METRO Environmental Laboratory

WORK GROUP REPORT (wk02)

Jun 21 2002, 10:15 am

Work Group: WG62688 (CS267 ~~CS#001~~ BNA) for Department: 7 - Organics, Trace

Created: 18-JUN-02 Due: Operator: GW/LM

Sample	Project Number	Project Description	PKey	C	Product	Matrix	Stat	UA	Workdate	Duedate
L24060-1	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-10	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	16-MAY-02	07-AUG-02
L24060-11	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	16-MAY-02	07-AUG-02
L24060-12	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	16-MAY-02	07-AUG-02
L24060-13	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-14	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-15	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-16	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-17	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-18	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-2	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-3	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-4	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-5	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-6	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	15-MAY-02	06-AUG-02
L24060-7	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	16-MAY-02	07-AUG-02
L24060-8	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	16-MAY-02	07-AUG-02
L24060-9	423457	North Outfall Siting Study	S		BNA	SHELLFISH	PREP	U	16-MAY-02	07-AUG-02
WG62688-1	MB		S		BNA	OTHR TISS	PREP	U	18-JUN-02	
WG62688-2	SB		S		BNA	OTHR TISS	PREP	U	18-JUN-02	
WG62688-3	MS		S		BNA	SHELLFISH	PREP	U	18-JUN-02	
WG62688-4	MSD		S		BNA	SHELLFISH	PREP	U	18-JUN-02	
WG62688-5	MS		S		BNA	SHELLFISH	PREP	U	18-JUN-02	
WG62688-6	MSD		S		BNA	SHELLFISH	PREP	U	18-JUN-02	
WG62688-7	LD		S		BNA	SHELLFISH	PREP	U	18-JUN-02	
WG62688-8	LD		S		BNA	SHELLFISH	PREP	U	18-JUN-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
WG62688-1	MB020618
WG62688-2	WG62688-1
WG62688-3	L24060-8 WHOLE
WG62688-4	WG62688-3 L24060-8 WHOLE
WG62688-5	L24060-9 EDIBLE
WG62688-6	WG62688-5 L24060-9 EDIBLE
WG62688-7	L24060-12 WHOLE
WG62688-8	L24060-11 EDIBLE

Lab 9/9/02

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 07/08/02 09:32
Run ID: R82501 Workgroup: WG62688 (CS#001 BNA)

MB:WG62688-1 Matrix: OTHR TISS Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: PKey: STD

