A/M
10/18/06

King County Environmental Laboratory

WORK GROUP REPORT (wk02)

Oct 10 2006, 10:59 am

Work Group: WG88463 (PHPAHWIPE) for Department: 7 - Organics, Trace

Created: 10-OCT-06 PrepDate: 10-OCT-06 Due: Operator: MCD

Sample	Project Number	Project Description	PKey	C	Product	Matrix		Stat	Un	Workdate	Duedate
L40468-10	423589-090-1	Lower Duwamish Phthalate Studies		S	PHPAHWIPE	OTHR	SOLID	WKGP	U	12-OCT-06	28-OCT-06
L40468-6	423589-090-1	Lower Duwamish Phthalate Studies		S	PHPAHWIPE	OTHR	SOLID	WKGP	U	12-OCT-06	28-OCT-06
L40468-7	423589-090-1	Lower Duwamish Phthalate Studies		S	PHPAHWIPE	OTHR	SOLID	WKGP	U	12-OCT-06	28-OCT-06
L40468-8	423589-090-1	Lower Duwamish Phthalate Studies		S	PHPAHWIPE	OTHR	SOLID	WKGP	U	12-OCT-06	28-OCT-06
L40468-9	423589-090-1	Lower Duwamish Phthalate Studies		S	PHPAHWIPE	OTHR	SOLID	WKGP	U	12-OCT-06	28-OCT-06
L40479-2	423589-090-1	Lower Duwamish Phthalate Studies		S	PHPAHWIPE	OTHR	SOLID	WKGP	U	11-OCT-06	27-OCT-06
WG88463-1	MB			S	PHPAHWIPE	OTHR	SOLID	WKGP	U	10-OCT-06	

Comments:

L40468-10	wipes
L40468-6	wipes
L40468-7	wipes
L40468-8	wipes
L40468-9	wipes
L40479-2	wipe blank
WG88463-1	EXTRACTION BLANK 10-OCT-06

KCSlip4 58673

SEA424972

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 10/11/06 08:17
Run ID: R116662 Workgroup: WG88463 (PHPAHWIPE)

AM 10/18/06

MB:WG88463-1 Matrix: OTHR SOLID Listtype: ORPHPAHWIPE Method: 8270D-WIPETEST Project: 423589-090+1 Pkey: STD
(Method Blank)

Parameter	Mdl	Rdl	Units	MB Value	Qual
Naphthalene	.02	.04	ug	<MDL	
Acenaphthylene	.01	.02	ug	<MDL	
Dimethyl Phthalate	.05	.1	ug	<MDL	
Acenaphthene	.01	.02	ug	<MDL	
Fluorene	.01	.02	ug	<MDL	
Diethyl Phthalate	.05	.1	ug	<MDL	
Phenanthrene	.01	.02	ug	<MDL	
Anthracene	.01	.02	ug	<MDL	
Di-N-Butyl Phthalate	.05	.1	ug	.2	B
Fluoranthene	.01	.02	ug	<MDL	
Pyrene	.01	.02	ug	<MDL	
Benzyl Butyl Phthalate	.05	.1	ug	<MDL	
Benzo(a)anthracene	.01	.02	ug	<MDL	
Chrysene	.01	.02	ug	<MDL	
Bis(2-Ethylhexyl)Phthalate	.05	.1	ug	<MDL	
Di-N-Octyl Phthalate	.05	.1	ug	<MDL	
Benzo(b)fluoranthene	.02	.04	ug	<MDL	
Benzo(k)fluoranthene	.02	.04	ug	<MDL	
Benzo(a)pyrene	.02	.04	ug	<MDL	
Indeno(1,2,3-Cd)Pyrene	.02	.04	ug	<MDL	
Dibenzo(a,h)anthracene	.02	.04	ug	<MDL	
Benzo(g,h,i)perylene	.02	.04	ug	<MDL	
2-Methylnaphthalene	.01	.02	ug	<MDL	

X3 = .6 "B"

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KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 10/11/06 08:17
Run ID: R116662 Workgroup: WG88463 (PHPAHWIPE)

Sample #	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	30-115	18-137
L40468-6	32	123
L40468-7	13 *	117
L40468-8	87	135
L40468-9	46	134
L40468-10	93	131
L40479-2	38	136
WG88463-1	2 *	126

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SOLID AND TISSUE SAMPLE EXTRACTION RECORD FOR BNA ANALYSIS
TRACE ORGANICS LABORATORY

