



# IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

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<b>CASE FILE NUMBER:</b>	<b>1740647</b>	<b>PAGE 1</b>
<b>REPORT DATE:</b>	<b>06/28/23</b>	
<b>DATE SAMPLED:</b>	<b>06/07/23</b>	<b>DATE RECEIVED: 06/08/23</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	0.005	<0.001	0.017				
TS-2	0.043	0.004	1.91				
TS-3	0.052		3.02				
TS-4a	0.018		0.087				
TS-4d	0.026						
TS-5a	0.011		0.047			1.9	0.9
TS-5b	0.013						
TS-5d	0.011						
TS-6a	0.013	<0.001	<0.010	109		4.0	1.4
TS-6b	0.010						
TS-6c	0.015						
TS-6d	0.014	0.003					
TS-7a	0.016		<0.010			4.0	5.3
TS-7b	0.017						
TS-7d	0.019						
TS-8a	0.037		<0.010			9.1	4.8
TS-8d	0.079						
TS-9	0.138	0.046	14.9	389	60.2		
TS-11a	0.021	0.003	0.079	122		2.1	1.8
TS-11b	0.062						
TS-11c	0.019						
TS-11d	0.019						
TS-12a	0.026		0.148			5.3	4.0
TS-12d	0.040						
TS-14	0.190	0.122	1.32	152	17.2		
TS-15a	0.016		0.092			2.3	1.2
TS-15b	0.014						
TS-15c	0.033						
TS-15d	0.058						

SAMPLE ID	CONDUCTIVITY (umhos/cm)	TOTAL-N (mg/L)
TS-1	160	
TS-2		3.13
TS-6a		0.330
TS-9	1067	
TS-11a		0.438
TS-14	366	1.95



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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	06/19/23	06/09/23	06/09/23	06/23/23	06/23/23	06/15/23	06/15/23
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	TS-15a	TS-15a
ORIGINAL	0.058	0.003	<0.010	152	24.6	2.3	1.2
DUPLICATE	0.058	0.003	<0.010	151	24.5	2.3	1.4
RPD	0.50%	0.70%	NC	0.66%	0.44%	0.00%	18.18%
SPIKE SAMPLE							
SAMPLE ID	TS-15d	BATCH	BATCH		BATCH		
ORIGINAL	0.058	0.003	<0.010		24.6		
SPIKED SAMPLE	0.117	0.022	0.198		35.5		
SPIKE ADDED	0.050	0.020	0.200		10.0		
% RECOVERY	118.86%	93.66%	99.09%	NA	109.16%	NA	NA
QC CHECK							
FOUND	0.095	0.040	0.412	97.8	10.2		
TRUE	0.094	0.039	0.408	100	10.0		
% RECOVERY	101.06%	102.56%	100.98%	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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