A/M
2/21/07
M3

King County Environmental Laboratory

WORK GROUP REPORT (wk02)

Feb 16 2007, 06:50 am

Work Group: WG90269 (PHPAH-WIPES) for Department: 7 - Organics, Trace

Created: 16-FEB-07 PrepDate: 15-FEB-07 Due: Operator: MCD

| Sample | Project Number | Project Description | PKey | Q | Product | Matrix | | Stat | UA | Workdate | Duedate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L41561-10 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PHPAHWIPE | OTHR | SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-6 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PHPAHWIPE | OTHR | SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-7 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PHPAHWIPE | OTHR | SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-8 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PHPAHWIPE | OTHR | SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-9 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PHPAHWIPE | OTHR | SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| WG90269-1 | MB | | S | | PHPAHWIPE | OTHR | SOLID | WKGP | U | 16-FEB-07 | |

Comments:

| | |
|---|---|
| L41561-10 | wipes |
| L41561-6 | wipes |
| L41561-7 | wipes |
| L41561-8 | wipes |
| L41561-9 | wipes |
| WG90269-1 | FILTER BLANK |



KCSlip4 57879

SEA424178

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

QC BATCH NO.: BS 1:1 Acetone:MeCl2 WORKGROUP NO.: WG90269 / WG90270

EPA SW-846 EXTRACTION METHOD: PCB = CLPEST/PCB LL SURR = #1372 JG 02/28/07 BNA SURROGATE SPIKE I.D.#: 1376 (BNA LL SURR) Coprostanol:

SONICATION EPA 3550 SOXHLET EPA 3540 BNA MATRIX SPIKE I.D.#: JG 02/28/07 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2/15/07 | WG90269-1 | 7 | Filter PAHPAH | | | 50uL BNA | 1.0 | AL | MA | 2/16/07 | Samples conc |
| | WG90270-1 | 3 | BLANK PCB | | | 25uL PCB | | | | | to 1.0 mL |
| | L41561-C | | Funnel wipes | | | | | | | | .5 mL -BNA |
| double spiked | BNA -7 | | | | | | | | | | ANALYSES |
| | -8 | | | | | | | | | | .5 mL AL |
| | -9 | | | | | | | | | | cleaned for |
| | -10 | | | | | | | | | | PCB ANALYSES |

(1) Filter paper rinsed with MeCl2

(2) Funnels wiped X2 with MeCl2 soaked filter paper

(3) Surrogates spiked, samples extracted X3 with 50 mL MeCl2 for 5 minutes on sonic bath. Sample conc to 1.0 mL

(4) 0.5 mL analyzed for PAHPAH wipe. 0.5 mL exchanged to hexane, AL cleaned & conc to 0.5 mL for PCB wipe analyses.



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A/M
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MS

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 02/20/07 09:43
Run ID: R118705 Workgroup: WG90269 (PHPAH-WIPES)

MB:WG90269-1 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 | <MDL | |
| 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 | .452 | B |
| 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 = 1.356
"B"
flag



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KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 02/20/07 09:43
Run ID: R118705 Workgroup: WG90269 [PHPAH-WIPES]

| Sample # (Lab Limits) | 2-Fluorobiphenyl 43-116 | d14-Terphenyl 33-141 |
|---|---|---|
| L41561-6 | 86 | 122 |
| L41561-7 | 98 | 124 |
| L41561-8 | 86 | 122 |
| L41561-9 | 81 | 114 |
| L41561-10 | 91 | 117 |
| WG90269-1 | 90 | 107 |

==========

If the following parameters are reported, values in the RPD column are their Absolute Differences:

pH
pH, Field
Salinity
Salinity, Field
Sample Depth
Sample Temperature, Field



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**Batch: \\orgizmo\EE\chem\6890j.i\070216.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 | 16-FEB-2007 06:06 | SDGa0971 | SDGa09 | | 10 NG/UL DFTPP MIX | NONE | 0.000 | 1.0 | 13.219 | 218176 | DFTPP.m | | M.Doubrava |
| 2 | CCALI-01 | 16-FEB-2007 06:40 | SDGa0282 | SDGa02 | | SS#1354 E 4.0 PPM BNA STD | WATER | 0.000 | 1.0 | 8.429 | 589655 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 3 | CCEDC-01 | 16-FEB-2007 07:25 | SDGa0962 | SDGa09 | | SS#1355 C 5.0 PPM EDC STD | WATER | 0.000 | 1.0 | 8.409 | 689848 | 8270bEDC.m | 06-JAN-2007 | M.Doubrava |
| 4 | BLANK-01 | 16-FEB-2007 07:59 | SDGa0282 | SDGa02 | | MECL2 INSTRUMENT BLANK | WATER | 0.000 | 1.0 | 0.000 | 0 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 5 | WG90269-1 | 16-FEB-2007 08:45 | WG90269 | WIPE | | WG90269-1 PHPAH WIPE | SOIL | 1.000 | 1.0 | 8.429 | 464210 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 6 | L41561-6 | 16-FEB-2007 09:30 | WG90269 | WIPE | | L41561-6 PHPAH WIPE | SOIL | 1.000 | 1.0 | 8.430 | 523650 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 7 | L41561-7 | 16-FEB-2007 10:16 | WG90269 | WIPE | | L41561-7 PHPAH WIPE | SOIL | 1.000 | 1.0 | 8.430 | 441572 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 8 | L41561-8 | 16-FEB-2007 11:01 | WG90269 | WIPE | | L41561-8 PHPAH WIPE | SOIL | 1.000 | 1.0 | 8.429 | 402865 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 9 | L41561-9 | 16-FEB-2007 11:47 | WG90269 | WIPE | | L41561-9 PHPAH WIPE | SOIL | 1.000 | 1.0 | 8.430 | 488463 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 10 | L41561-10 | 16-FEB-2007 12:32 | WG90269 | WIPE | | L41561-10 PHPAH WIPE | WATER | 1.000 | 1.0 | 8.430 | 535517 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 11 | DFTPP-2 | 16-FEB-2007 13:17 | SDGa0971 | SDGa09 | | 10 NG/UL DFTPP MIX | NONE | 0.000 | 1.0 | 13.209 | 193088 | DFTPP.m | | M.Doubrava |
| 12 | CCALI-02 | 16-FEB-2007 13:51 | SDGa0282 | SDGa02 | | SS#1354 E 4.0 PPM BNA STD | WATER | 0.000 | 1.0 | 8.421 | 629185 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 13 | CCEDC-02 | 16-FEB-2007 14:37 | SDGa0962 | SDGa09 | | SS#1355 C 5.0 PPM EDC STD | WATER | 0.000 | 1.0 | 8.409 | 479775 | 8270BEDC.m | 06-JAN-2007 | M.Doubrava |
| 14 | WG89985-5X | 16-FEB-2007 15:12 | WG89985 | EDCL#8 | | WG89985-5 LD X 10 SILICA GEL | WATER | 1000.000 | 5.0 | 19.876 | 767395 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 15 | L41533-1X | 16-FEB-2007 15:57 | WG89985 | EDCL#8 | | L41533-1 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.885 | 984467 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 16 | L41533-4X | 16-FEB-2007 16:43 | WG89985 | EDCL#8 | | L41533-4 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.885 | 724819 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 17 | WG89864-5X | 16-FEB-2007 17:28 | WG89864 | EDCL#8 | | WG89864-5 LD X 10 SILICA GEL | WATER | 1000.000 | 5.0 | 19.867 | 892574 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 18 | L41134-1X | 16-FEB-2007 18:14 | WG89864 | EDCL#8 | | L41134-1 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.876 | 672496 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 19 | L41134-4X | 16-FEB-2007 18:59 | WG89864 | EDCL#8 | | L41134-4 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.876 | 783121 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 20 | L41135-1X | 16-FEB-2007 19:44 | WG89864 | EDCL#8 | | L41135-1 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.876 | 721123 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 21 | L41135-4X | 16-FEB-2007 20:30 | WG89864 | EDCL#8 | | L41135-4 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.876 | 843626 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 22 | L41136-1X | 16-FEB-2007 21:15 | WG89864 | EDCL#8 | | L41136-1 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.867 | 826859 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 23 | L41136-4X | 16-FEB-2007 22:00 | WG89864 | EDCL#8 | | L41136-4 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.876 | 552592 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 24 | L41431-1X | 16-FEB-2007 22:45 | WG89864 | EDCL#8 | | L41431-1 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.876 | 782542 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 25 | L41431-4X | 16-FEB-2007 23:31 | WG89864 | EDCL#8 | | L41431-4 X 10 SILICA GEL CLE | WATER | 1000.000 | 5.0 | 19.867 | 770310 | 8270B1.m | 05-JAN-2007 | M.Doubrava |
| 26 | DFTPP-3 | 17-FEB-2007 00:16 | SDGa0971 | SDGa09 | | 10 NG/UL DFTPP MIX | NONE | 0.000 | 1.0 | 13.210 | 217216 | DFTPP.m | | M.Doubrava |
| 27 | CCALI-03 | 17-FEB-2007 00:50 | SDGa0282 | SDGa02 | | SS#1354 E 4.0 PPM BNA STD | WATER | 0.000 | 1.0 | 8.420 | 489855 | 8270b1.m | 05-JAN-2007 | M.Doubrava |
| 28 | CCEDC-03 | 17-FEB-2007 01:36 | SDGa0962 | SDGa09 | | SS#1355 C 5.0 PPM EDC STD | WATER | 0.000 | 1.0 | 8.409 | 633277 | 8270BEDC.m | 06-JAN-2007 | M.Doubrava |
| 29 | BLANK-03 | 17-FEB-2007 02:10 | SDGa0282 | SDGa02 | | MECL2 INSTRUMENT BLANK | WATER | 0.000 | 1.0 | 0.000 | 0 | 8270B1.m | 05-JAN-2007 | M.Doubrava |

**Samples: 21 QC Samples + Misc.: 3 ContinuingCals: 2 Tunes: 3 Calibrations: 0**

```
Sequence Name: C:\MSDChem\1\sequence\070216.S
        Comment:
       Operator:
      Data Path: C:\MSDChem\1\data\070216\
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#1354 E 4.0 PPM BNA STD
 3)  Sample        5  CCEDC-01 8270BEDC SS#1355 C 5.0 PPM EDC STD
 4)  Blank         2  BLANK-01 8270B1   MECL2 INSTRUMENT BLANK
 5) Blank          6
     Datafile         WG90269-1
     Method           8270B1
 6)  Sample        7  L41561-6 8270B1   L41561-6 PHPAH WIPE
 7)  Sample        8  L41561-7 8270B1   L41561-7 PHPAH WIPE
 8)  Sample        9  L41561-8 8270B1   L41561-8 PHPAH WIPE
 9)  Sample       10  L41561-9 8270B1   L41561-9 PHPAH WIPE
10) Sample        11
     Datafile         L41561-10
     Method           8270B1
11)  Tune          3  DFTPP-2  DFTPP    10 NG/UL DFTPP MIX
12)  Sample        4  CCALI-02 8270B1   SS#1354 E 4.0 PPM BNA STD
13)  Sample        5  CCEDC-02 8270BEDC SS#1355 C 5.0 PPM EDC STD
14) Sample        12
     Datafile         WG89985-5X
     Method           8270B1
15) Sample        13
     Datafile         L41533-1X
     Method           8270B1
16) Sample        14
     Datafile         L41533-4X
     Method           8270B1
17) Sample        15
     Datafile         WG89864-5X
     Method           8270B1
18) Sample        16
     Datafile         L41134-1X
     Method           8270B1
19) Sample        17
     Datafile         L41134-4X
     Method           8270B1
20) Sample        18
     Datafile         L41135-1X
     Method           8270B1
21) Sample        19
     Datafile         L41135-4X
     Method           8270B1
22) Sample        20
     Datafile         L41136-1X
     Method           8270B1
23) Sample        21
     Datafile         L41136-4X
     Method           8270B1
24) Sample        22
     Datafile         L41431-1X
     Method           8270B1
25) Sample        23
     Datafile         L41431-4X
     Method           8270B1
26)  Tune          3  DFTPP-3  DFTPP    10 NG/UL DFTPP MIX

   Last Modified: Thu Feb 08 06:33:13 2007                    Page: 1
```

