

# **Appendix C**

## **Quality Control Narrative and Data**

METRO Environmental Laboratory

WORK GROUP REPORT (wk02)

Sep 09 2002, 11:39 am

Work Group: WG62291 (TOTS N. OUTFALL MAY 2002) for Department: 3 - Conventionals

Created: 28-MAY-02 Due: Operator: DCH

Sample	Project Number	Project Description	PKey	C Product	Matrix	Stat	DA	Workdate	Due date
L24060-1	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-10	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	09-MAY-02	07-AUG-02
L24060-11	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	09-MAY-02	07-AUG-02
L24060-12	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	09-MAY-02	07-AUG-02
L24060-13	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-14	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-15	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-16	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-17	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-18	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-2	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-3	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-4	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-5	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-6	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-7	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	08-MAY-02	06-AUG-02
L24060-8	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	09-MAY-02	07-AUG-02
L24060-9	423457	North Outfall Siting Study	S	TOTS	SHELLFISH	DONE	I	09-MAY-02	07-AUG-02
L24380-1	421298A	SLUDGE CHARACTERIZATION	S	TOTS	SLUDGE	DONE	U	28-MAY-02	27-JUL-02
L24380-2	421298A	SLUDGE CHARACTERIZATION	S	TOTS	SLUDGE	DONE	U	28-MAY-02	27-JUL-02

Comments:

- L24060-1 Zone 7N, sample 1, edible tissue
- L24060-10 Zone 6, sample 2, whole body
- L24060-11 Zone 6, sample 3, edible tissue
- L24060-12 Zone 6, sample 3, whole body
- L24060-13 Zone 7S, sample 1, edible tissue
- L24060-14 Zone 7S, sample 1, whole body
- L24060-15 Zone 7S, sample 2, edible tissue
- L24060-16 Zone 7S, sample 2, whole body
- L24060-17 Zone 7S, sample 3, edible tissue
- L24060-18 Zone 7S, sample 3, whole body
- L24060-2 Zone 7N, sample 1, whole body
- L24060-3 Zone 7N, sample 2, edible tissue
- L24060-4 Zone 7N, sample 2, whole body
- L24060-5 Zone 7N, sample 3, edible tissue
- L24060-6 Zone 7N, sample 3, whole body
- L24060-7 Zone 6, sample 1, edible tissue
- L24060-8 Zone 6, sample 1, whole body
- L24060-9 Zone 6, sample 2, edible tissue
- L24380-1 Primary Raw Sludge
- L24380-2 Primary Raw Sludge

✓ Cal-91542

KING COUNTY METRO ENVIRONMENTAL LABORATORY  
 Lab QC Report - 09/09/02 11:46  
 Run ID: R80786 Workgroup: W662101 (IW Compliance, Geoduck Bleder Blanks)

SRM	Matrix	WTR	Listtype	MTHG-MTD	Method	EPA 245.2 (06-01-004-003)	Project	PKey	STD
Parameter	Mdl	Rdl	Units	SampValue	TrueValue	SRM Value	% Rec.	Qual	Limits
Mercury, Total, CVAA	.00005	.00015	mg/L	0.00159	0.0016	104	104	80-120	RPD/RSD Qual Limits
MB:W662101-2	Matrix: BLANK WTR	Listtype: MTHG-MTD	Method: EPA 245.2 (06-01-004-003)	Project: STD					
Parameter	Mdl	Rdl	Units	MB Value	Qual				
Mercury, Total, CVAA	.00005	.00015	mg/L	<MDL					
SB:W662101-3	Matrix: BLANK WTR	Listtype: MTHG-MTD	Method: EPA 245.2 (06-01-004-003)	Project: STD					
Parameter	Mdl	Rdl	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	Limits
Mercury, Total, CVAA	.00005	.00015	mg/L	<MDL	0.0005	.000541	108	85-115	
LD:W662101-4	Matrix: IW WTR	Listtype: MTHG-MTD	Method: EPA 245.2 (06-01-004-003)	Project: STD					
Parameter	Mdl	Rdl	Units	SampValue	TrueValue	LD Value	% Rec.	Qual	Limits
Mercury, Total, CVAA	.000056	.000167	mg/L			.00016			20
MS:W662101-5	Matrix: IW WTR	Listtype: MTHG-MTD	Method: EPA 245.2 (06-01-004-003)	Project: STD					
Parameter	Mdl	Rdl	Units	SampValue	TrueValue	MS Value	% Rec.	Qual	Limits
Mercury, Total, CVAA	.000056	.000167	mg/L			.00054	82	80-120	