QC BATCH NO.: BS

1:1 Acetone:MeCl2

EPA SW-846 EXTRACTION METHOD:

SONICATION EPA 3550 SOXHLET EPA 3540

WORKGROUP NO.: WG88463 - PAH PHTHWIPE, WG88464 - PCBWIPE

BNA SURROGATE SPIKE I.D.#:

BNA MATRIX SPIKE I.D.#:

Coprostanol:

Caffeine:

Date/ Analyst	Sample Number	Project Number	Sample Description	coc	Init. Amt (g)	Spike Amount (uL)	Vf (mL)	Clean ups (GPC)	Conc. Anal.	Turn Over Date	Comments
10/10/06	WG88463-1		Extraction			50 BNA	1mL	AL	MMO	10/10/06	Samples conc
	WG88464-1		BLANK			25 PCB					to 1 mL
	L40429-2		FUNNEL BLANK								split for
	L40468-2		FUNNEL WIPES								BNA/PCB
DOUBLED SPIKED	SURROGATES		(100 uL)								0.5 mL BNA
	-8										0.5 mL PCB
	-9										
	-10										

(1) Filter paper MeCl2 rinsed

(2) Funnels wiped X2 with MeCl2 soaked filter paper

(3) BNA/PCB surrogates added / samples extracted X3 with 50 mL MeCl2 on sonic bath and conc to 1 mL

(4) 0.5 BNA analysis / 0.5 mL exchanged to hex for AL cleanup and conc to 0.5 mL for PCB analysis

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```
        Comment:
       Operator:
      Data Path: C:\MSDChem\1\data\061010\
Top                    Pre-Seq Cmd:
Instrument Control     Pre-Seq Cmd:
Data Analysis          Pre-Seq Cmd:

Top                   Post-Seq Cmd:
Instrument Control    Post-Seq Cmd:
Data Analysis         Post-Seq Cmd:

   Method Sections To Run      On A Barcode Mismatch
     (X) Full Method             (X) Inject Anyway
     ( ) Reprocessing Only       ( ) Don't Inject

   ----------------------------------------------------------------------
   Line                     Sample Name/Misc Info
 1)  Tune            3  DFTPP-1  DFTPP     10 NG/UL DFTPP MIX
 2)  Sample          4  CCALI-01 8270B1    SS#1263 D 6.00 PPM BNA STD
 3)  Sample          5  CEDC-01  8270BEDC  SS#1190 B 10.0 PPM EDC STD
 4)  Inst. Blk       2  BLANK-01 8270B1    MECL2
 5) Blank            6
     Datafile           WG88463-1
     Method             8270B1
 6)  Blank           7  L40479-2 8270B1    L40479-2 FUNNEL WIPE BLANK
 7)  Sample          8  L40468-6 8270B1    L40468-6 FUNNEL WIPE
 8)  Sample          9  L40468-7 8270B1    L40468-7 FUNNEL WIPE
 9)  Sample         10  L40468-8 8270B1    L40468-8 FUNNEL WIPE
10)  Sample         11  L40468-9 8270B1    L40468-9 FUNNEL WIPE
11) Sample          12
     Datafile           L40468-10
     Method             8270B1
12)  Tune           3  DFTPP-2  DFTPP     10 NG/UL DFTPP MIX
13)  Sample         4  CCALI-02 8270B1    SS#1263 D 6.00 PPM BNA STD
14)  Sample         5  CEDC-02  8270BEDC  SS#1190 B 10.0 PPM EDC STD
15)  Inst. Blk      2  BLANK-02 8270B1    MECL2
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Batch: \\orgizmo\EE\chem\6890j.i\061010.b