Parameter	Mdl	Rdl	Units	MB Value	Qual
N-Nitrosodimethylamine	110	160	ug/Kg	<MDL	
Phenol	110	160	ug/Kg	<MDL	
Bis(2-Chloroethyl)Ether	16	26.7	ug/Kg	<MDL	
2-Chlorophenol	53	107	ug/Kg	<MDL	
1,3-Dichlorobenzene	16	26.7	ug/Kg	<MDL	
1,4-Dichlorobenzene	16	26.7	ug/Kg	<MDL	
1,2-Dichlorobenzene	16	26.7	ug/Kg	<MDL	
Bis(2-Chloroisopropyl)Ether	53	107	ug/Kg	<MDL	
N-Nitrosodi-N-Propylamine	27	53.3	ug/Kg	<MDL	
Hexachloroethane	27	53.3	ug/Kg	<MDL	
Nitrobenzene	27	53.3	ug/Kg	<MDL	
Isophorone	27	53.3	ug/Kg	<MDL	
2-Nitrophenol	27	53.3	ug/Kg	<MDL	
2,4-Dimethylphenol	27	53.3	ug/Kg	<MDL	
Bis(2-Chloroethoxy)Methane	27	53.3	ug/Kg	<MDL	
2,4-Dichlorophenol	27	53.3	ug/Kg	<MDL	
1,2,4-Trichlorobenzene	16	26.7	ug/Kg	<MDL	
Naphthalene	43	80	ug/Kg	<MDL	
Hexachlorobutadiene	27	53.3	ug/Kg	<MDL	
4-Chloro-3-Methylphenol	53	107	ug/Kg	<MDL	
Hexachlorocyclopentadiene	27	53.3	ug/Kg	<MDL	
2,4,6-Trichlorophenol	110	213	ug/Kg	<MDL	
2-Chloronaphthalene	16	26.7	ug/Kg	<MDL	
Acenaphthylene	16	26.7	ug/Kg	<MDL	
Dimethyl Phthalate	11	16	ug/Kg	<MDL	
2,6-Dinitrotoluene	11	21.3	ug/Kg	<MDL	
Acenaphthene	11	21.3	ug/Kg	<MDL	
2,4-Dinitrophenol	53	107	ug/Kg	<MDL	
4-Nitrophenol	53	107	ug/Kg	<MDL	
2,4-Dinitrotoluene	11	21.3	ug/Kg	<MDL	
Fluorene	16	26.7	ug/Kg	<MDL	
Diethyl Phthalate	27	53.3	ug/Kg	<MDL	
4-Chlorophenyl Phenyl Ether	16	26.7	ug/Kg	<MDL	
4,6-Dinitro-O-Cresol	53	107	ug/Kg	<MDL	
N-Nitrosodiphenylamine	27	53.3	ug/Kg	<MDL	
1,2-Diphenylhydrazine	53	107	ug/Kg	<MDL	
4-Bromophenyl Phenyl Ether	11	16	ug/Kg	<MDL	
Hexachlorobenzene	16	26.7	ug/Kg	<MDL	
Pentachlorophenol	27	53.3	ug/Kg	<MDL	
Phenanthrene	16	26.7	ug/Kg	<MDL	
Anthracene	16	26.7	ug/Kg	<MDL	
Di-N-Butyl Phthalate	27	53.3	ug/Kg	<MDL	
Fluoranthene	16	32	ug/Kg	<MDL	
Benzidine	640	1280	ug/Kg	<MDL	
Pyrene	16	26.7	ug/Kg	<MDL	
Benzyl Butyl Phthalate	16	26.7	ug/Kg	<MDL	
Benzo(a)anthracene	16	26.7	ug/Kg	<MDL	
Chrysene	16	26.7	ug/Kg	<MDL	
3,3'-Dichlorobenzidine	27	53.3	ug/Kg	<MDL	
Bis(2-Ethylhexyl)Phthalate	16	26.7	ug/Kg	<MDL	
Di-N-Octyl Phthalate	16	26.7	ug/Kg	<MDL	

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 07/08/02 09:32
Run ID: R82501 Workgroup: WG62688 (CS#001 BNA)

MB:WG62688-1 Matrix: OTHR TISS Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: PKey: STD

Parameter	Mdl	Rdl	Units	MB Value	Qual
Benzo(b)fluoranthene	43	80	ug/Kg	<MDL	
Benzo(k)fluoranthene	43	80	ug/Kg	<MDL	
Benzo(a)pyrene	27	53.3	ug/Kg	<MDL	
Indeno(1,2,3-Cd)Pyrene	27	53.3	ug/Kg	<MDL	
Dibenzo(a,h)anthracene	43	80	ug/Kg	<MDL	
Benzo(g,h,i)perylene	27	53.3	ug/Kg	<MDL	
Aniline	53	107	ug/Kg	<MDL	
Benzyl Alcohol	27	53.3	ug/Kg	<MDL	
2-Methylphenol	27	53.3	ug/Kg	<MDL	
4-Methylphenol	27	53.3	ug/Kg	<MDL	
Benzoic Acid	110	160	ug/Kg	<MDL	
4-Chloroaniline	53	107	ug/Kg	<MDL	
2-Methylnaphthalene	43	80	ug/Kg	<MDL	
2,4,5-Trichlorophenol	110	213	ug/Kg	<MDL	
2-Nitroaniline	110	160	ug/Kg	<MDL	
3-Nitroaniline	110	160	ug/Kg	<MDL	
Dibenzofuran	27	53.3	ug/Kg	<MDL	
4-Nitroaniline	110	160	ug/Kg	<MDL	
Carbazole	27	53.3	ug/Kg	<MDL	
Coprostanol	270	533	ug/Kg	<MDL	
Caffeine	5.3	26.7	ug/Kg	<MDL	

SB:WG62688-2 MB:WG62688-1 Matrix: OTHR TISS Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: PKey: STD