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SEA424183

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *07/02/16*

**WG #(s):** *WG90269*

☒ **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. WG90269-1 Filter Blank had quantitatable levels of phthalates. The Bis(2EH)phthalate at 0.452 ug is slightly above "normal" lab background contamination. The source of the contamination is most likely from the extraction lab as the instrument blanks indicated no phthalates were detected. Past phthalate "spikes" have been documented with no real definitive source identified. Samples with high*

*concentrations of phthalates have been extracted for sediment and IW projects and could have contributed to the lab contamination. All samples were flagged "B" in accordance with 3 times rule for the project.*

*8. L41561-7 funnel wipe was doubled spike with BNA surrogates. The amount added was corrected in the samples header info and the sample was requantitated with all surrogates passing QA/QC.*

## 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:

- ☐ None; corrective action entirely corrected anomaly (explanation optional):
- ☐ Potential effect explanation (explanation mandatory):

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** | [signature] | 2/20/07 |
| **Reviewer:** | | |
| **Supervisor:** *Dana Walker* | Dana Walker | 2/21/07 |
| **QA Officer:** *Colin Elliott* (For QA1 only) | | |
| **cc: LPM:** | | |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 09:10 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90269-1 | Matrix: | OTHR SOLID | List Type: | ORPHPAHWIPE | |
| | Project: | | Run ID: | R118705 | Col. Date: |
| | Locator: | MB | Work Group: | WG90269 | Rec. Date: 16-FEB-07 |
| | 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 | | ug | <MDL | .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 | .452 | ug | B | .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 | 1.13 | ug | | .02 | .04 | |
| d14-Terphenyl | 1.34 | ug | | .02 | .04 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 16-FEB-07 |
| Operator ID | | | | | | M.Doubrava |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/WG90269-1.rp |
| Instrument ID | | | | | | 6890j.i |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| 2-Fluorobiphenyl | 90 | 30-115 |
| d14-Terphenyl | 107 | 18-137 |



KCSlip4 57887

SEA424186

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 09:10 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-6 | Matrix: | OTHR SOLID | List Type: | ORPHPAHWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118705 | Col. Date: 23-JAN-07 |
| | Locator: | BWR | Work Group: | WG90269 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | 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 | .144 | ug | | .05 | .1 | |
| Phenanthrene | .017 | ug | <RDL | .01 | .02 | |
| Anthracene | | ug | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .072 | ug | <RDL | .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 | .793 | ug | B | .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 | 1.07 | ug | | .02 | .04 | |
| d14-Terphenyl | 1.52 | ug | | .02 | .04 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 16-FEB-07 |
| Operator ID | | | | | | M.Doubrava |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/L41561-6.rp |
| Instrument ID | | | | | | 6890j.i |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| 2-Fluorobiphenyl | 86 | 30-115 |
| d14-Terphenyl | 122 | 18-137 |



KCSlip4 57888

SEA424187

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 09:10 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-7 | Matrix: OTHR SOLID | List Type: ORPHPANWIPE | | | |
| | Project: 423589-090-1 | Run ID: R118705 | | Col. Date: | 23-JAN-07 |
| | Locator: CER | Work Group: WG90269 | | Rec. Date: | 23-JAN-07 |
| | Site: METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | 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 | .127 | ug | | .05 | .1 | |
| Phenanthrene | .0265 | ug | | .01 | .02 | |
| Anthracene | | ug | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .524 | ug | | .05 | .1 | |
| Fluoranthene | .0201 | ug | | .01 | .02 | |
| Pyrene | .016 | ug | <RDL | .01 | .02 | |
| Benzyl Butyl Phthalate | .136 | ug | | .05 | .1 | |
| Benzo(a)anthracene | | ug | <MDL | .01 | .02 | |
| Chrysene | | ug | <MDL | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | 6.16 | 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 | 2.45 | ug | | .02 | .04 | |
| d14-Terphenyl | 3.09 | ug | | .02 | .04 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 16-FEB-07 |
| Operator ID | | | | | | M.Doubrava |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/L41561-7.rp |
| Instrument ID | | | | | | 6890j 1 |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| 2-Fluorobiphenyl | 98 | 30-115 |
| d14-Terphenyl | 124 | 18-137 |



KCSlip4 57889

SEA424188

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 09:10 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-8 | Matrix: | OTHR SOLID | List Type: | ORPHPAHWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118705 | Col. Date: 23-JAN-07 |
| | Locator: | DZ | Work Group: | WG90269 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | 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 | .123 | ug | | .05 | .1 | |
| Phenanthrene | .016 | ug | <RDL | .01 | .02 | |
| Anthracene | | ug | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .3 | ug | | .05 | .1 | |
| Fluoranthene | .0225 | ug | | .01 | .02 | |
| Pyrene | .0206 | ug | | .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 | 1.18 | ug | B | .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 | 1.08 | ug | | .02 | .04 | |
| d14-Terphenyl | 1.53 | ug | | .02 | .04 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 16-FEB-07 |
| Operator ID | | | | | | M.Doubrava |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/L41561-8.xp |
| Instrument ID | | | | | | 6890j.i |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| 2-Fluorobiphenyl | 86 | 30-115 |
| d14-Terphenyl | 122 | 18-137 |



KCSlip4 57890

SEA424189

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 09:10 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-9 | Matrix: | OTHR SOLID | List Type: | ORPHPAHWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118705 | Col. Date: 23-JAN-07 |
| | Locator: | KCIA | Work Group: | WG90269 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | 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 | .121 | ug | | .05 | .1 | |
| Phenanthrene | .101 | ug | | .01 | .02 | |
| Anthracene | | ug | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .407 | ug | | .05 | .1 | |
| Fluoranthene | .301 | ug | | .01 | .02 | |
| Pyrene | .24 | ug | | .01 | .02 | |
| Benzyl Butyl Phthalate | .087 | ug | <RDL | .05 | .1 | |
| Benzo(a)anthracene | .106 | ug | | .01 | .02 | |
| Chrysene | .188 | ug | | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | 2.15 | ug | | .05 | .1 | |
| Di-N-Octyl Phthalate | | ug | <MDL | .05 | .1 | |
| Benzo(b)fluoranthene | .267 | ug | | .02 | .04 | |
| Benzo(k)fluoranthene | .156 | ug | | .02 | .04 | |
| Benzo(a)pyrene | .231 | ug | | .02 | .04 | |
| Indeno(1,2,3-Cd)Pyrene | .146 | ug | | .02 | .04 | |
| Dibenzo(a,h)anthracene | .038 | ug | <RDL | .02 | .04 | |
| Benzo(g,h,i)perylene | .164 | ug | | .02 | .04 | |
| 2-Methylnaphthalene | | ug | <MDL | .01 | .02 | |
| 2-Fluorobiphenyl | 1.02 | ug | | .02 | .04 | |
| d14-Terphenyl | 1.43 | ug | | .02 | .04 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 16-FEB-07 |
| Operator ID | | | | | | M.Doubrava |
| Porthandler File | | | | | | /usr/users/seed2/METRO83/files/gcms/L41561-9.rp |
| Instrument ID | | | | | | 6890j.i |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| 2-Fluorobiphenyl | 81 | 30-115 |
| d14-Terphenyl | 114 | 18-137 |



KCSlip4 57891

SEA424190

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 09:10 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-10 | Matrix: | OTHR SOLID | List Type: | ORPHPAHWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118705 | Col. Date: 23-JAN-07 |
| | Locator: | SPCC | Work Group: | WG90269 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | 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 | .125 | ug | | .05 | .1 | |
| Phenanthrene | .016 | ug | <RDL | .01 | .02 | |
| Anthracene | | ug | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .385 | ug | | .05 | .1 | |
| Fluoranthene | .0208 | ug | | .01 | .02 | |
| Pyrene | .018 | ug | <RDL | .01 | .02 | |
| Benzyl Butyl Phthalate | .188 | ug | | .05 | .1 | |
| Benzo(a)anthracene | | ug | <MDL | .01 | .02 | |
| Chrysene | | ug | <MDL | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | 1.72 | 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 | 1.13 | ug | | .02 | .04 | |
| d14-Terphenyl | 1.46 | ug | | .02 | .04 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 16-FEB-07 |
| Operator ID | | | | | | M.Doubrava |
| Porthandler File | | | | | | /usr/users/seed2/METROSJ/files/gcms/L41561-10.rp |
| Instrument ID | | | | | | 6890j.i |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| 2-Fluorobiphenyl | 91 | 43-116 |
| d14-Terphenyl | 117 | 33-141 |



KCSlip4 57892

SEA424191

King County Environmental Laboratory

WORK GROUP REPORT (wk02)

Feb 16 2007, 06:50 am

Work Group: WG90270 (PCBWIPE) for Department: 7 - Organics, Trace

Created: 16-FEB-07 PrepDate: 15-FEB-07 Due: Operator: MCD

| Sample | Project Number | Project Description | PKey | C | Product | Matrix | Stat | UA | Workdate | Duedate |
|---|---|---|---|---|---|---|---|---|---|---|
| L41561-10 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBWIPE | OTHR SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-6 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBWIPE | OTHR SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-7 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBWIPE | OTHR SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-8 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBWIPE | OTHR SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-9 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBWIPE | OTHR SOLID | WKGP | U | 06-FEB-07 | 22-FEB-07 |
| WG90270-1 | MB | | S | | PCBWIPE | OTHR SOLID | WKGP | U | 16-FEB-07 | |

Comments:

| | |
|---|---|
| L41561-10 | wipes |
| L41561-6 | wipes |
| L41561-7 | wipes |
| L41561-8 | wipes |
| L41561-9 | wipes |
| WG90270-1 | FILTER BLANK |

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

QC BATCH NO.: BS 1:1 Acetone:MeCl2 WORKGROUP NO.: WG90269 / WG90270

EPA SW-846 EXTRACTION METHOD: PCB - CLPEST/PCB LL SURR = #1372 JS 02/28/07 BNA SURROGATE SPIKE I.D.#: 1376 (BNALL SURR) JS 02/28/07 Coprostanol:

SONICATION EPA 3550 SOXHLET EPA 3540 BNA MATRIX SPIKE I.D.#: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2/15/07 | WG90269-1 | | Filter PHPAH | | | 50uL BNA | 1.0 | AL | MA | 2/16/07 | Samples conc |
| | WG90270-1 | | BLANK PCB | | | 25uL PCB | | | | | to 1.0 mL |
| | L41561-6 | | Funnel wipes | | | | | | | | .5 mL -BNA |
| | -7 | | | | | | | | | | analyses |
| | -8 | | | | | | | | | | .5 mL AL |
| | -9 | | | | | | | | | | cleaned for |
| | -10 | | | | | | | | | | PCB analyses |

(1) Filter paper rinsed with $MeCl_2$

(2) Funnels wiped X2 with $MeCl_2$ soaked filter paper

(3) Surrogates spiked, samples extracted X3 with 50 mL $MeCl_2$ for 3 minutes on sonic bath. Sample conc to 1.0 mL

(4) 0.5 mL analyzed for PHPAH wipe. 0.5 mL exchanged to hexane, AL cleaned & conc to 0.5 mL for PCB wipe analyses.