#	Smp. #	Injection Time	Wkgp. #	QC #	Project #	Sample Description	Matrix	Amount	DilFac	IS#2-RT	IS#2-Area	Method	Init Cali	Analyst
1	DFTPP-1	10-OCT-2006 11:23	SDGa0971	SDGa09		10 NG/UL DFTPP MIX	NONE	0.000	1.0	13.199	458880	DFTPP.m		M.Doubrava
2	CCALI-01	10-OCT-2006 11:56	SDGa0282	SDGa02		SS#1263 D 6.00 PPM BNA STD	SOIL	0.000	1.0	8.411	621679	8270b1.m	27-SEP-2006	M.Doubrava
3	CEDC-01	10-OCT-2006 12:42	SDGa0962	SDGa09		SS#1190 B 10.0 PPM EDC STD	WATER	0.000	1.0	8.399	850578	8270BEDC.m	15-DEC-2005	M.Doubrava
4	BLANK-01	10-OCT-2006 13:17	SDGa0282	SDGa02		MECL2	SOIL	0.000	1.0	0.000	0	8270B1.m	27-SEP-2006	M.Doubrava
5	WG88463-1	10-OCT-2006 14:03	WG88463	WIPE		WG88463-1 MB	SOIL	1.000	1.0	8.420	581163	8270b1.m	27-SEP-2006	M.Doubrava
6	L40479-2	10-OCT-2006 14:48	WG88463	WIPE		L40479-2 FUNNEL WIPE BLANK	SOIL	1.000	1.0	8.420	484217	8270b1.m	27-SEP-2006	M.Doubrava
7	L40468-6	10-OCT-2006 15:33	WG88463	WIPE		L40468-6 FUNNEL WIPE	SOIL	1.000	1.0	8.420	546371	8270b1.m	27-SEP-2006	M.Doubrava
8	L40468-7	10-OCT-2006 16:18	WG88463	WIPE		L40468-7 FUNNEL WIPE	SOIL	1.000	1.0	8.420	523189	8270b1.m	27-SEP-2006	M.Doubrava
9	L40468-8	10-OCT-2006 17:04	WG88463	WIPE		L40468-8 FUNNEL WIPE	SOIL	1.000	1.0	8.420	357382	8270b1.m	27-SEP-2006	M.Doubrava
10	L40468-9	10-OCT-2006 17:49	WG88463	WIPE		L40468-9 FUNNEL WIPE	SOIL	1.000	1.0	8.420	512717	8270b1.m	27-SEP-2006	M.Doubrava
11	L40468-10	10-OCT-2006 18:34	WG88463	WIPE		L40468-10 FUNNEL WIPE	SOIL	1.000	1.0	8.420	573059	8270b1.m	27-SEP-2006	M.Doubrava
12	DFTPP-2	10-OCT-2006 19:19	SDGa0971	SDGa09		10 NG/UL DFTPP MIX	NONE	0.000	1.0	13.195	296448	DFTPP.m		M.Doubrava
13	CCALI-02	10-OCT-2006 19:53	SDGa0282	SDGa02		SS#1263 D 6.00 PPM BNA STD	SOIL	0.000	1.0	8.411	600431	8270b1.m	27-SEP-2006	M.Doubrava
14	CEDC-02	10-OCT-2006 20:39	SDGa0962	SDGa09		SS#1190 B 10.0 PPM EDC STD	WATER	0.000	1.0	8.525	2212	8270BEDC.m	15-DEC-2005	M.Doubrava
15	BLANK-02	10-OCT-2006 21:14	SDGa0282	SDGa02		MECL2	SOIL	0.000	1.0	0.000	0	8270B1.m	27-SEP-2006	M.Doubrava

Samples: 8 **QC Samples + Misc.:** 4 **ContinuingCals:** 1 **Tunes:** 2 **Calibrations:** 0

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SEA424977

Trace Organics Data Anomaly Form

Date(s) Occurred: *06/10/01*

WG #(s): *WG88463*

☒ **All samples in WKGP(s) or Sample #(s):**

Project #(s): *423589-090-001*

Matrix: ☐ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☒ **Other:** *WIPES*

I. Analysis/Extraction

☐ BNA ☐ BNALL ☐ EDC ☐ EDC-LVI
☐ CLPESTPCB ☐ PEST ☐ PCB ☐ OPPEST
☐ VOA-GCMS ☐ NWTPH-GX ☐ NWTPH-DX ☐ NWTPH-HCID
☐ BUTYL TIN ☐ AIRTOX ☐ AIR-SULFUR
☒ Other: *PHPAHWIPE*
☐ Subcontracted:

II. Instrument

GC/ICP/MS: ☐ P
GC/MS: ☐ D ☐ E ☒ J ☐ K ☐ L ☐ M ☐ N
GC: ☐ F ECD ☐ G ECD ☐ H FID ☐ H OI4450PID/FID
☐ I FID
Extraction/Cleanup: ☐ PFE ☐ GPC
☐ Other:

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☒ Blank Contamination
2 ☐ SB/SBD Spike Recoveries
3 ☐ MS/MSD Spike Recoveries
4 ☐ LCS/SRM Recoveries
5 ☐ Initial Calibration
6 ☐ Performance Checks
7 ☐ ISTD % Differences
8 ☒ Surrogate Spike Recoveries
9 ☐ SB/SBD RPD
10 ☐ MS/MSD RPD
11 ☐ Sample/LD RPD
12 ☐ Continuing Calibration Checks
13 ☐ Tuning Criteria

14 ☐ Holding time exceeded by:
15 ☐ Insufficient sample amount.
16 ☐ Inappropriate storage, container or preservation.
17 ☐ Other

Anomaly Description:

1. WG88463-1 had a repotable level of Di-N-Butly Phthalate in the method blank. All samples were flagged "B" using the 3 times rule in accordance with project QA/QC protocols

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ORGJ_DAF061010WG88463

8. L40468-7 was doubled spiked with surrogate at 100ul instead of 50 ul. The spike recovery amount was corrected during data reduction. WG88463-1 and L40468-7 had 2-Fluorobiphenyl recovered less than the lab limit of 30%. The D14-Terphenyl reoceries were all within QA/QC limits.

IV. Type of Project Anomaly

- ☐ SAP/Work Plan specified MDLs not met.
- ☐ SAP/Work Plan specified QC frequency or QC type not met.
- ☐ SAP/Work Plan specified methodology not used.
- ☐ Sample exceeds regulatory and/or hazardous waste limits.
- ☐ Sample data results are unusual or inconsistent with expected results.
- ☐ Other

Anomaly Description:

V. Corrective Action Taken

- ☐ Sample(s) re-analyzed
- ☐ Sample(s) re-prepared and re-analyzed
- ☒ Sample(s) reported "AS IS"
- ☒ Data qualified with the following flags: *B*
- ☐ Other

Corrective Action Description:

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

- ☐ It is likely the observed anomaly influenced the reported value(s).
- ☐ It is unlikely the observed anomaly influenced the reported value(s).
- ☒ The observed anomaly may have influenced the reported value(s).
- ☐ It is unknown whether or not the observed anomaly affected the reported value(s).

Explanation: *1. The low level phthalate contamination is consistant with past workgroups. Since the project goal is detection of low level PAHs and Phthalates, the phthalate levels at or near the contamination level could be biased. 2. The low recoveries of the surrogate 2-fluorobiphenyl could be attributed to concentrating to fast during the K-D or N-EVAP step of the extraction. It is possible the lighter or front end PAHs could be biased low, however the results are comparable to previous workgroups*

	Signatures	Signature Dates
Reported By: *M. Doubrava*		10/11/06
Reviewer:		
Supervisor: *Dana Walker*	Dana M. Walker	10/16/06
QA Officer: *Colin Elliott* (For QA1 only)		
cc: LPM:		

October 11, 2006
ORGJ_DAF061010WG88463

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 10/18/06 07:27 - Data Source: ELD

Sample#: WG88463-1	Matrix:	OTHR SOLID	List Type:	ORPHPAHWIPE	
	Project:		Run ID:	R116662	Col. Date:
	Locator:	MB	Work Group:	WG88463	Rec. Date: 10-OCT-06
	Site:	NONE	QC Type:	MB	Due Date:
	Method Code:	8270D-WIPETEST			

Parameter	Value	Units	Valq	Mdl	Rdl	Textvalue
Naphthalene		ug	<MDL	.02	.04	
Acenaphthylene		ug	<MDL	.01	.02	
Dimethyl Phthalate		ug	<MDL	.05	.1	
Acenaphthene		ug	<MDL	.01	.02	
Fluorene		ug	<MDL	.01	.02	
Diethyl Phthalate		ug	<MDL	.05	.1	
Phenanthrene		ug	<MDL	.01	.02	
Anthracene		ug	<MDL	.01	.02	
Di-N-Butyl Phthalate	.2	ug	B	.05	.1	
Fluoranthene		ug	<MDL	.01	.02	
Pyrene		ug	<MDL	.01	.02	
Benzyl Butyl Phthalate		ug	<MDL	.05	.1	
Benzo(a)anthracene		ug	<MDL	.01	.02	
Chrysene		ug	<MDL	.01	.02	
Bis(2-Ethylhexyl)Phthalate		ug	<MDL	.05	.1	
Di-N-Octyl Phthalate		ug	<MDL	.05	.1	
Benzo(b)fluoranthene		ug	<MDL	.02	.04	
Benzo(k)fluoranthene		ug	<MDL	.02	.04	
Benzo(a)pyrene		ug	<MDL	.02	.04	
Indeno(1,2,3-Cd)Pyrene		ug	<MDL	.02	.04	
Dibenzo(a,h)anthracene		ug	<MDL	.02	.04	
Benzo(g,h,i)perylene		ug	<MDL	.02	.04	
2-Methylnaphthalene		ug	<MDL	.01	.02	
2-Fluorobiphenyl	.024	ug	<RDL	.02	.04	
d14-Terphenyl	1.58	ug		.02	.04	
Amount Analyzed	1	g				
Standard Amount	1	g				
Dilution Factor	1	none				
Date Analyzed						10-OCT-06
Operator ID						M.Doubrava
Porthandler File						/usr/users/seed2/METROS3/files/gcms/WG88463-1.rp
Instrument ID						6890j.i
Prep Date						10-OCT-06

