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AQUATIC RESEARCH
CONSULTING AND LABORATORY SERVICES
FOR WATER RESOURCES

October 28, 1999

Ken Ludwa
Parametrix Incorporated
5808 Lake Washington Blvd. NE
Kirkland, WA 98033

Dear: Ken

Please find enclosed a data report and invoice for the laboratory analysis of samples received on 10/11/99 from Port of Seattle. Please submit this invoice for payment.

Please let me know if you have any questions regarding this report or invoice.

Sincerely,
AQUATIC RESEARCH INCORPORATED


Steven Lazoff
Laboratory Director



AQUATIC RESEARCH INCORPORATED
LABORATORY & CONSULTING SERVICES
 3927 AURORA AVENUE NORTH, SEATTLE, WA 98103
 PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER:	PAR025-18	PAGE 1
REPORT DATE:	10/28/99	
DATE SAMPLED:	10/08,11/99	DATE RECEIVED: 10/11/99
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM PARAMETRIX / PORT OF SEATTLE		

CASE NARRATIVE

One water sample was received by the laboratory in good condition. Samples analyzed for NWTPH-Dx were subjected to sulfuric acid/silica gel cleanup after extraction but prior to final sample concentration. No difficulties were encountered in the preparation or analysis of these samples. Sample data follows while QA/QC data is contained on subsequent pages.

SAMPLE DATA

SAMPLE ID	NWTPH-DX		
	TSS (mg/l)	DIESEL (mg/l)	MOTOR OIL (mg/l)
POS NEPL	2.3	<0.05	<0.10

SAMPLE ID	TOTAL METALS			
	CADMIUM (mg/l)	COPPER (mg/l)	LEAD (mg/l)	ZINC (mg/l)
POS NEPL	<0.00020	0.0070	<0.0020	0.102



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QA/QC DATA

QC PARAMETER	TSS (mg/l)	DIESEL (mg/l)	MOTOR OIL (mg/l)
CAS NUMBER	NA	NA	NA
METHOD	EPA 160.2	NWTPH-DX	NWTPH-DX
DATE ANALYZED	10/15/99	10/14/99	10/14/99
PRACTICAL QUANTITATION LIMIT	0.50	0.05	0.10
DETECTION LIMIT	0.50	0.05	0.10
DUPLICATE			
SAMPLE ID	POS NEPL	POS NEPL	POS NEPL
ORIGINAL	2.3	<0.05	<0.10
DUPLICATE	2.6	<0.05	<0.10
RPD	11.76%	NC	NC
SPIKE SAMPLE			
SAMPLE ID			
ORIGINAL			
SPIKED SAMPLE			
SPIKE ADDED	NA	NA	NA
% RECOVERY			
QC CHECK (mg/l)			
TRUE	10	0.26	0.52
	10	0.25	0.50
% RECOVERY	104.00%	102.80%	104.80%
BLANK	<0.50	<0.05	<0.10

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.



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CASE FILE NUMBER: PAR025-18 **PAGE 3**
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QA/QC DATA - TOTAL RECOVERABLE METALS

QC PARAMETER	CADMIUM (mg/l)	COPPER (mg/l)	LEAD (mg/l)	ZINC (mg/l)
CAS NUMBER	7440-43-9	7440-50-8	7439-92-1	7440-66-6
METHOD	EPA 213.2	EPA 220.2	EPA 239.2	EPA 200.7
DATE ANALYZED	10/20/99	10/19/99	10/20/99	10/21/99
PRACTICAL QUANTITATION LIMIT	0.00020	0.0020	0.0020	0.005
DETECTION LIMIT	0.00010	0.0010	0.0010	0.005
DUPLICATE				
SAMPLE ID	POS NEPL	POS NEPL	POS NEPL	POS NEPL
ORIGINAL	<0.00020	0.0070	<0.0020	0.102
DUPLICATE	<0.00020	0.0069	<0.0020	0.103
RPD	NC	1.01%	NC	0.98%
SPIKE SAMPLE				
SAMPLE ID	POS NEPL	POS NEPL	POS NEPL	POS NEPL
ORIGINAL	<0.00020	0.0070	<0.0020	0.102
SPIKED SAMPLE	0.00112	0.0205	0.0115	1.06
SPIKE ADDED	0.00125	0.0125	0.0125	1.00
% RECOVERY	89.60%	108.00%	92.00%	95.80%
QC CHECK (mg/l)				
	0.00255	0.0259	0.0273	0.922
TRUE	0.00250	0.0250	0.0250	1.00
% RECOVERY	102.00%	103.60%	109.20%	92.20%
PREP BLANK	<0.00010	<0.0010	<0.0010	<0.005
BLANK SPIKE % RECOVERY	97.6%	107%	105.0%	94.5%

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Submitted By:

Steven Lazoff

Laboratory Director