Parameter	Mdl	Rdl	Units	MB Value	Truevalue	SB Value	% Rec.	Qual	Limits	Truevalue	Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
Phenol	110	160	ug/Kg	<MDL	3333.3333	1750	53		26-90								35
2-Chlorophenol	53	107	ug/Kg	<MDL	3333.3333	1960	59		25-102								50
1,4-Dichlorobenzene	16	26.7	ug/Kg	<MDL	1666.6667	906	54		28-104								27
N-Nitrosodi-N-Propylamine	27	53.3	ug/Kg	<MDL	1666.6667	1020	61		41-126								38
1,2,4-Trichlorobenzene	16	26.7	ug/Kg	<MDL	1666.6667	970	58		38-107								23
4-Chloro-3-Methylphenol	53	107	ug/Kg	<MDL	3333.3333	2270	68		26-103								33
Acenaphthene	11	21.3	ug/Kg	<MDL	1666.6667	1080	65		31-137								19
4-Nitrophenol	53	107	ug/Kg	<MDL	3333.3333	2150	65		11-114								50
2,4-Dinitrotoluene	11	21.3	ug/Kg	<MDL	1666.6667	1260	75		28-89								47
Pentachlorophenol	27	53.3	ug/Kg	<MDL	3333.3333	2230	67		17-109								47
Pyrene	16	26.7	ug/Kg	<MDL	1666.6667	1800	108		35-142								36

MS:WG62688-3 MSD:WG62688-4 L24060-8 Matrix: SHELLFISH Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	MS Value	% Rec.	Qual	Limits	Truevalue	MSD Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
Phenol	210	320	ug/Kg	<MDL	3332.2667	1960	59		26-90	3333.3333	2110	63		26-90	7		35
2-Chlorophenol	110	213	ug/Kg	<MDL	3332.2667	1990	60		25-102	3333.3333	2280	68		25-102	13		50
1,4-Dichlorobenzene	32	53.3	ug/Kg	<MDL	1666.1333	779	47		28-104	1666.6667	759	46		28-104	2		27
N-Nitrosodi-N-Propylamine	53	107	ug/Kg	<MDL	1666.1333	1180	71		41-126	1666.6667	1240	74		41-126	4		38
1,2,4-Trichlorobenzene	32	53.3	ug/Kg	<MDL	1666.1333	1010	61		38-107	1666.6667	1060	64		38-107	5		23
4-Chloro-3-Methylphenol	110	213	ug/Kg	<MDL	3332.2667	2950	89		26-103	3333.3333	2870	86		26-103	3		33
Acenaphthene	21	42.7	ug/Kg	<MDL	1666.1333	1250	75		31-137	1666.6667	1250	75		31-137	0		19

MS:WG62688-3 MSD:WG62688-4 L24060-8 Matrix: SHELLFISH Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	MS Value	% Rec.	Qual	Limits	Truevalue	MSD Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
4-Nitrophenol	110	213	ug/Kg	<MDL	3332.2667	5330	160	*	11-114	3333.3333	4520	135	*	11-114	17		50
2,4-Dinitrotoluene	21	42.7	ug/Kg	<MDL	1666.1333	1240	75		28-89	1666.6667	1260	76		28-89	1		47
Pentachlorophenol	53	107	ug/Kg	<MDL	3332.2667	2670	80		17-109	3333.3333	2600	78		17-109	3		47
Pyrene	32	53.3	ug/Kg	<MDL	1666.1333	1310	78		35-142	1666.6667	1180	71		35-142	9		36

MS:WG62688-5 MSD:WG62688-6 L24060-9 Matrix: SHELLFISH Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	MS Value	% Rec.	Qual	Limits	Truevalue	MSD Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
Phenol	210	320	ug/Kg	<MDL	3332.2667	2270	68		26-90	3332.2667	2170	65		26-90	5		35
2-Chlorophenol	110	213	ug/Kg	<MDL	3332.2667	2470	74		25-102	3332.2667	2380	71		25-102	4		50
1,4-Dichlorobenzene	32	53.3	ug/Kg	<MDL	1666.1333	961	58		28-104	1666.1333	683	41		28-104	34	*	27
N-Nitrosodi-N-Propylamine	53	107	ug/Kg	<MDL	1666.1333	1220	73		41-126	1666.1333	1150	69		41-126	6		38
1,2,4-Trichlorobenzene	32	53.3	ug/Kg	<MDL	1666.1333	1260	76		38-107	1666.1333	1150	69		38-107	10		23
4-Chloro-3-Methylphenol	110	213	ug/Kg	<MDL	3332.2667	3260	98		26-103	3332.2667	3330	100		26-103	2		33
Acenaphthene	21	42.7	ug/Kg	<MDL	1666.1333	1340	80		31-137	1666.1333	1340	80		31-137	0		19
4-Nitrophenol	110	213	ug/Kg	<MDL	3332.2667	2670	80		11-114	3332.2667	2680	80		11-114	0		50
2,4-Dinitrotoluene	21	42.7	ug/Kg	<MDL	1666.1333	1440	87		28-89	1666.1333	1520	91	*	28-89	4		47
Pentachlorophenol	53	107	ug/Kg	<MDL	3332.2667	2690	81		17-109	3332.2667	2480	74		17-109	9		47
Pyrene	32	53.3	ug/Kg	<MDL	1666.1333	1310	79		35-142	1666.1333	1230	74		35-142	7		36