KCSlip4 57894
SEA424193

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report 02/21/07 01:14
Run ID: R118744 Workgroup: WG90270 (PCBWIPE)

MB:WG90270-1 Matrix: OTHR SOLID Listtype: ORPCBWIPE Method: 8270D-WIPETEST Project: Pkey: STD
(Method Blank)

| Parameter | Mdl | Rdl | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Aroclor 1016 | 50 | 100 | ug | <MDL | |
| Aroclor 1221 | 50 | 100 | ug | <MDL | |
| Aroclor 1232 | 50 | 100 | ug | <MDL | |
| Aroclor 1242 | 50 | 100 | ug | <MDL | |
| Aroclor 1248 | 50 | 100 | ug | <MDL | |
| Aroclor 1254 | 50 | 100 | ug | <MDL | |
| Aroclor 1260 | 50 | 100 | ug | <MDL | |



KCSlip4 57895
SEA424194

| Sample # (Lab Limits) | Decachlorobiphenyl 25-150 |
|---|---|
| L41561-6 | 66 |
| L41561-7 | 53 |
| L41561-8 | 57 |
| L41561-9 | 66 |
| L41561-10 | 62 |
| WG90270-1 | 80 |

==========

If the following parameters are reported, values in the RPD column are their Absolute Differences:

- pH
- pH, Field
- Salinity
- Salinity, Field
- Sample Depth
- Sample Temperature, Field



KCSlip4 57896
SEA424195

| Data File Name | Sample Name | Date Acquired | Vial Numb | Sample Amount | Sample Multiplie | Isodrin (RT) | Isodrin (Height) | Leptophos (RT) | Leptophos (Height) | Isodrin #2 (RT) | Isodrin #2 (Height) | Leptoph (RT) | Leptophos #2 (Height) | Misc Info | Data File Path |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COND-01.D | conditioner | 2/20/2007 9:43 | 1 | 0 | 1 | | | | | | | | | | S:\MSDCHEM\2\DATA\070220\ |
| BLANK-01.D | blank | 2/20/2007 10:19 | 2 | 0 | 1 | | | | | | | | | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-01.D | 1218D 1016/1260 500/50 | 2/20/2007 10:56 | 3 | 0 | 1 | 15.296 | 107681171 | 23.641 | 165541101 | 12.934 | 305576528 | 19.331 | 530776736 | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-02.D | 1209.2 1248 500/50 | 2/20/2007 11:33 | 4 | 0 | 1 | 15.298 | 90630981 | 23.641 | 136187769 | 12.932 | 253910615 | 19.328 | 419241212 | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-03.D | 1210.2 1254 500/50 | 2/20/2007 12:09 | 5 | 0 | 1 | 15.292 | 99996276 | 23.636 | 155452521 | 12.933 | 285103972 | 19.330 | 476915874 | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-04.D | 1208.2 1221 500/50 | 2/20/2007 12:46 | 6 | 0 | 1 | 15.295 | 95297337 | 23.640 | 145658677 | 12.933 | 276559635 | 19.328 | 468961052 | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-05.D | 1207.2 1232 500/50 | 2/20/2007 13:23 | 7 | 0 | 1 | 15.295 | 96314064 | 23.639 | 146599186 | 12.932 | 277440808 | 19.327 | 477267775 | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-06.D | 1208.2 1242 500/50 | 2/20/2007 13:59 | 8 | 0 | 1 | 15.294 | 101113277 | 23.636 | 152572665 | 12.933 | 302427134 | 19.330 | 514057169 | | S:\MSDCHEM\2\DATA\070220\ |
| WG90270-1.D | MB | 2/20/2007 14:36 | 9 | 0 | 1 | 15.296 | 71583893 | 23.640 | 108968840 | 12.932 | 210738709 | 19.327 | 361334512 | PPBWIPE05 PCB DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| L41561-6.D | L41561-6 | 2/20/2007 15:12 | 10 | 0 | 1 | 15.294 | 90648956 | 23.639 | 121937625 | 12.932 | 245398582 | 19.326 | 431341067 | PPBWIPE05 PCB DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| L41561-7.D | L41561-7 | 2/20/2007 15:49 | 11 | 0 | 1 | 15.298 | 87186718 | 23.639 | 114559856 | 12.934 | 229717926 | 19.327 | 411008568 | PPBWIPE05 PCB DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| L41561-8.D | L41561-8 | 2/20/2007 16:26 | 12 | 0 | 1 | 15.296 | 83794611 | 23.640 | 136966789 | 12.932 | 233719563 | 19.327 | 418722118 | PPBWIPE05 PCB DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| L41561-9.D | L41561-9 | 2/20/2007 17:02 | 13 | 0 | 1 | 15.294 | 73140804 | 23.638 | 116002398 | 12.933 | 203776705 | 19.327 | 359318147 | PPBWIPE05 PCB DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| L41561-10.D | L41561-10 | 2/20/2007 17:39 | 14 | 0 | 1 | 15.295 | 77328870 | 23.638 | 124701573 | 12.932 | 219759863 | 19.327 | 394680405 | PPBWIPE05 PCB DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| PCB-07.D | 1218D 1016/1260 500/50 | 2/20/2007 18:16 | 3 | 0 | 1 | 15.293 | 98782715 | 23.638 | 171463708 | 12.930 | 295039633 | 19.325 | 511732624 | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-08.D | 1209.2 1248 500/50 | 2/20/2007 18:52 | 4 | 0 | 1 | 15.291 | 82949294 | 23.634 | 137774918 | 12.930 | 238773498 | 19.324 | 413731198 | | S:\MSDCHEM\2\DATA\070220\ |
| WG89887-1.D | SB | 2/20/2007 19:29 | 15 | 2000 | 1 | 15.291 | 83191185 | 23.633 | 139879802 | 12.930 | 243416775 | 19.323 | 420194072 | BL687 PCBLL DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| WG89887-2.D | MB | 2/20/2007 20:05 | 16 | 2000 | 1 | 15.291 | 84776481 | 23.633 | 142472555 | 12.931 | 246268478 | 19.324 | 426453884 | BL687 PCBLL DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| L41489-1.D | L41489-1 | 2/20/2007 20:42 | 17 | 2000 | 1 | 15.292 | 81901580 | 23.635 | 136572550 | 12.930 | 245044505 | 19.323 | 421582549 | BL687 PCBLL DUWAMISH PHTHALATES | S:\MSDCHEM\2\DATA\070220\ |
| PCB-09.D | 1218D 1016/1260 500/50 | 2/21/2007 12:22 | 3 | 0 | 1 | 15.290 | 109742707 | 23.632 | 187519608 | 12.929 | 320579949 | 19.321 | 559560716 | | S:\MSDCHEM\2\DATA\070220\ |
| PCB-10.D | 1210.2 1254 500/50 | 2/21/2007 12:58 | 5 | 0 | 1 | 15.287 | 99353840 | 23.628 | 161681076 | 12.930 | 279084547 | 19.322 | 479815895 | | S:\MSDCHEM\2\DATA\070220\ |
| | | | | | Ave. | 15.293 | 90284955 | 23.637 | 142290180 | 12.932 | 256791959 | 19.326 | 447096241 | | |
| | | | | | Std. Dev. | 0.003 | 10997433 | 0.004 | 20532136 | 0.001 | 33766378 | 0.003 | 53492774 | | |
| | | | | | %RSD | | 12% | | 14% | | 13% | | 12% | | |



KCSlip4 57897
SEA424196

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 01:14 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90270-1 | Matrix: | OTHR SOLID | List Type: | ORPCBWIPE | |
| | Project: | | Run ID: | R118744 | Col. Date: |
| | Locator: | MB | Work Group: | WG90270 | Rec. Date: 16-FEB-07 |
| | Site: | NONE | QC Type: | MB | Due Date: |
| | Method Code: | 8270D-WIPETEST | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug | <MDL | 50 | 100 | |
| Aroclor 1221 | | ug | <MDL | 50 | 100 | |
| Aroclor 1232 | | ug | <MDL | 50 | 100 | |
| Aroclor 1242 | | ug | <MDL | 50 | 100 | |
| Aroclor 1248 | | ug | <MDL | 50 | 100 | |
| Aroclor 1254 | | ug | <MDL | 50 | 100 | |
| Aroclor 1260 | | ug | <MDL | 50 | 100 | |
| Decachlorobiphenyl | 24.9 | ug | | 5 | 10 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 20-FEB-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90270.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 80 | 25-150 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 01:14 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-6 | Matrix: OTHR SOLID | List Type: ORPCBWIPE | | | |
| | Project: 423589-090-1 | Run ID: R118744 | | Col. Date: | 23-JAN-07 |
| | Locator: BWR | Work Group: WG90270 | | Rec. Date: | 23-JAN-07 |
| | Site: METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | Method Code: 8270D-WIPETEST | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug | <MDL | 50 | 100 | |
| Aroclor 1221 | | ug | <MDL | 50 | 100 | |
| Aroclor 1232 | | ug | <MDL | 50 | 100 | |
| Aroclor 1242 | | ug | <MDL | 50 | 100 | |
| Aroclor 1248 | | ug | <MDL | 50 | 100 | |
| Aroclor 1254 | | ug | <MDL | 50 | 100 | |
| Aroclor 1260 | | ug | <MDL | 50 | 100 | |
| Decachlorobiphenyl | 20.5 | ug | | 5 | 10 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 20 FEB 07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROSJ/files/gc/wg90270.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 66 | 25-150 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 01:14 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-7 | Matrix: | OTHR SOLID | List Type: | ORPCBWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118744 | Col. Date: 23-JAN-07 |
| | Locator: | CER | Work Group: | WG90270 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | Method Code: | 8270D-WIPETEST | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug | <MDL | 50 | 100 | |
| Aroclor 1221 | | ug | <MDL | 50 | 100 | |
| Aroclor 1232 | | ug | <MDL | 50 | 100 | |
| Aroclor 1242 | | ug | <MDL | 50 | 100 | |
| Aroclor 1248 | | ug | <MDL | 50 | 100 | |
| Aroclor 1254 | | ug | <MDL | 50 | 100 | |
| Aroclor 1260 | | ug | <MDL | 50 | 100 | |
| Decachlorobiphenyl | 16.4 | ug | | 5 | 10 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 20-FEB-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS1/files/gc/wg90270.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 53 | 25-150 |