METRO Environmental Laboratory

WORK GROUP REPORT (wk02)

Sep 09 2002, 11:43 am

Work Group: WG62159 (MOSS Geoducks) for Department: 6 - Metals, Trace

Created: 20-MAY-02 Due: Operator: E. Salnick

Sample	Project Number	Project Description	PKey C	Product	Matrix	Stat	UA	Workdate	Duedate
L24060-1	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-10	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	06-JUN-02	07-AUG-02
L24060-11	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	06-JUN-02	07-AUG-02
L24060-12	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	06-JUN-02	07-AUG-02
L24060-13	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-14	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-15	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-16	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-17	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-18	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-2	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-3	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-4	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-5	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-6	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	05-JUN-02	06-AUG-02
L24060-7	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	06-JUN-02	07-AUG-02
L24060-8	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	06-JUN-02	07-AUG-02
L24060-9	423457	North Outfall Siting Study	S	HG-CVAA	SHELLFISH	DONE	I	06-JUN-02	07-AUG-02

Comments:

- L24060-1 Zone 7N, sample 1, edible tissue
- L24060-10 Zone 6, sample 2, whole body
- L24060-11 Zone 6, sample 3, edible tissue
- L24060-12 Zone 6, sample 3, whole body
- L24060-13 Zone 7S, sample 1, edible tissue
- L24060-14 Zone 7S, sample 1, whole body
- L24060-15 Zone 7S, sample 2, edible tissue
- L24060-16 Zone 7S, sample 2, whole body
- L24060-17 Zone 7S, sample 3, edible tissue
- L24060-18 Zone 7S, sample 3, whole body
- L24060-2 Zone 7N, sample 1, whole body
- L24060-3 Zone 7N, sample 2, edible tissue
- L24060-4 Zone 7N, sample 2, whole body
- L24060-5 Zone 7N, sample 3, edible tissue
- L24060-6 Zone 7N, sample 3, whole body
- L24060-7 Zone 6, sample 1, edible tissue
- L24060-8 Zone 6, sample 1, whole body
- L24060-9 Zone 6, sample 2, edible tissue

*Feb 9/02*

Parameter	Mdl	Rdl	Units	MB Value	Qual	Matrix	Listtype	Method	Project	PKey	Std
Mercury, Total, CVAA	.00005	.0002	mg/L	<MDL		MB:WG62159-1	BLANK WTR	PSEP1996	06-01-004-003	STD	
Mercury, Total, CVAA	.00005	.0002	mg/L	0.005	103	SB:WG62159-2	BLANK WTR	PSEP1996	06-01-004-003	STD	
Mercury, Total, CVAA	.00005	.0002	mg/L	0.005	103	SRM:WG62159-3	SHELLFISH	PSEP1996	06-01-004-003	STD	
Mercury, Total, CVAA	.00099	.0394	mg/Kg	.27	81	LD:WG62159-4	SHELLFISH	PSEP1996	06-01-004-003	STD	
Mercury, Total, CVAA	.0037	.0149	mg/Kg	.0345	82	MS:WG62159-5	SHELLFISH	PSEP1996	06-01-004-003	STD	
Mercury, Total, CVAA	.0039	.0155	mg/Kg	.0345	82						

METRO Environmental Laboratory

WORK GROUP REPORT (wk02)

Sep 09 2002, 11:43 am

Work Group: WG62348 (05/30/02 Geoducks-Blender Blanks) for Department: 6 - Metals, Trace