LD:WG62688-7 L24060-12 Matrix: SHELLFISH Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	LD Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
N-Nitrosodimethylamine	210	320	ug/Kg	<MDL		<MDL						100
Phenol	210	320	ug/Kg	<MDL		<MDL						100
Bis(2-Chloroethyl)Ether	32	53.3	ug/Kg	<MDL		<MDL						100
2-Chlorophenol	110	213	ug/Kg	<MDL		<MDL						100
1,3-Dichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
1,4-Dichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
1,2-Dichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
Bis(2-Chloroisopropyl)Ether	110	213	ug/Kg	<MDL		<MDL						100
N-Nitrosodi-N-Propylamine	53	107	ug/Kg	<MDL		<MDL						100
Hexachloroethane	53	107	ug/Kg	<MDL		<MDL						100
Nitrobenzene	53	107	ug/Kg	<MDL		<MDL						100
Isophorone	53	107	ug/Kg	<MDL		<MDL						100
2-Nitrophenol	53	107	ug/Kg	<MDL		<MDL						100
2,4-Dimethylphenol	53	107	ug/Kg	<MDL		<MDL						100
Bis(2-Chloroethoxy)Methane	53	107	ug/Kg	<MDL		<MDL						100
2,4-Dichlorophenol	53	107	ug/Kg	<MDL		<MDL						100
1,2,4-Trichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
Naphthalene	85	160	ug/Kg	<MDL		<MDL						100
Hexachlorobutadiene	53	107	ug/Kg	<MDL		<MDL						100
4-Chloro-3-Methylphenol	110	213	ug/Kg	<MDL		<MDL						100
Hexachlorocyclopentadiene	53	107	ug/Kg	<MDL		<MDL						100
2,4,6-Trichlorophenol	210	427	ug/Kg	<MDL		<MDL						100
2-Chloronaphthalene	32	53.3	ug/Kg	<MDL		<MDL						100
Acenaphthylene	32	53.3	ug/Kg	<MDL		<MDL						100