KCSlip4 57900

SEA424199

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 01:14 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-8 | Matrix: | OTHR SOLID | List Type: | ORPCBWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118744 | Col. Date: 23-JAN-07 |
| | Locator: | DZ | Work Group: | WG90270 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | Method Code: | 8270D-WIPETEST | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug | <MDL | 50 | 100 | |
| Aroclor 1221 | | ug | <MDL | 50 | 100 | |
| Aroclor 1232 | | ug | <MDL | 50 | 100 | |
| Aroclor 1242 | | ug | <MDL | 50 | 100 | |
| Aroclor 1248 | | ug | <MDL | 50 | 100 | |
| Aroclor 1254 | | ug | <MDL | 50 | 100 | |
| Aroclor 1260 | | ug | <MDL | 50 | 100 | |
| Decachlorobiphenyl | 17.8 | ug | | 5 | 10 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 20-FEB-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90270.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 57 | 25-150 |



KCSlip4 57901

SEA424200

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 01:14 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-9 | Matrix: | OTHR SOLID | List Type: | ORPCBWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118744 | Col. Date: 23-JAN-07 |
| | Locator: | KCIA | Work Group: | WG90270 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | Method Code: | 8270D-WIPETEST | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug | <MDL | 50 | 100 | |
| Aroclor 1221 | | ug | <MDL | 50 | 100 | |
| Aroclor 1232 | | ug | <MDL | 50 | 100 | |
| Aroclor 1242 | | ug | <MDL | 50 | 100 | |
| Aroclor 1248 | | ug | <MDL | 50 | 100 | |
| Aroclor 1254 | | ug | <MDL | 50 | 100 | |
| Aroclor 1260 | | ug | <MDL | 50 | 100 | |
| Decachlorobiphenyl | 20.6 | ug | | 5 | 10 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 20-FEB-07 |
| Operator ID | | | | | | JSP |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90270.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 66 | 25-150 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 02/21/07 01:14 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-10 | Matrix: | OTHR SOLID | List Type: | ORPCBWIPE | |
| | Project: | 423589-090-1 | Run ID: | R118744 | Col. Date: 23-JAN-07 |
| | Locator: | SPCC | Work Group: | WG90270 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | Method Code: | 8270D-WIPETEST | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug | <MDL | 50 | 100 | |
| Aroclor 1221 | | ug | <MDL | 50 | 100 | |
| Aroclor 1232 | | ug | <MDL | 50 | 100 | |
| Aroclor 1242 | | ug | <MDL | 50 | 100 | |
| Aroclor 1248 | | ug | <MDL | 50 | 100 | |
| Aroclor 1254 | | ug | <MDL | 50 | 100 | |
| Aroclor 1260 | | ug | <MDL | 50 | 100 | |
| Decachlorobiphenyl | 19.3 | ug | | 5 | 10 | |
| Amount Analyzed | 1 | g | | | | |
| Standard Amount | 1 | g | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 20-FEB-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90270.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 15-FEB-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 62 | 25-150 |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *02-20-07*

WG #(s): *WG89887, WG90270*

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

Project #(s): *423589*

**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:
☐ 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:** *2. The SB (WG89887-1) had a low recovery (46%) for aroclor 1260. 8. The TCX surrogate is low (83%) in PCB-03.*

## IV. Type of Project Anomaly

King County Environmental Laboratory

WORK GROUP REPORT (wk02)

Feb 28 2007, 09:47 am

Work Group: WG90067 (BL#688 PHPAHSOURCE) for Department: 7 - Organics, Trace

Created: 01-FEB-07 PrepDate: 26-JAN-07 Due: Operator: JG

| Sample | Project Number | Project Description | Prty | Product | Matrix | Stat | UA | Workdate | Duedate |
|---|---|---|---|---|---|---|---|---|---|
| L41561-1 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | PHPAHSOURCE | STORM WTR | PREP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-2 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | PHPAHSOURCE | STORM WTR | PREP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-3 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | PHPAHSOURCE | STORM WTR | PREP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-4 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | PHPAHSOURCE | STORM WTR | PREP | U | 06-FEB-07 | 22-FEB-07 |
| L41561-5 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | PHPAHSOURCE | STORM WTR | PREP | U | 06-FEB-07 | 22-FEB-07 |
| L41562-1 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | PHPAHSOURCE | BLANK WTR | PREP | U | 08-FEB-07 | 24-FEB-07 |
| WG90067-1 | SB | | S | PHPAHSOURCE | BLANK WTR | PREP | U | 01-FEB-07 | |
| WG90067-2 | MB | | S | PHPAHSOURCE | BLANK WTR | PREP | U | 01-FEB-07 | |
| WG90067-3 | SBD | | S | PHPAHSOURCE | BLANK WTR | PREP | U | 01-FEB-07 | |
| WG90067-4 | MB | | S | PHPAHSOURCE | BLANK WTR | PREP | U | 01-FEB-07 | |

Comments:

| | |
|---|---|
| L41561-1 | carboys |
| L41561-2 | carboys |
| L41561-3 | carboys |
| L41561-4 | carboys |
| L41561-5 | carboys |
| L41562-1 | blank water |
| WG90067-1 | WG90067-2 |
| WG90067-2 | MB070126 |
| WG90067-3 | WG90067-1 WG90067-2 |
| WG90067-4 | MB070131 |



KCSlip4 57905

SEA424204

# Data Change Request

DMA # _____
DATE _____

*Supervisor signature required on all Data Change requests:* Dana Walla

Requested by: Jack Gudeman
Date Requested: 03/09/2007 Phone: 684-2336
Dept: ☐ESS ☐CONV ☐MICRO ☐MET ☐ORG ☐AQ ☐IW ☐ISDA ☐CSS

**HISTORICAL DATA**

☐ Parameter names ☑ Analytical and Field Data ☐ Site, Locator, Project, Matrix, Units ☐ See attachment

Customer Name(s): Bruce Tiffany ☐ Customer contacted {NOTE: Customer must be contacted of changes > 24 hours}

Description of the data to be changed: (ie. Project, Lab Sample Number, Parameter, etc.) Explain the reason for this change.
(Remember to include the Unrounded value when the Numvalue is being changed)

For each non-constant analytical parameter (not including surrogates) reported for samples L41561-1, L41561-4 and L41561-5 in WG90067, please append any existing data qualifiers to include an "H" flag.

In addition, for each non-constant analytical parameter (not including surrogates) reported for samples L41561-1, L41561-4 and L41561-5 in WG90067, please add the following text statement, "7 day holding time for sample preparation exceeded (8 days)".

**LIST TYPE**

☐ Addition ☐ Deletion ☐ Modification ☐ See attachment

Listtype Name: _____ Method Reference: _____
Matrix Class: (Liquid, Solid, Tissue, Air ) _____ Process Chain: _____
Design ID: (ie. OSMP-OR) _____ Product Link: _____

| Seq | Parm Name | Value | Units | RDL | MDL | Parm Type | RDLSig | MDL Sig | Textvalue |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

**QC LOOK-UP**

☐ Addition ☐ Deletion ☐ Modification ☐ See attachment

QC Type: _____ CHEM: MB, CS, LCS, SRM, SB, SBD, LD, LT, MS, MSD, SDA, PDS, SR, SDIL
BIOLOGY: ETOH, PC, NC, DC, SC, AC, BF, AF
FIELD: BB, FB, MTRB, PB, RB, TB, FDUP, FREP, VREP, FSPK, BKGR

Matrix Class: (Liquid, Solid, Tissue, Air ) _____ List Function: _____ Project Key: (STD, SED) _____
Design ID: (ie. OSMP-OR)

| Seq | ParmName | TrueVal | Units | ParmType | HiLimit1 | HiQual1 | LoLimit1 | LoQual1 | VeryLo2 | LoQual2 | HiLimit3 | HQual3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

DataChangeRqstWG90067.doc, revised 15-Aug-2005

KCSlip4 57906

SEA424205

## PRODUCT CHANGES

☐ Addition ☐ Deletion ☐ Modification

Matrix Code(s): _____
(AB,LA,LB,LC,LD,LE,LF,LG,LH,LJ,LK,LL,LM,LN,LP,LQ,LR,LS,SA,SB,SC,SD,SE,SF,SG,SH,SJ,TA,TB,TC,TD,TE,TF,TG,TH)
Product: _____ **Standalone Products Only:** Hold Days: _____ Due Days: _____
Class: ____ (Standalone or Parent) Method: _____
Description:(Mandatory) _____ Hold Flag: _____ (Receive or Collect date)
Listlink: _____
**Parent Products Only:** List Children: _____

Time per test (Mandatory for requestor) _____ Cost per test (Obtain from Lab Manager) _____
Lab Manager's Approval _____
ISDA Supervsior _____

## PARAMETER ADDITION

Final Stored Name of the New Parameter: _____ Units assigned to the Parameter: _____
Synonyms for the Parameter: _____ Number of Significant Figures: _____
Listtype Associated with Parameter: _____ List Matrix Class: _____
Product Associated with Parameter: _____
Reporting List(s) associated with Parameter: _____

## CODES AND STATIC DATA

☐ Matrix Code: _____ Matrix Name: _____ Group: _____ (Solid, Liquid, Air, Tissue)
☐ QC Type: _____ Description: _____
☐ Qualifier Code: _____ Description: _____
☐ Units abbr: _____ Description: _____

QC Officer Approval: _____ Date: _____
ISDA Supervisor: _____ Date: _____

ISDA tracking log for this Data Change Request ☐ See attachment

Completed by: _____ Date: _____ Date Requestor Notified: _____ ☐Phone ☐Email
Audited by: _____ Date _____

DataChangeRqstWG90067.doc, revised 15-Aug-2005

KCSlip4 57907

SEA424206

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *01/31/2007*

**WG #(s):** *WG90067*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L41561-1, L41561-4, L41561-5*

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

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

## 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: *PHPAHSOURCE*
☐ 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: *1 day*
15 ☐ Insufficient sample amount.
16 ☐ Inappropriate storage, container or preservation.
17 ☐ Other

**Anomaly Description:** *Samples were processed using solid-phase extraction beyond the seven (7) day holding time for sample preparation. Samples were processed on day eight (8), exceeding the holding time by one (1) day.*

## 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: *H = 7 day holding time for sample preparation exceeded (8 days).*
☐ Other

**Corrective Action Description:**

## VI. Potential Effects on Data Quality:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The carboy samplers were deployed in the field for thirteen (13) days (01/10/2007 - 01/23/2007) prior to retrieval and return to the laboratory. They were then refrigerated until analysis. It is unlikely that the holding time exceedance of one (1) day (while samples were stored at 4°C) had a significant impact on the final results.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Jack Gudeman* | Jack A. Gudeman | 03/09/2007 |
| **Reviewer:** *Mike Doubrava* | [illegible] | 3/9/07 |
| **Supervisor:** *Dana Walker* | Dana Walker | 3/9/07 |
| **QA Officer:** *Colin Elliott* (For QA1 only) | | |
| **cc: LPM:** | | |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 03/05/07 06:38
Run ID: R118920 Workgroup: WG90067 (BL#688 PHPAHSOURCE)