Created: 31-MAY-02 Due: Operator: JG

Sample	Project Number	Project Description	PKey	C	Product	Matrix	Stat	UA	Workdate	Due date
L24060-19	423457	North Outfall Siting Study	S		AG-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-19	423457	North Outfall Siting Study	S		AS-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-19	423457	North Outfall Siting Study	S		CD-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-19	423457	North Outfall Siting Study	S		CR-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-19	423457	North Outfall Siting Study	S		CU-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-19	423457	North Outfall Siting Study	S		SE-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-19	423457	North Outfall Siting Study	S		ZN-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S		AG-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S		ZN-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S		SE-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S		AS-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S		CD-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S		CR-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S		CU-ICP	BLANK WTR	DONE	I	07-AUG-02	07-AUG-02
WG62348-1	LCS		S		ROUTINE ICP	BLANK WTR	DONE	U	31-MAY-02	
WG62348-2	MB		S		ROUTINE ICP	BLANK WTR	DONE	U	31-MAY-02	

Comments:

L24060-19 pre-homogenization blender blank  
 L24060-20 post homogenization blender blank  
 WG62348-1 QCLCS  
 WG62348-2 METHOD BLANK

✓ 1008 9/10/02

Parameter	Mdl	Rdl	Units	MB Value	Qual	Sample Value	True Value	ID Value	% Rec	Qual Limits	LT Value	% Rec	Qual Limits	RPD/RSD	Qual	Limits
MB:WG62291-1 Total Solids	.005	.01	%	<MDL												
LD:WG62291-2 Parameter Total Solids	.005	.01	%			22.3	22.3	22.3			22.3					25
LD:WG62291-3 Parameter Total Solids	.005	.01	%			3.31	3.34									20
MB:WG62291-6 Parameter Total Solids	.005	.01	%	<MDL												

METRO Environmental Laboratory

WORK GROUP REPORT (wk02)

Sep 09 2002, 11:42 am

Work Group: WG62101 (IW Compliance, Geoduck Bleder Blanks) for Department: 6 - Metals, Trace

Created: 16-MAY-02 Due: Operator: E. Salnick

Sample	Project Number	Project Description	PKey C	Product	Matrix	Stat	UA	Workdate	Due date
L24060-19	423457	North Outfall Siting Study	S	HG-CVAA	BLANK WTR	DONE	I	06-JUN-02	07-AUG-02
L24060-20	423457	North Outfall Siting Study	S	HG-CVAA	BLANK WTR	DONE	I	06-JUN-02	07-AUG-02
Comments:									
L24060-19	pre-homogenization blender blank								
L24060-20	post homogenization blender blank								

✓  
 Lab 919102

LCS:W62348-1 Matrix: BLANK WTR Listtype: MTICP Method: EPA 200.7 (06-02-004-002) Project: PKey: STD

Parameter	Mbl	Rdl	Units	Sample Value	True Value	LCS Value	% Rec. Qual	Limits	RPD/RSD	Qual	Limits
Silver, Total, ICP	.004	.02	mg/L	0.5	0.5	.538	108	80-120			
Arsenic, Total, ICP	.05	.25	mg/L	0.5	0.5	.517	103	80-120			
Cadmium, Total, ICP	.003	.015	mg/L	0.5	0.5	.518	104	80-120			
Chromium, Total, ICP	.005	.025	mg/L	0.5	0.5	.522	104	80-120			
Copper, Total, ICP	.004	.02	mg/L	0.5	0.5	.532	106	80-120			
Selenium, Total, ICP	.05	.25	mg/L	0.5	0.5	.503	101	80-120			
Zinc, Total, ICP	.005	.025	mg/L	0.5	0.5	.524	105	80-120			

MB:W62348-2 Matrix: BLANK WTR Listtype: MTICP Method: EPA 200.7 (06-02-004-002) Project: PKey: STD

Parameter	Mbl	Rdl	Units	MB Value	Qual
Silver, Total, ICP	.004	.02	mg/L	<MDL	
Arsenic, Total, ICP	.05	.25	mg/L	<MDL	
Cadmium, Total, ICP	.003	.015	mg/L	<MDL	
Chromium, Total, ICP	.005	.025	mg/L	<MDL	
Copper, Total, ICP	.004	.02	mg/L	<MDL	
Selenium, Total, ICP	.05	.25	mg/L	<MDL	
Zinc, Total, ICP	.005	.025	mg/L	<MDL	