SAMPLE							
SAMPLE ID	TS-15d	TS-11a	TS-15a		BATCH		
ORIGINAL	0.035	0.003	<0.010		12.0		
SPIKED SAMPLE	0.085	0.023	0.216		22.3		
SPIKE ADDED	0.050	0.020	0.200		10.0		
% RECOVERY	101.93%	100.90%	108.10%	NA	102.58%	NA	NA
QC CHECK							
FOUND	0.097	0.040	0.417	102	9.70		
TRUE	0.094	0.039	0.408	100	10.0		
% RECOVERY	103.19%	102.56%	102.28%	102.00%	97.00%	NA	NA
BLANK							
	<0.002	<0.010	<0.010	NA	<0.500	NA	NA

RPD = RELATIVE PERCENT DIFFERENCE.  
 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