Alm 3/5/07

SBD:WG90067-3 SB:WG90067-1 MB:WG90067-2 Matrix: BLANK WTR Listtype: ORPHPAHSOURCE Method: 8270B Project: 423589-090-1 Pkey: STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

| Parameter | Mdl | Rdl | Units | MB Value | Truevalue | SB Value | % Rec | Qual | LabLimit | Truevalue | SBD Value | % Rec | Qual | LabLimit | RPD | Qual | LabLim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | .01 | .02 | ug/L | <MDL | 0.250 | .161 | 65 | | 10-150 | 0.250 | .0916 | 37 | | 10-150 | 55 | | 10 |
| Dimethyl Phthalate | .01 | .02 | ug/L | <MDL | 0.250 | .228 | 91 | | 10-150 | 0.250 | .13 | 52 | | 10-150 | 55 | | 10 |
| Fluorene | .01 | .02 | ug/L | <MDL | 0.250 | .189 | 76 | | 10-150 | 0.250 | .108 | 43 | | 10-150 | 55 | | 10 |
| Diethyl Phthalate | .015 | .03 | ug/L | <MDL | 0.250 | .262 | 105 | | 10-150 | 0.250 | .168 | 67 | | 10-150 | 44 | | 10 |
| Phenanthrene | .01 | .02 | ug/L | <MDL | 0.250 | .206 | 83 | | 10-150 | 0.250 | .164 | 66 | | 10-150 | 23 | | 10 |
| Anthracene | .01 | .02 | ug/L | <MDL | 0.250 | .179 | 72 | | 10-150 | 0.250 | .147 | 59 | | 10-150 | 20 | | 10 |
| Di-N-Butyl Phthalate | .01 | .02 | ug/L | .0461 | 0.250 | .346 | 120 | | 10-150 | 0.250 | .311 | 106 | | 10-150 | 12 | | 10 |
| Pyrene | .01 | .02 | ug/L | <MDL | 0.250 | .256 | 102 | | 10-150 | 0.250 | .229 | 92 | | 10-150 | 10 | | 10 |
| Benzyl Butyl Phthalate | .01 | .02 | ug/L | .015 | 0.250 | .342 | 131 | | 10-150 | 0.250 | .31 | 118 | | 10-150 | 10 | | 10 |
| Benzo(a)anthracene | .01 | .02 | ug/L | <MDL | 0.250 | .227 | 91 | | 10-150 | 0.250 | .217 | 87 | | 10-150 | 4 | | 10 |
| Chrysene | .01 | .02 | ug/L | <MDL | 0.250 | .231 | 93 | | 10-150 | 0.250 | .217 | 87 | | 10-150 | 7 | | 10 |
| Bis(2-Ethylhexyl)Phthalate | .01 | .02 | ug/L | .0879 | 0.250 | .247 | 64 | | 10-150 | 0.250 | .214 | 50 | | 10-150 | 25 | | 10 |
| Benzo(b)fluoranthene | .015 | .03 | ug/L | <MDL | 0.250 | .201 | 81 | | 10-150 | 0.250 | .194 | 77 | | 10-150 | 5 | | 10 |
| Benzo(k)fluoranthene | .015 | .03 | ug/L | <MDL | 0.250 | .176 | 70 | | 10-150 | 0.250 | .173 | 69 | | 10-150 | 1 | | 10 |
| Benzo(a)pyrene | .015 | .03 | ug/L | <MDL | 0.250 | .149 | 59 | | 10-150 | 0.250 | .148 | 59 | | 10-150 | 0 | | 10 |
| Indeno(1,2,3-Cd)Pyrene | .015 | .03 | ug/L | <MDL | 0.250 | .0876 | 35 | | 10-150 | 0.250 | .0939 | 38 | | 10-150 | 8 | | 10 |
| Dibenzo(a,h)anthracene | .015 | .03 | ug/L | <MDL | 0.250 | .0905 | 36 | | 10-150 | 0.250 | .0987 | 39 | | 10-150 | 9 | | 10 |
| Benzo(g,h,i)perylene | .015 | .03 | ug/L | <MDL | 0.250 | .085 | 34 | | 10-150 | 0.250 | .0938 | 38 | | 10-150 | 11 | | 10 |

MB:WG90067-2 Matrix: BLANK WTR Listtype: ORPHPAHSOURCE Method: 8270B Project: 423589-090-1 Pkey: STD
(Method Blank)

| Parameter | Mdl | Rdl | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Naphthalene | .02 | .04 | ug/L | <MDL | |
| Acenaphthylene | .01 | .02 | ug/L | <MDL | |
| Dimethyl Phthalate | .01 | .02 | ug/L | <MDL | |
| Acenaphthene | .01 | .02 | ug/L | <MDL | |
| Fluorene | .01 | .02 | ug/L | <MDL | |
| Diethyl Phthalate | .015 | .03 | ug/L | <MDL | |
| Phenanthrene | .01 | .02 | ug/L | <MDL | |
| Anthracene | .01 | .02 | ug/L | <MDL | |
| Di-N-Butyl Phthalate | .01 | .02 | ug/L | .0461 | B |
| Fluoranthene | .01 | .02 | ug/L | <MDL | |
| Pyrene | .01 | .02 | ug/L | <MDL | |
| Benzyl Butyl Phthalate | .01 | .02 | ug/L | .015 | B |
| Benzo(a)anthracene | .01 | .02 | ug/L | <MDL | |
| Chrysene | .01 | .02 | ug/L | <MDL | |
| Bis(2-Ethylhexyl)Phthalate | .01 | .02 | ug/L | .0879 | B |
| Di-N-Octyl Phthalate | .015 | .03 | ug/L | <MDL | |
| Benzo(b)fluoranthene | .015 | .03 | ug/L | <MDL | |
| Benzo(k)fluoranthene | .015 | .03 | ug/L | <MDL | |
| Benzo(a)pyrene | .015 | .03 | ug/L | <MDL | |
| Indeno(1,2,3-Cd)Pyrene | .015 | .03 | ug/L | <MDL | |
| Dibenzo(a,h)anthracene | .015 | .03 | ug/L | <MDL | |
| Benzo(g,h,i)perylene | .015 | .03 | ug/L | <MDL | |
| 2-Methylnaphthalene | .015 | .03 | ug/L | <MDL | |



KCSlip4 57910
SEA424209

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 03/05/07 06:38
Run ID: R118920 Workgroup: WG90067 (BL#688 PHPAHSOURCE)

MB:WG90067-4 Matrix: BLANK WTR Listtype: ORPHPAHSOURCE Method: 8270B Project: 423589-090-1 Pkey: STD
(Method Blank)

| Parameter | Mdl | Rdl | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Naphthalene | .02 | .04 | ug/L | <MDL | |
| Acenaphthylene | .01 | .02 | ug/L | <MDL | |
| Dimethyl Phthalate | .01 | .02 | ug/L | <MDL | |
| Acenaphthene | .01 | .02 | ug/L | <MDL | |
| Fluorene | .01 | .02 | ug/L | <MDL | |
| Diethyl Phthalate | .015 | .03 | ug/L | <MDL | |
| Phenanthrene | .01 | .02 | ug/L | <MDL | |
| Anthracene | .01 | .02 | ug/L | <MDL | |
| Di-N-Butyl Phthalate | .01 | .02 | ug/L | .0333 | B |
| Fluoranthene | .01 | .02 | ug/L | <MDL | |
| Pyrene | .01 | .02 | ug/L | <MDL | |
| Benzyl Butyl Phthalate | .01 | .02 | ug/L | .011 | B |
| Benzo(a)anthracene | .01 | .02 | ug/L | <MDL | |
| Chrysene | .01 | .02 | ug/L | <MDL | |
| Bis(2-Ethylhexyl)Phthalate | .01 | .02 | ug/L | .0782 | B |
| Di-N-Octyl Phthalate | .015 | .03 | ug/L | <MDL | |
| Benzo(b)fluoranthene | .015 | .03 | ug/L | <MDL | |
| Benzo(k)fluoranthene | .015 | .03 | ug/L | <MDL | |
| Benzo(a)pyrene | .015 | .03 | ug/L | <MDL | |
| Indeno(1,2,3-Cd)Pyrene | .015 | .03 | ug/L | <MDL | |
| Dibenzo(a,h)anthracene | .015 | .03 | ug/L | <MDL | |
| Benzo(g,h,i)perylene | .015 | .03 | ug/L | <MDL | |
| 2-Methylnaphthalene | .015 | .03 | ug/L | <MDL | |



KCSlip4 57911
SEA424210

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 03/05/07 06:38
Run ID: R118920 Workgroup: WG90067 (BL#688 PHPAHSOURCE)

| Sample # | d14-Terphenyl | D6-Dimethyl Phthalate | D8-Acenaphthylene | D10-Fluorene | D10-Anthracene | D10-Pyrene | D12-Benzo(a)pyrene |
|---|---|---|---|---|---|---|---|
| (Lab Limits) | 33-141 | 0-150 | 0-150 | 0-150 | 0-150 | 0-150 | 0-150 |
| L41561-1 | 98 | 60 | 0 * | 0 * | 0 * | 26 | 47 |
| L41561-2 | 61 | 53 | 0 * | 0 * | 0 * | 38 | 35 |
| L41561-3 | 85 | 63 | 0 * | 0 * | 0 * | 25 | 31 |
| L41561-4 | 107 | 61 | 0 * | 0 * | 0 * | 22 | 30 |
| L41561-5 | 102 | 63 | 0 * | 0 * | 0 * | 33 | 38 |
| L41562-1 | 88 | 49 | 37 | 42 | 49 | 67 | 77 |
| WG90067-1 | 85 | 81 | 66 | 68 | 55 | 67 | 60 |
| WG90067-2 | 81 | 74 | 64 | 64 | 58 | 66 | 76 |
| WG90067-3 | 76 | 44 | 37 | 39 | 44 | 61 | 58 |
| WG90067-4 | 81 | 55 | 40 | 44 | 53 | 65 | 78 |

If the following parameters are reported, values in the RPD column are their Absolute Differences:

pH
pH, Field
Salinity
Salinity, Field
Sample Depth
Sample Temperature, Field



KCSlip4 57912
SEA424211

# LIQUID SAMPLE EXTRACTION RECORD FOR BNA ANALYSIS
## TRACE ORGANICS LABORATORY

Round 18 - Samples
Round 20 - Rinse Blank

Acetone Lot#
MeCL2 Lot # C5122
QC BATCH NO.: BL#688
EPA SW-846 EXTRACTION METHOD:
CONT. L-L EPA 3520 SEP. FUNNEL EPA 3510

PHPAHSOURCE/PCBLL via SPE

WORKGROUP NO.: { PHPAHSOURCE = WG90067, PCBLL = WG90068
PCB FieldSurr = 1344
PCB HouseSurr = 1352
PCB MS LL = 1261
BNA SURROGATE SPIKE: 1315 + 1343 (DMCs)
BNA MATRIX SPIKE: 1246

| Date/ Analyst | Sample Number | Project Number | Sample Description | coc | pH | Initial Amt. (ml) | Spike Amount (ul) | Vf (ml) | Conc. Anlyst | Turn Over Date | Comments | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JG 01/26/07 | WG90067-1 WG90068-1 | QC | SB | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl 1246-50µl 1261-100µl | 1.0 | JG | 02/28/07 | 10 ml MeOH | 8.9 |
| | WG90067-2 WG90068-2 | QC | MB | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl | 1.0 | JG | 02/28/07 | 10 ml MeOH | 7.9 |
| | L41562-1 | 423589-090-001 | BWR-BK-012407-012407 | | 6 | 2000 | | 1.0 | JG | 02/28/07 | 10 ml MeOH | 8.1 |
| | L41561-2 | | CER-01-011007-012307 | | 6 | 1610 | | 1.0 | | 02/28/07 | 7.5 ml MeOH std 1343+1344 spiked pre-deployment | 7.8 |
| | L41561-3 | | DZ-01-011007-012307 | | 5 | 1410 | | 1.0 | | | 7.0 ml MeOH std 1343+1344 spiked pre-deployment. | 7.3 |
| JG 01/31/07 | WG90067-3 WG90068-3 | QC | SBD | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl 1246-50µl 1261-100µl | 1.0 | JG | 02/28/07 | 10 ml MeOH | 9.4 |
| | WG90067-4 WG90068-4 | QC | MB | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl | 1.0 | JG | 02/28/07 | 10 ml MeOH excessive blow down to 0.25ml for PHPAHSOURCE. | 10. |
| | L41561-5 | 423589-090-001 | SPCC-01-011007-012307 | | 5 | 1860 | | 1.0 | JG | 02/28/07 | 8 ml MeOH std 1343+1344 spiked pre-deployment. | 9.2 |
| | L41561-1 | | BWR-01-011007-012307 | | 5 | 1420 | | 1.0 | | 02/28/07 | std 1343+1344 spiked pre-deployment. 7 ml MeOH | 7.2 |
| | L41561-4 | | KCIA-01-011007-012307 | | 5 | 1480 | | 1.0 | | 02/28/07 | 7 ml MeOH std 1343+1344 spiked pre-deployment. | — |

* All samples processed via SPE using Speedisk Lot C03N14.