SURROGATE RECOVERY INFORMATION

Parameter	% Rec	Lab Limits
2-Fluorobiphenyl	2 *	30-115
d14-Terphenyl	126	18-137

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KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 10/18/06 07:27 - Data Source: ELD

Sample#: L40479-2	Matrix:	OTHR SOLID	List Type:	ORPHPAHWIPE	
	Project:	423589-090-1	Run ID:	R116662	Col. Date: 27-SEP-06
	Locator:	BWR	Work Group:	WG88463	Rec. Date: 27-SEP-06
	Site:	METRO	QC Type:		Due Date: 27-OCT-06
	Method Code:	8270D-WIPETEST			

Parameter	Value	Units	Valq	Mdl	Rdl	Textvalue
Naphthalene		ug	<MDL	.02	.04	
Acenaphthylene		ug	<MDL	.01	.02	
Dimethyl Phthalate		ug	<MDL	.05	.1	
Acenaphthene		ug	<MDL	.01	.02	
Fluorene		ug	<MDL	.01	.02	
Diethyl Phthalate		ug	<MDL	.05	.1	
Phenanthrene		ug	<MDL	.01	.02	
Anthracene		ug	<MDL	.01	.02	
Di-N-Butyl Phthalate	.299	ug	B	.05	.1	
Fluoranthene		ug	<MDL	.01	.02	
Pyrene		ug	<MDL	.01	.02	
Benzyl Butyl Phthalate		ug	<MDL	.05	.1	
Benzo(a)anthracene		ug	<MDL	.01	.02	
Chrysene		ug	<MDL	.01	.02	
Bis(2-Ethylhexyl)Phthalate	.249	ug		.05	.1	
Di-N-Octyl Phthalate		ug	<MDL	.05	.1	
Benzo(b)fluoranthene		ug	<MDL	.02	.04	
Benzo(k)fluoranthene		ug	<MDL	.02	.04	
Benzo(a)pyrene		ug	<MDL	.02	.04	
Indeno(1,2,3-Cd)Pyrene		ug	<MDL	.02	.04	
Dibenzo(a,h)anthracene		ug	<MDL	.02	.04	
Benzo(g,h,i)perylene		ug	<MDL	.02	.04	
2-Methylnaphthalene		ug	<MDL	.01	.02	
2-Fluorobiphenyl	.471	ug		.02	.04	
d14-Terphenyl	1.7	ug		.02	.04	
Amount Analyzed	1	g				
Standard Amount	1	g				
Dilution Factor	1	none				
Date Analyzed						10-OCT-06
Operator ID						M.Doubrava
Porthandler File						/usr/users/seed2/METROS3/files/gcms/L40479-2.rp
Instrument ID						6890j.i
Prep Date						10-OCT-06

SURROGATE RECOVERY INFORMATION

Parameter	% Rec	Lab Limits
2-Fluorobiphenyl	38	30-115
d14-Terphenyl	136	18-137

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 10/18/06 07:27 - Data Source: ELD

Sample#: L40468-6	Matrix:	OTHR SOLID	List Type:	ORPHPAHWIPE	
	Project:	423589-090-1	Run ID:	R116662	Col. Date: 28-SEP-06
	Locator:	DZ	Work Group:	WG88463	Rec. Date: 28-SEP-06
	Site:	METRO	QC Type:		Due Date: 28-OCT-06
	Method Code:	8270D-WIPETEST			

