



# IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

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<b>CASE FILE NUMBER:</b>	<b>1740954</b>	<b>PAGE 1</b>
<b>REPORT DATE:</b>	<b>07/21/23</b>	
<b>DATE SAMPLED:</b>	<b>06/21/23</b>	<b>DATE RECEIVED: 06/22/23</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	0.007	<0.001	0.021				
TS-2	0.075	0.006	1.79				
TS-3	0.151		2.54				
TS-4a	0.045		0.060				
TS-4d	0.056						
TS-5a	0.038		0.018				
TS-5b	0.038						
TS-5d	0.043						
TS-6a	0.027	<0.001	0.016	109		6.9	2.8
TS-6b	0.036						
TS-6c	0.027						
TS-6d	0.023	<0.001					
TS-7a	0.024		0.016				
TS-7b	0.027						
TS-7d	0.036						
TS-8a	0.052		0.062				
TS-8d	0.058						
TS-9	0.066	0.044	13.5	389	59.3		
TS-11a	0.047	0.003	0.017	122			
TS-11b	0.048						
TS-11c	0.048						
TS-11d	0.047						
TS-12a	0.059		0.031			27	9.6
TS-12d	0.057						
TS-14	0.142	0.098	1.19	152	16.5		
TS-15a	0.067		0.019			21	5.6
TS-15b	0.066						
TS-15c	0.069						
TS-15d	0.069						

SAMPLE ID	CONDUCTIVITY (umhos/cm)	TOTAL-N (mg/L)
TS-1	157	
TS-2		4.05
TS-6a		0.370
TS-9	1048	
TS-11a		0.484
TS-14	358	2.24



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<b>CASE FILE NUMBER:</b>	<b>1740954</b>	<b>PAGE 2</b>
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**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 200.8	SM1810200H	SM1810200H
DATE ANALYZED	06/26/23	06/22/23	06/22/23	06/23/23	06/23/23	06/23/23	06/23/23
REPORTING LIMIT	0.002	0.001	0.010	1.00	0.500	0.1	0.1
DUPLICATE							
SAMPLE ID	TS-15d	BATCH	BATCH	TS-14	BATCH	BATCH	BATCH
ORIGINAL	0.069	0.002	0.159	152	24.6	2.9	1.4
DUPLICATE	0.069	0.002	0.159	151	24.5	2.7	1.3
RPD	0.11%	5.13%	0.18%	0.66%	0.44%	9.52%	8.16%
SPIKE SAMPLE							
SAMPLE ID	TS-15d	BATCH	BATCH		BATCH		
ORIGINAL	0.069	0.002	0.159		24.6		
SPIKED SAMPLE	0.123	0.022	0.341		35.5		
SPIKE ADDED	0.050	0.020	0.200		10.0		
% RECOVERY	108.57%	102.00%	90.82%	NA	109.16%	NA	NA
QC CHECK							
FOUND	0.096	0.040	0.427	97.8	10.2		
TRUE	0.094	0.039	0.408	100	10.0		
% RECOVERY	102.13%	102.56%	104.57%	97.80%	102.00%	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:

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