KCSlip4 57913
SEA424212

## 6890n DILUTION LOG

King County Environmental Laboratory

| Date & Initials | Sample Name/ Sample Number | Extract Vol Used (ml) | Final Vol | Dil Fac | IS # | Additional IS (ul) | Total IS (ul) |
|---|---|---|---|---|---|---|---|
| 03-01-07 DJ | L4156-4 | 0.1 ml | 0.5ml | 5x | SS#969x200 | 8µl | 10µl |
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## 6890n MAINTENANCE LOG

King County Environmental Laboratory

| Date & Initials | Maintenance Description | | | | | | |
|---|---|---|---|---|---|---|---|
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KCSlip4 57914

SEA424213

Batch: \\Orgizmo\EE\chem\6890n.i\070228.b

| # | Smp. # | Injection Time | Wkgp. # | QC # | Project # | Sample Description | Matrix | Amount | DilFac | IS#2-RT | IS#2-Area | Method | Init Cali | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BLANK-1 | 28-FEB-2007 07:39 | SDGa1658 | SDGa16 | 421152 | Solvent Blank + ISTD's | WATER | 1000.000 | 1.0 | 6.704 | 160189 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 2 | DFTPP-1 | 28-FEB-2007 08:20 | SDGa2816 | SDGa28 | 421152 | SS#1254x50 DFTPP | NONE | 0.000 | 1.0 | 12.724 | 86248 | LVI_DFTP.m | | Dave Fada |
| 3 | CCALI-1 | 28-FEB-2007 09:01 | SDGa1658 | SDGa15 | 421152 | SS#1345E 250 ppb | WATER | 1.000 | 1.0 | 6.695 | 169873 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 4 | WG90067-2 | 28-FEB-2007 10:14 | WG90067 | BL#688 | 423589-09 | Method Blank (01-26-2007) | WATER | 2000.000 | 1.0 | 6.686 | 135019 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 5 | WG90067-4 | 28-FEB-2007 10:55 | WG90067 | BL#688 | 423589-09 | Method Blank (01-31-2007) | WATER | 2000.000 | 1.0 | 6.686 | 151683 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 6 | WG90067-1 | 28-FEB-2007 11:36 | WG90067 | BL#688 | 423589-09 | Spike Blank (01-26-2007) | WATER | 2000.000 | 1.0 | 6.686 | 124855 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 7 | WG90067-3 | 28-FEB-2007 12:17 | WG90067 | BL#688 | 423589-09 | Spike Blank Dup (01-31-2007) | WATER | 2000.000 | 1.0 | 6.686 | 158074 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 8 | L41562-1 | 28-FEB-2007 12:59 | WG90067 | BL#688 | 423589-09 | Lower Duwamish Phthalate Stu | WATER | 2000.000 | 1.0 | 6.686 | 149087 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 9 | L41561-1 | 28-FEB-2007 13:40 | WG90067 | BL#688 | 423589-09 | Lower Duwamish Phthalate Stu | WATER | 1420.000 | 1.0 | 6.686 | 147022 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 10 | L41561-2 | 28-FEB-2007 14:21 | WG90067 | BL#688 | 423589-09 | Lower Duwamish Phthalate Stu | WATER | 1610.000 | 1.0 | 6.686 | 160855 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 11 | L41561-3 | 28-FEB-2007 15:02 | WG90067 | BL#688 | 423589-09 | Lower Duwamish Phthalate Stu | WATER | 1410.000 | 1.0 | 6.686 | 142651 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 12 | L41561-4 | 28-FEB-2007 15:43 | WG90067 | BL#688 | 423589-09 | Lower Duwamish Phthalate Stu | WATER | 1480.000 | 1.0 | 6.686 | 180345 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 13 | L41561-5 | 28-FEB-2007 16:24 | WG90067 | BL#688 | 423589-09 | Lower Duwamish Phthalate Stu | WATER | 1860.000 | 1.0 | 6.686 | 220119 | PHPAH.m | 13-FEB-2007 | Dave Fada |

**Samples:** 6 **QC Samples + Misc.:** 5 **ContinuingCals:** 1 **Tunes:** 1 **Calibrations:** 0

KCSlip4 57915

SEA424214

## Batch: \\Orgizmo\EE\chem\6890n.i\070301.b

| # | Smp. # | Injection Time | Wkgp. # | QC # | Project # | Sample Description | Matrix | Amount | DilFac | IS#2-RT | IS#2-Area | Method | Init Cali | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BLANK-1 | 01-MAR-2007 08:19 | SDGa1658 | SDGa16 | 421152 | Solvent Blank + ISTD's | WATER | 1000.000 | 1.0 | 6.704 | 247847 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 2 | DFTPP-1 | 01-MAR-2007 08:59 | SDGa2816 | SDGa28 | 421152 | SS#1254x50 DFTPP | NONE | 0.000 | 1.0 | 12.724 | 69136 | LVI_DFTP.m | | Dave Fada |
| 3 | CCALI-1 | 01-MAR-2007 09:40 | SDGa1658 | SDGa16 | 421152 | SS#1345E 250 ppb | WATER | 1.000 | 1.0 | 6.686 | 330541 | PHPAH.m | 13-FEB-2007 | Dave Fada |
| 4 | L41561-4 | 01-MAR-2007 10:50 | WG90067 | BL#688 | 423589-09 | Lower Duwamish Phthalate Stu | WATER | 1480.000 | 5.0 | 6.686 | 273644 | PHPAH.m | 13-FEB-2007 | Dave Fada |

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

KCSlip4 57916

SEA424215

Comment:
Operator: Dave Fada
Data Path: C:\MSDCHEM\1\DATA\070228\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

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

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

---

| Line | Sample Name/Misc Info |
|---|---|
| 1 | Type: Blank<br>Vial: 1<br>Method : PHPAH.M<br>Datafile: BLANK-1.D<br>Bar Code: 421152 Samp Amt: 1000 Multiplr: 1<br>Matrix :Method Default Sublist :Method Default<br>Spikelist :Method Default Re-inject :No |
| 2 | Type: Tune<br>Vial: 2<br>Method : LVI_DFTP.M<br>Datafile: DFTPP-1.D<br>Bar Code: 421152 Samp Amt: 1 Multiplr: 1<br>Matrix :Method Default Sublist :Method Default<br>Spikelist :Method Default Re-inject :No |
| 3 | Type: Cont.Cal<br>Vial: 3<br>Method : PHPAH.M<br>Datafile: CCALI-1.D<br>Bar Code: 421152 Samp Amt: 1 Multiplr: 1<br>Matrix :Method Default Sublist :Method Default<br>Spikelist :Method Default Re-inject :No |
| 4 | Type: Blank<br>Vial: 4<br>Method : PHPAH.M<br>Datafile: WG90067-2.D<br>Bar Code: 423589-090-1 Samp Amt: 2000 Multiplr: 1<br>Matrix :Liquid Sublist :Method Default<br>Spikelist :Method Default Re-inject :No |
| 5 | Type: Blank<br>Vial: 5<br>Method : PHPAH.M<br>Datafile: WG90067-4.D<br>Bar Code: 423589-090-2 Samp Amt: 2000 Multiplr: 1<br>Matrix :Liquid Sublist :Method Default<br>Spikelist :Method Default Re-inject :No |
| 6 | Type: SB<br>Vial: 6<br>Method : PHPAH.M<br>Datafile: WG90067-1.D<br>Bar Code: 423589-090-1 Samp Amt: 2000 Multiplr: 1<br>Matrix :Liquid Sublist :Method Default<br>Spikelist :Method Default Re-inject :No |
| 7 | Type: SBD<br>Vial: 7<br>Method : PHPAH.M<br>Datafile: WG90067-3.D<br>Bar Code: 423589-090-2 Samp Amt: 2000 Multiplr: 1<br>Matrix :Liquid Sublist :Method Default<br>Spikelist :Method Default Re-inject :No |
| 8 | Type: Sample |

Lower Duwamish Phthalate Studies

Sequence Last Modified Wed Feb 28 10:09:43 2007 Page: 1

KCSlip4 57917

SEA424216

```
    Method   : PHPAH.M
    Datafile: L41562-1.D
    Bar Code: 423589-090-1      Samp Amt: 2000        Multiplr: 1
    Matrix           :Liquid            Sublist          :Method Default
    Spikelist        :Method Default    Re-inject        :No
-----------------------------------------------------------------------
9   Type: Sample       Lower Duwamish Phthalate Studies
    Vial: 9            WG90067;BL#688;SS#969x200;SS#1315/1343
    Method   : PHPAH.M
    Datafile: L41561-1.D
    Bar Code: 423589-090-1      Samp Amt: 1420        Multiplr: 1
    Matrix           :Liquid            Sublist          :Method Default
    Spikelist        :Method Default    Re-inject        :No
-----------------------------------------------------------------------
10  Type: Sample       Lower Duwamish Phthalate Studies
    Vial: 10           WG90067;BL#688;SS#969x200;SS#1315/1343
    Method   : PHPAH.M
    Datafile: L41561-2.D
    Bar Code: 423589-090-1      Samp Amt: 1610        Multiplr: 1
    Matrix           :Liquid            Sublist          :Method Default
    Spikelist        :Method Default    Re-inject        :No
-----------------------------------------------------------------------
11  Type: Sample       Lower Duwamish Phthalate Studies
    Vial: 11           WG90067;BL#688;SS#969x200;SS#1315/1343
    Method   : PHPAH.M
    Datafile: L41561-3.D
    Bar Code: 423589-090-1      Samp Amt: 1410        Multiplr: 1
    Matrix           :Liquid            Sublist          :Method Default
    Spikelist        :Method Default    Re-inject        :No
-----------------------------------------------------------------------
12  Type: Sample       Lower Duwamish Phthalate Studies
    Vial: 12           WG90067;BL#688;SS#969x200;SS#1315/1343
    Method   : PHPAH.M
    Datafile: L41561-4.D
    Bar Code: 423589-090-1      Samp Amt: 1480        Multiplr: 1
    Matrix           :Liquid            Sublist          :Method Default
    Spikelist        :Method Default    Re-inject        :No
-----------------------------------------------------------------------
13  Type: Sample       Lower Duwamish Phthalate Studies
    Vial: 13           WG90067;BL#688;SS#969x200;SS#1315/1343
    Method   : PHPAH.M
    Datafile: L41561-5.D
    Bar Code: 423589-090-1      Samp Amt: 1860        Multiplr: 1
    Matrix           :Liquid            Sublist          :Method Default
    Spikelist        :Method Default    Re-inject        :No
-----------------------------------------------------------------------
```