Parameter	Value	Units	Valq	Mdl	Rdl	Textvalue
Naphthalene		ug	<MDL	.02	.04	
Acenaphthylene		ug	<MDL	.01	.02	
Dimethyl Phthalate		ug	<MDL	.05	.1	
Acenaphthene		ug	<MDL	.01	.02	
Fluorene		ug	<MDL	.01	.02	
Diethyl Phthalate	.119	ug		.05	.1	
Phenanthrene	.0843	ug		.01	.02	
Anthracene		ug	<MDL	.01	.02	
Di-N-Butyl Phthalate	.702	ug		.05	.1	
Fluoranthene	.101	ug		.01	.02	
Pyrene	.0836	ug		.01	.02	
Benzyl Butyl Phthalate	.442	ug		.05	.1	
Benzo(a)anthracene	.0405	ug		.01	.02	
Chrysene	.0712	ug		.01	.02	
Bis(2-Ethylhexyl)Phthalate	.866	ug		.05	.1	
Di-N-Octyl Phthalate	.683	ug		.05	.1	
Benzo(b)fluoranthene	.0834	ug		.02	.04	
Benzo(k)fluoranthene	.066	ug		.02	.04	
Benzo(a)pyrene	.0993	ug		.02	.04	
Indeno(1,2,3-Cd)Pyrene	.058	ug		.02	.04	
Dibenzo(a,h)anthracene		ug	<MDL	.02	.04	
Benzo(g,h,i)perylene	.0911	ug		.02	.04	
2-Methylnaphthalene		ug	<MDL	.01	.02	
2-Fluorobiphenyl	.403	ug		.02	.04	
d14-Terphenyl	1.54	ug		.02	.04	
Amount Analyzed	1	g				
Standard Amount	1	g				
Dilution Factor	1	none				
Date Analyzed						10-OCT-06
Operator ID						M Doubrava
Porthandler File						/usr/users/seed2/METROS3/files/gcms/L40468-6.rp
Instrument ID						6890j i
Prep Date						10-OCT-06

SURROGATE RECOVERY INFORMATION

Parameter	% Rec	Lab Limits
2-Fluorobiphenyl	32	30-115
d14-Terphenyl	123	18-137

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SEA424983

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 10/18/06 07:27 - Data Source: ELD

Sample#: L40468-7	Matrix:	OTHR SOLID	List Type:	ORPHPAHWIPE	
	Project:	423589-090-1	Run ID:	R116662	Col. Date: 28-SEP-06
	Locator:	CER	Work Group:	WG88463	Rec. Date: 28-SEP-06
	Site:	METRO	QC Type:		Due Date: 28-OCT-06
	Method Code:	8270D-WIPETEST			

Parameter	Value	Units	Valq	Mdl	Rdl	Textvalue
Naphthalene		ug	<MDL	.02	.04	
Acenaphthylene		ug	<MDL	.01	.02	
Dimethyl Phthalate		ug	<MDL	.05	.1	
Acenaphthene		ug	<MDL	.01	.02	
Fluorene		ug	<MDL	.01	.02	
Diethyl Phthalate	.19	ug		.05	.1	
Phenanthrene	.0785	ug		.01	.02	
Anthracene		ug	<MDL	.01	.02	
Di-N-Butyl Phthalate	1.17	ug		.05	.1	
Fluoranthene	.0548	ug		.01	.02	
Pyrene	.0423	ug		.01	.02	
Benzyl Butyl Phthalate	.434	ug		.05	.1	
Benzo(a)anthracene	.025	ug		.01	.02	
Chrysene	.0335	ug		.01	.02	
Bis(2-Ethylhexyl)Phthalate	.706	ug		.05	.1	
Di-N-Octyl Phthalate		ug	<MDL	.05	.1	
Benzo(b)fluoranthene	.0403	ug		.02	.04	
Benzo(k)fluoranthene	.021	ug	<RDL	.02	.04	
Benzo(a)pyrene	.059	ug		.02	.04	
Indeno(1,2,3-Cd)Pyrene	.024	ug	<RDL	.02	.04	
Dibenzo(a,h)anthracene		ug	<MDL	.02	.04	
Benzo(g,h,i)perylene	.0458	ug		.02	.04	
2-Methylnaphthalene		ug	<MDL	.01	.02	
2-Fluorobiphenyl	.334	ug		.02	.04	
d14-Terphenyl	2.92	ug		.02	.04	
Amount Analyzed	1	g				
Standard Amount	1	g				
Dilution Factor	1	none				
Date Analyzed						10-OCT-06
Operator ID						M.Doubrava
Porthandler File						/usr/users/seed2/METROS3/files/gcms/L40468-7.rp
Instrument ID						6890j.i
Prep Date						10-OCT-06