LD:WG62688-7 L24060-12 Matrix: SHELLFISH Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	LD Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
Dimethyl Phthalate	21	32	ug/Kg	<MDL		<MDL						100
2,6-Dinitrotoluene	21	42.7	ug/Kg	<MDL		<MDL						100
Acenaphthene	21	42.7	ug/Kg	<MDL		<MDL						100
2,4-Dinitrophenol	110	213	ug/Kg	<MDL		<MDL						100
4-Nitrophenol	110	213	ug/Kg	<MDL		<MDL						100
2,4-Dinitrotoluene	21	42.7	ug/Kg	<MDL		<MDL						100
Fluorene	32	53.3	ug/Kg	<MDL		<MDL						100
Diethyl Phthalate	53	107	ug/Kg	<MDL		<MDL						100
4-Chlorophenyl Phenyl Ether	32	53.3	ug/Kg	<MDL		<MDL						100
4,6-Dinitro-O-Cresol	110	213	ug/Kg	<MDL		<MDL						100
N-Nitrosodiphenylamine	53	107	ug/Kg	<MDL		<MDL						100
1,2-Diphenylhydrazine	110	213	ug/Kg	<MDL		<MDL						100
4-Bromophenyl Phenyl Ether	21	32	ug/Kg	<MDL		<MDL						100
Hexachlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
Pentachlorophenol	53	107	ug/Kg	<MDL		<MDL						100
Phenanthrene	32	53.3	ug/Kg	<MDL		<MDL						100
Anthracene	32	53.3	ug/Kg	<MDL		<MDL						100
Di-N-Butyl Phthalate	53	107	ug/Kg	<MDL		<MDL						100
Fluoranthene	32	64	ug/Kg	<MDL		<MDL						100
Benzidine	1300	2560	ug/Kg	<MDL		<MDL						100
Pyrene	32	53.3	ug/Kg	<MDL		<MDL						100
Benzyl Butyl Phthalate	32	53.3	ug/Kg	<MDL		<MDL						100
Benzo(a)anthracene	32	53.3	ug/Kg	<MDL		<MDL						100
Chrysene	32	53.3	ug/Kg	<MDL		<MDL						100
3,3'-Dichlorobenzidine	53	107	ug/Kg	<MDL		<MDL						100
Bis(2-Ethylhexyl)Phthalate	32	53.3	ug/Kg	78		102				27		100
Di-N-Octyl Phthalate	32	53.3	ug/Kg	<MDL		<MDL						100
Benzo(b)fluoranthene	85	160	ug/Kg	<MDL		<MDL						100
Benzo(k)fluoranthene	85	160	ug/Kg	<MDL		<MDL						100
Benzo(a)pyrene	53	107	ug/Kg	<MDL		<MDL						100
Indeno(1,2,3-Cd)Pyrene	53	107	ug/Kg	<MDL		<MDL						100
Dibenzo(a,h)anthracene	85	160	ug/Kg	<MDL		<MDL						100
Benzo(g,h,i)perylene	53	107	ug/Kg	<MDL		<MDL						100
Aniline	110	213	ug/Kg	<MDL		<MDL						100
Benzyl Alcohol	53	107	ug/Kg	<MDL		<MDL						100
2-Methylphenol	53	107	ug/Kg	<MDL		<MDL						100
4-Methylphenol	53	107	ug/Kg	<MDL		<MDL						100
Benzoic Acid	210	320	ug/Kg	11000		10300				7		100
4-Chloroaniline	110	213	ug/Kg	<MDL		<MDL						100
2-Methylnaphthalene	85	160	ug/Kg	<MDL		<MDL						100
2,4,5-Trichlorophenol	210	427	ug/Kg	<MDL		<MDL						100
2-Nitroaniline	210	320	ug/Kg	<MDL		<MDL						100
3-Nitroaniline	210	320	ug/Kg	<MDL		<MDL						100
Dibenzofuran	53	107	ug/Kg	<MDL		<MDL						100
4-Nitroaniline	210	320	ug/Kg	<MDL		<MDL						100
Carbazole	53	107	ug/Kg	<MDL		<MDL						100
Coprostanol	530	1070	ug/Kg	<MDL		<MDL						100
Caffeine	11	53.3	ug/Kg	<MDL		<MDL						100

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 07/08/02 09:33
Run ID: R82501 Workgroup: WG62688 (CS#001 BNA)

