



IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

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CASE FILE NUMBER:	1741236	PAGE 1
REPORT DATE:	07/21/23	
DATE SAMPLED:	07/05/23	DATE RECEIVED: 07/06/23
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	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	0.008	0.001	0.015				
TS-2	0.051	0.007	1.46				
TS-3	0.210		2.63				
TS-4a	0.054		0.031				
TS-4d	0.079						
TS-5a	0.039		<0.010			25	3.8
TS-5b	0.039						
TS-5d	0.041						
TS-6a	0.025	0.001	<0.010	109		9.6	0.9
TS-6b	0.030						
TS-6c	0.025						
TS-6d	0.033	0.013					
TS-7a	0.016		<0.010			3.7	1.9
TS-7b	0.032						
TS-7d	0.033						
TS-8a	0.037		<0.010			13	5.1
TS-8d	0.038						
TS-9	0.121	0.046	13.7	396	61.9		
TS-11a	0.054	0.003	<0.010	112		27	2.7
TS-11b	0.057						
TS-11c	0.051						
TS-11d	0.051						
TS-12a	0.062		<0.010			44	4.4
TS-12d	0.059						
TS-14	0.160	0.105	1.11	155	17.7		
TS-15a	0.045		<0.010			35	3.0
TS-15b	0.041						
TS-15c	0.042						
TS-15d	0.036						

SAMPLE ID	CONDUCTIVITY (umhos/cm)	TOTAL-N (mg/L)
TS-1	156	
TS-2		2.53
TS-6a		0.521
TS-9	1082	
TS-11a		0.894
TS-14	367	1.88



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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	07/10/23	07/07/23	07/07/23	07/10/23	07/13/23	07/13/23	07/13/23
REPORTING LIMIT	0.002	0.001	0.010	1.00	0.500	0.1	0.1
DUPLICATE							
SAMPLE ID	TS-15d	BATCH	TS-15a	BATCH	BATCH	TS-15a	TS-15a
ORIGINAL	0.036	0.017	<0.010	166	25.7	35	3.0
DUPLICATE	0.036	0.017	<0.010	164	25.9	32	2.7
RPD	0.55%	1.20%	NC	1.01%	0.55%	8.00%	11.11%
SPIKE SAMPLE							
SAMPLE ID	TS-15d	BATCH	TS-15a		BATCH		
ORIGINAL	0.036	0.017	<0.010		25.7		
SPIKED SAMPLE	0.090	0.037	0.217		36.8		
SPIKE ADDED	0.050	0.020	0.200		10.0		
% RECOVERY	107.00%	100.50%	108.28%	NA	110.28%	NA	NA
QC CHECK							
FOUND	0.094	0.039	0.417	99.5	10.7		
TRUE	0.094	0.039	0.408	100	10.0		
% RECOVERY	100.00%	100.00%	102.28%	99.50%	107.00%	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