KCSlip4 57918

SEA424217

Comment:
Operator: Dave Fada
Data Path: C:\MSDCHEM\1\DATA\070301\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

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

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

---

| Line | Sample Name/Misc Info |
|---|---|
| 1 | Type: Blank — Solvent Blank + ISTD's<br>Vial: 1 — Solvent Blank + ISTD's<br>Method : PHPAH.M<br>Datafile: BLANK-1.D<br>Bar Code: 421152 — Samp Amt: 1000 — Multiplr: 1<br>Matrix :Method Default — Sublist :Method Default<br>Spikelist :Method Default — Re-inject :No |
| 2 | Type: Tune — SS#1254x50 DFTPP<br>Vial: 2 — DFTPP 1.0 ug/ml 20 ul injection<br>Method : LVI_DFTP.M<br>Datafile: DFTPP-1.D<br>Bar Code: 421152 — Samp Amt: 1 — Multiplr: 1<br>Matrix :Method Default — Sublist :Method Default<br>Spikelist :Method Default — Re-inject :No |
| 3 | Type: Cont.Cal — SS#1345E 250 ppb<br>Vial: 3 — Phthalate/PAH 250 ppb 20 ul injection<br>Method : PHPAH.M<br>Datafile: CCALI-1.D<br>Bar Code: 421152 — Samp Amt: 1 — Multiplr: 1<br>Matrix :Method Default — Sublist :Method Default<br>Spikelist :Method Default — Re-inject :No |
| 4 | Type: Sample — Lower Duwamish Phthalate Studies<br>Vial: 4 — WG90067;BL#688;SS#969x200;SS#1315/1343<br>Method : PHPAH.M<br>Datafile: L41561-4.D<br>Bar Code: 423589-090-1 — Samp Amt: 1480 — Multiplr: 5<br>Matrix :Liquid — Sublist :Method Default<br>Spikelist :Method Default — Re-inject :No |

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KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90067-1 | Matrix: BLANK WTR | List Type: | ORPHPAHSOURCE | | |
| | Project: | Run ID: | R118920 | Col. Date: | |
| | Locator: SB | Work Group: | WG90067 | Rec. Date: | 01-FEB 07 |
| | Site: NONE | QC Type: | SB | Due Date: | |
| | Method Code: 8270B | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | | ug/L | <MDL | .02 | .04 | |
| Acenaphthylene | .161 | ug/L | | .01 | .02 | |
| Dimethyl Phthalate | .228 | ug/L | | .01 | .02 | |
| Acenaphthene | | ug/L | <MDL | .01 | .02 | |
| Fluorene | .189 | ug/L | | .01 | .02 | |
| Diethyl Phthalate | .262 | ug/L | | .015 | .03 | |
| Phenanthrene | .206 | ug/L | | .01 | .02 | |
| Anthracene | .179 | ug/L | | .01 | .02 | |
| Di-N-Butyl Phthalate | .346 | ug/L | | .01 | .02 | |
| Fluoranthene | | ug/L | <MDL | .01 | .02 | |
| Pyrene | .256 | ug/L | | .01 | .02 | |
| Benzyl Butyl Phthalate | .342 | ug/L | | .01 | .02 | |
| Benzo(a)anthracene | .227 | ug/L | | .01 | .02 | |
| Chrysene | .231 | ug/L | | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | .247 | ug/L | B | .01 | .02 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Benzo(b)fluoranthene | .201 | ug/L | | .015 | .03 | |
| Benzo(k)fluoranthene | .176 | ug/L | | .015 | .03 | |
| Benzo(a)pyrene | .149 | ug/L | | .015 | .03 | |
| Indeno(1,2,3-Cd)Pyrene | .0876 | ug/L | | .015 | .03 | |
| Dibenzo(a,h)anthracene | .0905 | ug/L | | .015 | .03 | |
| Benzo(g,h,i)perylene | .085 | ug/L | | .015 | .03 | |
| 2-Methylnaphthalene | | ug/L | <MDL | .015 | .03 | |
| d14-Terphenyl | .528 | ug/L | | .01 | .02 | |
| D6-Dimethyl Phthalate | .201 | ug/L | | .01 | .02 | |
| D8-Acenaphthylene | .166 | ug/L | | .01 | .02 | |
| D10-Fluorene | .169 | ug/L | | .01 | .02 | |
| D10-Anthracene | .141 | ug/L | | .01 | .02 | |
| D10-Pyrene | .167 | ug/L | | .01 | .02 | |
| D12-Benzo(a)pyrene | .151 | ug/L | | .01 | .02 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/WG90067-1.rp |
| Instrument ID | | | | | | 6890n.1 |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| d14-Terphenyl | 85 | 33-141 |
| D6-Dimethyl Phthalate | 81 | 0-150 |
| D8-Acenaphthylene | 66 | 0-150 |
| D10-Fluorene | 68 | 0-150 |
| D10-Anthracene | 56 | 0-150 |
| D10-Pyrene | 67 | 0-150 |
| D12-Benzo(a)pyrene | 60 | 0-150 |



KCSlip4 57920

SEA424219

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90067-2 | Matrix: | BLANK WTR | List Type: | ORPHPAHSOURCE | |
| | Project: | | Run ID: | R118920 | Col. Date: |
| | Locator: | MB | Work Group: | WG90067 | Rec. Date: 01-FEB-07 |
| | Site: | NONE | QC Type: | MB | Due Date: |
| | Method Code: | 8270B | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | | ug/L | <MDL | .02 | .04 | |
| Acenaphthylene | | ug/L | <MDL | .01 | .02 | |
| Dimethyl Phthalate | | ug/L | <MDL | .01 | .02 | |
| Acenaphthene | | ug/L | <MDL | .01 | .02 | |
| Fluorene | | ug/L | <MDL | .01 | .02 | |
| Diethyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Phenanthrene | | ug/L | <MDL | .01 | .02 | |
| Anthracene | | ug/L | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .0461 | ug/L | B | .01 | .02 | |
| Fluoranthene | | ug/L | <MDL | .01 | .02 | |
| Pyrene | | ug/L | <MDL | .01 | .02 | |
| Benzyl Butyl Phthalate | .015 | ug/L | <RDL,B | .01 | .02 | |
| Benzo(a)anthracene | | ug/L | <MDL | .01 | .02 | |
| Chrysene | | ug/L | <MDL | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | .0879 | ug/L | B | .01 | .02 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Benzo(b)fluoranthene | | ug/L | <MDL | .015 | .03 | |
| Benzo(k)fluoranthene | | ug/L | <MDL | .015 | .03 | |
| Benzo(a)pyrene | | ug/L | <MDL | .015 | .03 | |
| Indeno(1,2,3-Cd)Pyrene | | ug/L | <MDL | .015 | .03 | |
| Dibenzo(a,h)anthracene | | ug/L | <MDL | .015 | .03 | |
| Benzo(g,h,i)perylene | | ug/L | <MDL | .015 | .03 | |
| 2-Methylnaphthalene | | ug/L | <MDL | .015 | .03 | |
| d14-Terphenyl | .504 | ug/L | | .01 | .02 | |
| D6-Dimethyl Phthalate | .185 | ug/L | | .01 | .02 | |
| D8-Acenaphthylene | .16 | ug/L | | .01 | .02 | |
| D10-Fluorene | .161 | ug/L | | .01 | .02 | |
| D10-Anthracene | .144 | ug/L | | .01 | .02 | |
| D10-Pyrene | .166 | ug/L | | .01 | .02 | |
| D12-Benzo(a)pyrene | .19 | ug/L | | .01 | .02 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/file s/gcms/WG90067-2.rp |
| Instrument ID | | | | | | 6890n.i |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| d14-Terphenyl | 81 | 33-141 |
| D6-Dimethyl Phthalate | 74 | 0-150 |
| D8-Acenaphthylene | 64 | 0-150 |
| D10-Fluorene | 64 | 0-150 |
| D10-Anthracene | 58 | 0-150 |
| D10-Pyrene | 66 | 0-150 |
| D12-Benzo(a)pyrene | 76 | 0-150 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90067-3 | Matrix: BLANK WTR | List Type: | ORPHPAHSOURCE | | |
| | Project: | Run ID: | R118920 | Col. Date: | |
| | Locator: SBD | Work Group: | WG90067 | Rec. Date: | 01-FEB-07 |
| | Site: NONE | QC Type: | SBD | Due Date: | |
| | Method Code: 8270B | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | | ug/L | <MDL | .02 | .04 | |
| Acenaphthylene | .0916 | ug/L | | .01 | .02 | |
| Dimethyl Phthalate | .13 | ug/L | | .01 | .02 | |
| Acenaphthene | | ug/L | <MDL | .01 | .02 | |
| Fluorene | .108 | ug/L | | .01 | .02 | |
| Diethyl Phthalate | .168 | ug/L | | .015 | .03 | |
| Phenanthrene | .164 | ug/L | | .01 | .02 | |
| Anthracene | .147 | ug/L | | .01 | .02 | |
| Di-N Butyl Phthalate | .311 | ug/L | | .01 | .02 | |
| Fluoranthene | | ug/L | <MDL | .01 | .02 | |
| Pyrene | .229 | ug/L | | .01 | .02 | |
| Benzyl Butyl Phthalate | .31 | ug/L | | .01 | .02 | |
| Benzo(a)anthracene | .217 | ug/L | | .01 | .02 | |
| Chrysene | .217 | ug/L | | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | .214 | ug/L | B | .01 | .02 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Benzo(b)fluoranthene | .194 | ug/L | | .015 | .03 | |
| Benzo(k)fluoranthene | .173 | ug/L | | .015 | .03 | |
| Benzo(a)pyrene | .148 | ug/L | | .015 | .03 | |
| Indeno(1,2,3-Cd)Pyrene | .0939 | ug/L | | .015 | .03 | |
| Dibenzo(a,h)anthracene | .0987 | ug/L | | .015 | .03 | |
| Benzo(g,h,i)perylene | .0938 | ug/L | | .015 | .03 | |
| 2-Methylnaphthalene | | ug/L | <MDL | .015 | .03 | |
| d14-Terphenyl | .477 | ug/L | | .01 | .02 | |
| D6-Dimethyl Phthalate | .11 | ug/L | | .01 | .02 | |
| D8-Acenaphthylene | .0915 | ug/L | | .01 | .02 | |
| D10-Fluorene | .0965 | ug/L | | .01 | .02 | |
| D10-Anthracene | .111 | ug/L | | .01 | .02 | |
| D10-Pyrene | .153 | ug/L | | .01 | .02 | |
| D12-Benzo(a)pyrene | .144 | ug/L | | .01 | .02 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/WG90067-3.rp |
| Instrument ID | | | | | | 6890n.1 |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| d14-Terphenyl | 76 | 33-141 |
| D6-Dimethyl Phthalate | 44 | 0-150 |
| D8-Acenaphthylene | 37 | 0-150 |
| D10-Fluorene | 39 | 0-150 |
| D10-Anthracene | 44 | 0-150 |
| D10-Pyrene | 61 | 0-150 |
| D12-Benzo(a)pyrene | 58 | 0-150 |