LD:WG62688-8 L24060-11 Matrix: SHELLFISH Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	LD Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
N-Nitrosodimethylamine	210	320	ug/Kg	<MDL		<MDL						100
Phenol	210	320	ug/Kg	<MDL		<MDL						100
Bis(2-Chloroethyl)Ether	32	53.3	ug/Kg	<MDL		<MDL						100
2-Chlorophenol	110	213	ug/Kg	<MDL		<MDL						100
1,3-Dichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
1,4-Dichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
1,2-Dichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
Bis(2-Chloroisopropyl)Ether	110	213	ug/Kg	<MDL		<MDL						100
N-Nitrosodi-N-Propylamine	53	107	ug/Kg	<MDL		<MDL						100
Hexachloroethane	53	107	ug/Kg	<MDL		<MDL						100
Nitrobenzene	53	107	ug/Kg	<MDL		<MDL						100
Isophorone	53	107	ug/Kg	<MDL		<MDL						100
2-Nitrophenol	53	107	ug/Kg	<MDL		<MDL						100
2,4-Dimethylphenol	53	107	ug/Kg	<MDL		<MDL						100
Bis(2-Chloroethoxy)Methane	53	107	ug/Kg	<MDL		<MDL						100
2,4-Dichlorophenol	53	107	ug/Kg	<MDL		<MDL						100
1,2,4-Trichlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
Naphthalene	85	160	ug/Kg	<MDL		<MDL						100
Hexachlorobutadiene	53	107	ug/Kg	<MDL		<MDL						100
4-Chloro-3-Methylphenol	110	213	ug/Kg	<MDL		<MDL						100
Hexachlorocyclopentadiene	53	107	ug/Kg	<MDL		<MDL						100
2,4,6-Trichlorophenol	210	427	ug/Kg	<MDL		<MDL						100
2-Chloronaphthalene	32	53.3	ug/Kg	<MDL		<MDL						100
Acenaphthylene	32	53.3	ug/Kg	<MDL		<MDL						100
Dimethyl Phthalate	21	32	ug/Kg	<MDL		<MDL						100
2,6-Dinitrotoluene	21	42.7	ug/Kg	<MDL		<MDL						100
Acenaphthene	21	42.7	ug/Kg	<MDL		<MDL						100
2,4-Dinitrophenol	110	213	ug/Kg	<MDL		<MDL						100
4-Nitrophenol	110	213	ug/Kg	<MDL		<MDL						100
2,4-Dinitrotoluene	21	42.7	ug/Kg	<MDL		<MDL						100
Fluorene	32	53.3	ug/Kg	<MDL		<MDL						100
Diethyl Phthalate	53	107	ug/Kg	<MDL		<MDL						100
4-Chlorophenyl Phenyl Ether	32	53.3	ug/Kg	<MDL		<MDL						100
4,6-Dinitro-O-Cresol	110	213	ug/Kg	<MDL		<MDL						100
N-Nitrosodiphenylamine	53	107	ug/Kg	<MDL		<MDL						100
1,2-Diphenylhydrazine	110	213	ug/Kg	<MDL		<MDL						100
4-Bromophenyl Phenyl Ether	21	32	ug/Kg	<MDL		<MDL						100
Hexachlorobenzene	32	53.3	ug/Kg	<MDL		<MDL						100
Pentachlorophenol	53	107	ug/Kg	<MDL		<MDL						100
Phenanthrene	32	53.3	ug/Kg	<MDL		<MDL						100
Anthracene	32	53.3	ug/Kg	<MDL		<MDL						100
Di-N-Butyl Phthalate	53	107	ug/Kg	<MDL		<MDL						100
Fluoranthene	32	64	ug/Kg	<MDL		<MDL						100
Benzidine	1300	2560	ug/Kg	<MDL		<MDL						100
Pyrene	32	53.3	ug/Kg	<MDL		<MDL						100
Benzyl Butyl Phthalate	32	53.3	ug/Kg	<MDL		<MDL						100
Benzo(a)anthracene	32	53.3	ug/Kg	<MDL		<MDL						100
Chrysene	32	53.3	ug/Kg	<MDL		<MDL						100
3,3'-Dichlorobenzidine	53	107	ug/Kg	<MDL		<MDL						100
Bis(2-Ethylhexyl)Phthalate	32	53.3	ug/Kg	78.3		106				30		100
Di-N-Octyl Phthalate	32	53.3	ug/Kg	<MDL		<MDL						100

LD:WG62688-8 L24060-11 Matrix: SHELLFISH Listtype: ORBNA Method: EPA 3550B/8270C (7-3-01-004) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	LD Value	% Rec.	Qual	Limits	RPD/RSD	Qual	Limits
Benzo(b)fluoranthene	85	160	ug/Kg	<MDL		<MDL						100
Benzo(k)fluoranthene	85	160	ug/Kg	<MDL		<MDL						100
Benzo(a)pyrene	53	107	ug/Kg	<MDL		<MDL						100
Indeno(1,2,3-Cd)Pyrene	53	107	ug/Kg	<MDL		<MDL						100
Dibenzo(a,h)anthracene	85	160	ug/Kg	<MDL		<MDL						100
Benzo(g,h,i)perylene	53	107	ug/Kg	<MDL		<MDL						100
Aniline	110	213	ug/Kg	<MDL		<MDL						100
Benzyl Alcohol	53	107	ug/Kg	<MDL		<MDL						100
2-Methylphenol	53	107	ug/Kg	<MDL		<MDL						100
4-Methylphenol	53	107	ug/Kg	<MDL		<MDL						100
Benzoic Acid	210	320	ug/Kg	510		508				0		100
4-Chloroaniline	110	213	ug/Kg	<MDL		<MDL						100
2-Methylnaphthalene	85	160	ug/Kg	<MDL		<MDL						100
2,4,5-Trichlorophenol	210	427	ug/Kg	<MDL		<MDL						100
2-Nitroaniline	210	320	ug/Kg	<MDL		<MDL						100
3-Nitroaniline	210	320	ug/Kg	<MDL		<MDL						100
Dibenzofuran	53	107	ug/Kg	<MDL		<MDL						100
4-Nitroaniline	210	320	ug/Kg	<MDL		<MDL						100
Carbazole	53	107	ug/Kg	<MDL		<MDL						100
Coprostanol	530	1070	ug/Kg	<MDL		<MDL						100
Caffeine	11	53.3	ug/Kg	<MDL		<MDL						100

