



IEH ANALYTICAL LABORATORIES

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

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CASE FILE NUMBER:	1715802	PAGE 1
REPORT DATE:	09/14/20	
DATE SAMPLED:	08/13/20	DATE RECEIVED: 08/14/20
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM MLIRD		

CASE NARRATIVE

Twenty seven 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	0.012	<0.001	0.018				
TS-2	0.030	0.010	2.00				
TS-5a	0.039		0.109			22	4.1
TS-5b	0.033						
TS-5d	0.033						
TS-6a	0.037		0.034			11	3.2
TS-6b	0.174						
TS-6c	0.023						
TS-6d	0.163						
TS-7a	0.029		0.018			6.9	1.3
TS-7b	0.037						
TS-7d	0.031		0.014				
TS-11a	0.065		0.010			41	2.6
TS-11b	0.064						
TS-11c	0.065						
TS-11d	0.061						
TS-15a	0.061		0.016			29	2.9
TS-15b	0.048						
TS-15c	0.053						
TS-15d	0.046						
TS-12	0.157		0.268			134	2.0
TS-13	0.059	0.010	2.66	239	20.5		
TS-14	0.132	0.099	1.61	151	16.9		
TS-9	0.148	0.044	11.8	371	55.9		
TS-8	0.051		<0.010			11	3.0
TS-3	0.027		0.569				
TS-4	0.057		0.152				

SAMPLE ID	CONDUCTIVITY (umhos/cm)
TS-13	593
TS-14	381
TS-9	963



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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 200.7	SM1810200H	SM1810200H
DATE ANALYZED	08/20/20	08/14/20	08/14/20	08/19/20	08/15/20	08/19/20	08/19/20
REPORTING LIMIT	0.002	0.001	0.010	1.00	0.500	0.1	0.1
DUPLICATE							
SAMPLE ID	TS-11a	TS-9	TS-4	TS-9	BATCH	BATCH	BATCH
ORIGINAL	0.065	0.044	0.152	371	16.4	5.9	1.6
DUPLICATE	0.067	0.045	0.152	379	16.2	6.9	1.7
RPD	2.72%	2.24%	0.55%	1.96%	1.35%	16.67%	3.28%
SPIKE SAMPLE							
SAMPLE ID	TS-11a	TS-9	TS-4		BATCH		
ORIGINAL	0.065	0.044	0.152		16.4		
SPIKED SAMPLE	0.114	0.062	0.343		25.0		
SPIKE ADDED	0.050	0.020	0.200		10.0		
% RECOVERY	97.52%	92.87%	95.84%	NA	86.10%	NA	NA
QC CHECK							
FOUND	0.102	0.040	0.421	95.5	9.24		
TRUE	0.094	0.039	0.408	100	10.0		
% RECOVERY	107.98%	102.56%	103.19%	95.50%	92.40%	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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 Project Manager