SURROGATE RECOVERY INFORMATION

Parameter	% Rec	Lab Limits
2-Fluorobiphenyl	13 *	30-115
d14-Terphenyl	117	18-137

KCSlip4 58685

SEA424984

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 10/18/06 07:27 - Data Source: ELD

Sample#: L40468-8	Matrix: OTHR SOLID	List Type: ORPHPAHWIPE			
	Project: 423589-090-1	Run ID: R116662		Col. Date:	28-SEP-06
	Locator: KCIA	Work Group: WG88463		Rec. Date:	28-SEP-06
	Site: METRO	QC Type:		Due Date:	28-OCT-06
	Method Code: 8270D-WIPETEST				

Parameter	Value	Units	Valq	Mdl	Rdl	Textvalue
Naphthalene		ug	<MDL	.02	.04	
Acenaphthylene		ug	<MDL	.01	.02	
Dimethyl Phthalate		ug	<MDL	.05	.1	
Acenaphthene		ug	<MDL	.01	.02	
Fluorene	.0246	ug		.01	.02	
Diethyl Phthalate	.241	ug		.05	.1	
Phenanthrene	.45	ug		.01	.02	
Anthracene	.0313	ug		.01	.02	
Di-N-Butyl Phthalate	1.82	ug		.05	.1	
Fluoranthene	1.12	ug		.01	.02	
Pyrene	.801	ug		.01	.02	
Benzyl Butyl Phthalate	.413	ug		.05	.1	
Benzo(a)anthracene	.289	ug		.01	.02	
Chrysene	.616	ug		.01	.02	
Bis(2-Ethylhexyl)Phthalate	1	ug		.05	.1	
Di-N-Octyl Phthalate		ug	<MDL	.05	.1	
Benzo(b)fluoranthene	.683	ug		.02	.04	
Benzo(k)fluoranthene	.521	ug		.02	.04	
Benzo(a)pyrene	.466	ug		.02	.04	
Indeno(1,2,3-Cd)Pyrene	.4	ug		.02	.04	
Dibenzo(a,h)anthracene	.108	ug		.02	.04	
Benzo(g,h,i)perylene	.482	ug		.02	.04	
2-Methylnaphthalene		ug	<MDL	.01	.02	
2-Fluorobiphenyl	1.09	ug		.02	.04	
d14-Terphenyl	1.69	ug		.02	.04	
Amount Analyzed	1	g				
Standard Amount	1	g				
Dilution Factor	1	none				
Date Analyzed						10-OCT-06
Operator ID						M.Doubrava
Porthandler File						/usr/users/seed2/METROS3/files/gcms/L40468-8.rp
Instrument ID						6890j.i
Prep Date						10-OCT-06

SURROGATE RECOVERY INFORMATION

Parameter	% Rec	Lab Limits
2-Fluorobiphenyl	87	30-115
d14-Terphenyl	135	18-137

KCSlip4 58686

SEA424985

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 10/18/06 07:27 - Data Source: ELD

Sample#: L40468-9	Matrix:	OTHR SOLID	List Type:	ORPHPAHWIPE	
	Project:	423589-090-1	Run ID:	R116662	Col. Date: 28-SEP-06
	Locator:	SPCC	Work Group:	WG88463	Rec. Date: 28-SEP-06
	Site:	METRO	QC Type:		Due Date: 28-OCT-06
	Method Code:	8270D-WIPETEST			