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 07/08/02 09:33
Run ID: R82501 Workgroup: WG62688 (CS#001 BNA)

Sample #	2-Fluorophenol	d5-Phenol	d5-Nitrobenzene	d4-2-Chlorophenol	d4-1,2-Dichlorobenzene	2-Fluorobiphenyl	2,4,6-Tribromophenol	d14-Terphenyl
	25-121	24-113	23-120	20-130	20-130	30-115	19-122	18-137
L24060-1	78	78	72	85	68	89	93	102
L24060-10	68	75	63	77	52	85	96	107
L24060-11	74	76	64	82	59	85	100	88
L24060-12	64	69	64	71	56	77	79	81
L24060-13	77	78	71	86	69	89	98	93
L24060-14	80	83	73	87	68	93	96	57
L24060-15	72	77	63	82	59	87	100	97
L24060-16	76	82	70	85	59	89	110	114
L24060-17	86	85	77	95	70	98	110	106
L24060-18	72	77	69	79	58	88	104	112
L24060-2	73	79	67	80	61	88	96	112
L24060-3	80	82	70	89	68	89	95	103
L24060-4	71	75	64	78	58	89	106	119
L24060-5	77	79	69	86	63	89	97	102
L24060-6	62	69	57	70	46	84	98	102
L24060-7	84	86	73	92	68	95	106	104
L24060-8	76	79	69	83	61	89	98	111
L24060-9	75	73	65	82	63	83	97	90
WG62688-1	54	55	53	58	52	62	53	105
WG62688-2	59	56	57	62	55	65	70	97
WG62688-3	57	65	58	65	50	78	92	111
WG62688-4	71	74	68	79	57	87	94	111
WG62688-5	72	73	65	80	60	84	97	101
WG62688-6	71	72	67	81	61	88	103	101
WG62688-7	80	83	78	85	67	93	92	68
WG62688-8	67	72	59	75	53	83	97	91

METRO Environmental Laboratory

WORK GROUP REPORT (wk02)

Aug 30 2002, 09:58 am

Work Group: WG63880 (BU#65-tributyltin) for Department: 7 - Organics, Trace

Created: 19-AUG-02 Due: Operator: lm/gw

A/M 9/5/02 M

mple	Project Number	Project Description	PKey	C	Product	Matrix	Stat	UA	Workdate	Duedate
4060-1	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-10	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	07-AUG-02	07-AUG-02
4060-11	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	07-AUG-02	07-AUG-02
4060-12	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	07-AUG-02	07-AUG-02
4060-13	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-14	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-15	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-16	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-17	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-18	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-2	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-3	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-4	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-5	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-6	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	06-AUG-02	06-AUG-02
4060-7	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	07-AUG-02	07-AUG-02
4060-8	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	07-AUG-02	07-AUG-02
4060-9	423457	North Outfall Siting Study	S		TRIBUTYLTIN	SHELLFISH	PREP	U	07-AUG-02	07-AUG-02
63880-1	MB		S		TRIBUTYLTIN	OTHR TISS	PREP	U	19-AUG-02	
63880-2	SB		S		TRIBUTYLTIN	OTHR TISS	PREP	U	19-AUG-02	
63880-5	MS		S		TRIBUTYLTIN	SHELLFISH	PREP	U	19-AUG-02	
63880-6	MSD		S		TRIBUTYLTIN	SHELLFISH	PREP	U	19-AUG-02	
63880-7	LD		S		TRIBUTYLTIN	SHELLFISH	PREP	U	19-AUG-02	

mments:

4060-1	Zone 7N, sample 1, edible tissue
4060-10	Zone 6, sample 2, whole body
4060-11	Zone 6, sample 3, edible tissue
4060-12	Zone 6, sample 3, whole body
4060-13	Zone 7S, sample 1, edible tissue
4060-14	Zone 7S, sample 1, whole body
4060-15	Zone 7S, sample 2, edible tissue
4060-16	Zone 7S, sample 2, whole body
4060-17	Zone 7S, sample 3, edible tissue
4060-18	Zone 7S, sample 3, whole body
4060-2	Zone 7N, sample 1, whole body
4060-3	Zone 7N, sample 2, edible tissue
4060-4	Zone 7N, sample 2, whole body
4060-5	Zone 7N, sample 3, edible tissue
4060-6	Zone 7N, sample 3, whole body
4060-7	Zone 6, sample 1, edible tissue
4060-8	Zone 6, sample 1, whole body
4060-9	Zone 6, sample 2, edible tissue
63880-1	MB021908
63880-2	WG63880-1
63880-5	L24060-13
63880-6	WG63880-5 L24060-13
63880-7	L24060-12

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 08/30/02 10:00
Run ID: R84531 Workgroup: WG63880 (BU#65-tributyltin)

Kab 9/9/02 A/M 9/5/02

MB:WG63880-1 Matrix: OTHR TISS Listtype: ORBUTYLTIN Method: KRONE 1989 (07-03-012-000) Project: PKey: STD

Parameter	Mdl	Rdl	Units	MB Value	Qual
Mono-n-Butyltin (as monobutylt	25	50	ug/Kg	<MDL	
Di-n-Butyltin (as dibutyltin i	25	50	ug/Kg	<MDL	
Tri-n-Butyltin (as tributyltin	25	50	ug/Kg	<MDL	
Tetra-n-Butyltin (as tetrabuty	25	50	ug/Kg	<MDL	

SB:WG63880-2 MB:WG63880-1 Matrix: OTHR TISS Listtype: ORBUTYLTIN Method: KRONE 1989 (07-03-012-000) Project: PKey: STD

Parameter	Mdl	Rdl	Units	MB Value	Truevalue	SB Value	% Rec	Qual	Limits	Truevalue	Value	% Rec	Qual	Limits	RPD/RSD	Qual	Limits
Mono-n-Butyltin (as monobutylt	2.5	5	ug/Kg	<MDL	62.4	75.5	121		50-150								100
Di-n-Butyltin (as dibutyltin i	2.5	5	ug/Kg	<MDL	76.8	7.88	10	*	50-150								100
Tri-n-Butyltin (as tributyltin	2.5	5	ug/Kg	<MDL	89.1	68	76		50-150								100
Tetra-n-Butyltin (as tetrabuty	2.5	5	ug/Kg	<MDL	100	63.7	64		50-150								100

MS:WG63880-5 MSD:WG63880-6 L24060-13 Matrix: SHELLFISH Listtype: ORBUTYLTIN Method: KRONE 1989 (07-03-012-000) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	MS Value	% Rec	Qual	Limits	Truevalue	MSD Value	% Rec	Qual	Limits	RPD/RSD	Qual	Limits
Mono-n-Butyltin (as monobutylt	2.5	5	ug/Kg	<MDL	62.4	28.6	46	*	50-150	62.4	24.7	40	*	50-150	14		100
Di-n-Butyltin (as dibutyltin i	2.5	5	ug/Kg	<MDL	76.8	53.6	70		50-150	76.8	53.5	70		50-150	0		100
Tri-n-Butyltin (as tributyltin	2.5	5	ug/Kg	<MDL	89.1	80.9	91		50-150	89.1	81	91		50-150	0		100
Tetra-n-Butyltin (as tetrabuty	2.5	5	ug/Kg	<MDL	100	80.9	81		50-150	100	81.8	82		50-150	1		100

LD:WG63880-7 L24060-12 Matrix: SHELLFISH Listtype: ORBUTYLTIN Method: KRONE 1989 (07-03-012-000) Project: 423457 PKey: STD

Parameter	Mdl	Rdl	Units	SampValue	Truevalue	LD Value	% Rec	Qual	Limits	RPD/RSD	Qual	Limits
Mono-n-Butyltin (as monobutylt	25	50	ug/Kg	<MDL		<MDL						100
Di-n-Butyltin (as dibutyltin i	25	50	ug/Kg	<MDL		<MDL						100
Tri-n-Butyltin (as tributyltin	25	50	ug/Kg	<MDL		<MDL						100
Tetra-n-Butyltin (as tetrabuty	25	50	ug/Kg	<MDL		<MDL						100