Parameter	Value	Units	Valq	Mdl	Rdl	Textvalue
Naphthalene		ug	<MDL	.02	.04	
Acenaphthylene		ug	<MDL	.01	.02	
Dimethyl Phthalate		ug	<MDL	.05	.1	
Acenaphthene		ug	<MDL	.01	.02	
Fluorene		ug	<MDL	.01	.02	
Diethyl Phthalate	.204	ug		.05	.1	
Phenanthrene	.0622	ug		.01	.02	
Anthracene		ug	<MDL	.01	.02	
Di-N-Butyl Phthalate	1.34	ug		.05	.1	
Fluoranthene	.0695	ug		.01	.02	
Pyrene	.065	ug		.01	.02	
Benzyl Butyl Phthalate	.56	ug		.05	.1	
Benzo(a)anthracene	.0338	ug		.01	.02	
Chrysene	.0525	ug		.01	.02	
Bis(2-Ethylhexyl)Phthalate	1.18	ug		.05	.1	
Di-N-Octyl Phthalate		ug	<MDL	.05	.1	
Benzo(b)fluoranthene	.0538	ug		.02	.04	
Benzo(k)fluoranthene	.029	ug	<RDL	.02	.04	
Benzo(a)pyrene	.0724	ug		.02	.04	
Indeno(1,2,3-Cd)Pyrene	.039	ug	<RDL	.02	.04	
Dibenzo(a,h)anthracene		ug	<MDL	.02	.04	
Benzo(g,h,i)perylene	.0575	ug		.02	.04	
2-Methylnaphthalene		ug	<MDL	.01	.02	
2-Fluorobiphenyl	.579	ug		.02	.04	
d14-Terphenyl	1.67	ug		.02	.04	
Amount Analyzed	1	g				
Standard Amount	1	g				
Dilution Factor	1	none				
Date Analyzed						10-OCT-06
Operator ID						M.Doubrava
Porthandler File						/usr/users/seed2/METROS3/files/gcms/L40468-9.rp
Instrument ID						6890j.i
Prep Date						10-OCT-06

SURROGATE RECOVERY INFORMATION

Parameter	% Rec	Lab Limits
2-Fluorobiphenyl	46	30-115
d14-Terphenyl	134	18-137

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 10/18/06 07:27 - Data Source: ELD

Sample#: L40468-10	Matrix:	OTHR SOLID	List Type:	ORPHPAHWIPE	
	Project:	423589-090-1	Run ID:	R116662	Col. Date: 28-SEP-06
	Locator:	SPCC	Work Group:	WG88463	Rec. Date: 28-SEP-06
	Site:	METRO	QC Type:		Due Date: 28-OCT-06
	Method Code:	8270D-WIPETEST			

Parameter	Value	Units	Valq	Mdl	Rdl	Textvalue
Naphthalene		ug	<MDL	.02	.04	
Acenaphthylene		ug	<MDL	.01	.02	
Dimethyl Phthalate		ug	<MDL	.05	.1	
Acenaphthene		ug	<MDL	.01	.02	
Fluorene		ug	<MDL	.01	.02	
Diethyl Phthalate	.156	ug		.05	.1	
Phenanthrene	.0479	ug		.01	.02	
Anthracene		ug	<MDL	.01	.02	
Di-N-Butyl Phthalate	.982	ug		.05	.1	
Fluoranthene	.0466	ug		.01	.02	
Pyrene	.0425	ug		.01	.02	
Benzyl Butyl Phthalate	.398	ug		.05	.1	
Benzo(a)anthracene	.0287	ug		.01	.02	
Chrysene	.0304	ug		.01	.02	
Bis(2-Ethylhexyl)Phthalate	.736	ug		.05	.1	
Di-N-Octyl Phthalate		ug	<MDL	.05	.1	
Benzo(b)fluoranthene	.034	ug	<RDL	.02	.04	
Benzo(k)fluoranthene	.026	ug	<RDL	.02	.04	
Benzo(a)pyrene	.0637	ug		.02	.04	
Indeno(1,2,3-Cd)Pyrene	.029	ug	<RDL	.02	.04	
Dibenzo(a,h)anthracene		ug	<MDL	.02	.04	
Benzo(g,h,i)perylene	.0459	ug		.02	.04	
2-Methylnaphthalene		ug	<MDL	.01	.02	
2-Fluorobiphenyl	1.16	ug		.02	.04	
d14-Terphenyl	1.63	ug		.02	.04	
Amount Analyzed	1	g				
Standard Amount	1	g				
Dilution Factor	1	none				
Date Analyzed						10-OCT-06
Operator ID						M.Doubrava
Porthandler File						/usr/users/seed2/METROS3/files/gcms/L40468-10.rp
Instrument ID						6890j i
Prep Date						10-OCT-06

SURROGATE RECOVERY INFORMATION

Parameter	% Rec	Lab Limits
2-Fluorobiphenyl	93	30-115
d14-Terphenyl	131	18-137

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