KCSlip4 57922

SEA424221

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90067-4 | Matrix: BLANK WTR | List Type: | ORPHPAHSOURCE | | |
| | Project: | Run ID: | R118920 | Col. Date: | |
| | Locator: MB | Work Group: | WG90067 | Rec. Date: | 01-FEB-07 |
| | Site: NONE | QC Type: | MB | Due Date: | |
| | Method Code: 8270B | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | | ug/L | <MDL | .02 | .04 | |
| Acenaphthylene | | ug/L | <MDL | .01 | .02 | |
| Dimethyl Phthalate | | ug/L | <MDL | .01 | .02 | |
| Acenaphthene | | ug/L | <MDL | .01 | .02 | |
| Fluorene | | ug/L | <MDL | .01 | .02 | |
| Diethyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Phenanthrene | | ug/L | <MDL | .01 | .02 | |
| Anthracene | | ug/L | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .0333 | ug/L | B | .01 | .02 | |
| Fluoranthene | | ug/L | <MDL | .01 | .02 | |
| Pyrene | | ug/L | <MDL | .01 | .02 | |
| Benzyl Butyl Phthalate | .011 | ug/L | <RDL,B | .01 | .02 | |
| Benzo(a)anthracene | | ug/L | <MDL | .01 | .02 | |
| Chrysene | | ug/L | <MDL | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | .0782 | ug/L | B | .01 | .02 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Benzo(b)fluoranthene | | ug/L | <MDL | .015 | .03 | |
| Benzo(k)fluoranthene | | ug/L | <MDL | .015 | .03 | |
| Benzo(a)pyrene | | ug/L | <MDL | .015 | .03 | |
| Indeno(1,2,3-Cd)Pyrene | | ug/L | <MDL | .015 | .03 | |
| Dibenzo(a,h)anthracene | | ug/L | <MDL | .015 | .03 | |
| Benzo(g,h,i)perylene | | ug/L | <MDL | .015 | .03 | |
| 2-Methylnaphthalene | | ug/L | <MDL | .015 | .03 | |
| d14-Terphenyl | .508 | ug/L | | .01 | .02 | |
| D6-Dimethyl Phthalate | .136 | ug/L | | .01 | .02 | |
| D8-Acenaphthylene | .0992 | ug/L | | .01 | .02 | |
| D10-Fluorene | .111 | ug/L | | .01 | .02 | |
| D10-Anthracene | .134 | ug/L | | .01 | .02 | |
| D10-Pyrene | .163 | ug/L | | .01 | .02 | |
| D12-Benzo(a)pyrene | .195 | ug/L | | .01 | .02 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/WG90067-4.rp |
| Instrument ID | | | | | | 6890n.1 |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| d14-Terphenyl | 81 | 33-141 |
| D6-Dimethyl Phthalate | 55 | 0-150 |
| D8-Acenaphthylene | 40 | 0-150 |
| D10-Fluorene | 44 | 0-150 |
| D10-Anthracene | 53 | 0-150 |
| D10-Pyrene | 65 | 0-150 |
| D12-Benzo(a)pyrene | 78 | 0-150 |



KCSlip4 57923

SEA424222

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-1 | Matrix: STORM WTR | List Type: ORPHPAHSOURCE | | | |
| | Project: 423589-090-1 | Run ID: R118920 | | Col. Date: | 23-JAN-07 |
| | Locator: BWR | Work Group: WG90067 | | Rec. Date: | 23-JAN-07 |
| | Site: METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | Method Code: 8270B | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | | ug/L | <MDL | .028 | .0563 | |
| Acenaphthylene | .016 | ug/L | <RDL | .014 | .0282 | |
| Dimethyl Phthalate | .018 | ug/L | <RDL | .014 | .0282 | |
| Acenaphthene | | ug/L | <MDL | .014 | .0282 | |
| Fluorene | | ug/L | <MDL | .014 | .0282 | |
| Diethyl Phthalate | .13 | ug/L | | .021 | .0423 | |
| Phenanthrene | .0382 | ug/L | | .014 | .0282 | |
| Anthracene | | ug/L | <MDL | .014 | .0282 | |
| Di-N-Butyl Phthalate | .169 | ug/L | | .014 | .0282 | |
| Fluoranthene | .026 | ug/L | <RDL | .014 | .0282 | |
| Pyrene | .026 | ug/L | <RDL | .014 | .0282 | |
| Benzyl Butyl Phthalate | .246 | ug/L | | .014 | .0282 | |
| Benzo(a)anthracene | | ug/L | <MDL | .014 | .0282 | |
| Chrysene | .017 | ug/L | <RDL | .014 | .0282 | |
| Bis(2-Ethylhexyl)Phthalate | 1.78 | ug/L | | .014 | .0282 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .021 | .0423 | |
| Benzo(b)fluoranthene | | ug/L | <MDL | .021 | .0423 | |
| Benzo(k)fluoranthene | | ug/L | <MDL | .021 | .0423 | |
| Benzo(a)pyrene | | ug/L | <MDL | .021 | .0423 | |
| Indeno(1,2,3-Cd)Pyrene | | ug/L | <MDL | .021 | .0423 | |
| Dibenzo(a,h)anthracene | | ug/L | <MDL | .021 | .0423 | |
| Benzo(g,h,i)perylene | | ug/L | <MDL | .021 | .0423 | |
| 2-Methylnaphthalene | | ug/L | <MDL | .021 | .0423 | |
| d14-Terphenyl | .861 | ug/L | | .014 | .0282 | |
| D6-Dimethyl Phthalate | .21 | ug/L | | .014 | .0282 | |
| D8-Acenaphthylene | | ug/L | <MDL | .014 | .0282 | |
| D10-Fluorene | | ug/L | <MDL | .014 | .0282 | |
| D10-Anthracene | | ug/L | <MDL | .014 | .0282 | |
| D10-Pyrene | .0899 | ug/L | | .014 | .0282 | |
| D12-Benzo(a)pyrene | .164 | ug/L | | .014 | .0282 | |
| Amount Analyzed | 1420 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/L41561-1.rp |
| Instrument ID | | | | | | 6890n.1 |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | | Lab Limits |
|---|---|---|---|
| d14-Terphenyl | 98 | | 33-141 |
| D6-Dimethyl Phthalate | 60 | | 0-150 |
| D8-Acenaphthylene | 0 | * | 0-150 |
| D10-Fluorene | 0 | * | 0-150 |
| D10-Anthracene | 0 | * | 0-150 |
| D10-Pyrene | 26 | | 0-150 |
| D12-Benzo(a)pyrene | 47 | | 0-150 |



KCSlip4 57924

SEA424223

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-2 | Matrix: | STORM WTR | List Type: | ORPHPAHSOURCE | |
| | Project: | 423589-090-1 | Run ID: | R118920 | Col. Date: 23-JAN-07 |
| | Locator: | CER | Work Group: | WG90067 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | Method Code: | 8270B | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | .04 | ug/L | <RDL | .025 | .0497 | |
| Acenaphthylene | .018 | ug/L | <RDL | .012 | .0248 | |
| Dimethyl Phthalate | .0299 | ug/L | | .012 | .0248 | |
| Acenaphthene | | ug/L | <MDL | .012 | .0248 | |
| Fluorene | .014 | ug/L | <RDL | .012 | .0248 | |
| Diethyl Phthalate | .13 | ug/L | | .019 | .0373 | |
| Phenanthrene | .0798 | ug/L | | .012 | .0248 | |
| Anthracene | | ug/L | <MDL | .012 | .0248 | |
| Di-N-Butyl Phthalate | .23 | ug/L | | .012 | .0248 | |
| Fluoranthene | .0701 | ug/L | | .012 | .0248 | |
| Pyrene | .0475 | ug/L | | .012 | .0248 | |
| Benzyl Butyl Phthalate | .0651 | ug/L | | .012 | .0248 | |
| Benzo(a)anthracene | | ug/L | <MDL | .012 | .0248 | |
| Chrysene | .024 | ug/L | <RDL | .012 | .0248 | |
| Bis(2-Ethylhexyl)Phthalate | .526 | ug/L | | .012 | .0248 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .019 | .0373 | |
| Benzo(b)fluoranthene | | ug/L | <MDL | .019 | .0373 | |
| Benzo(k)fluoranthene | | ug/L | <MDL | .019 | .0373 | |
| Benzo(a)pyrene | | ug/L | <MDL | .019 | .0373 | |
| Indeno(1,2,3-Cd)Pyrene | | ug/L | <MDL | .019 | .0373 | |
| Dibenzo(a,h)anthracene | | ug/L | <MDL | .019 | .0373 | |
| Benzo(g,h,i)perylene | | ug/L | <MDL | .019 | .0373 | |
| 2-Methylnaphthalene | .022 | ug/L | <RDL | .019 | .0373 | |
| d14-Terphenyl | .471 | ug/L | | .012 | .0248 | |
| D6-Dimethyl Phthalate | .164 | ug/L | | .012 | .0248 | |
| D8-Acenaphthylene | | ug/L | <MDL | .012 | .0248 | |
| D10-Fluorene | | ug/L | <MDL | .012 | .0248 | |
| D10-Anthracene | | ug/L | <MDL | .012 | .0248 | |
| D10-Pyrene | .119 | ug/L | | .012 | .0248 | |
| D12-Benzo(a)pyrene | .109 | ug/L | | .012 | .0248 | |
| Amount Analyzed | 1610 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/L41561-2.xp |
| Instrument ID | | | | | | 6890n i |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | | Lab Limits |
|---|---|---|---|
| d14-Terphenyl | 61 | | 33-141 |
| D6-Dimethyl Phthalate | 53 | | 0-150 |
| D8-Acenaphthylene | 0 | * | 0-150 |
| D10-Fluorene | 0 | * | 0-150 |
| D10-Anthracene | 0 | * | 0-150 |
| D10-Pyrene | 38 | | 0-150 |
| D12-Benzo(a)pyrene | 35 | | 0-150 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-3 | Matrix: STORM WTR | List Type: ORPHPAHSOURCE | | | |
| | Project: 423589-090-1 | Run ID: R118920 | | Col. Date: | 23-JAN-07 |
| | Locator: DZ | Work Group: WG90067 | | Rec. Date: | 23-JAN-07 |
| | Site: METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | Method Code: 8270B | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | .049 | ug/L | <RDL | .028 | .0567 | |
| Acenaphthylene | .021 | ug/L | <RDL | .014 | .0284 | |
| Dimethyl Phthalate | .0422 | ug/L | | .014 | .0284 | |
| Acenaphthene | | ug/L | <MDL | .014 | .0284 | |
| Fluorene | .015 | ug/L | <RDL | .014 | .0284 | |
| Diethyl Phthalate | .187 | ug/L | | .021 | .0426 | |
| Phenanthrene | .0759 | ug/L | | .014 | .0284 | |
| Anthracene | | ug/L | <MDL | .014 | .0284 | |
| Di-N-Butyl Phthalate | .312 | ug/L | | .014 | .0284 | |
| Fluoranthene | .0736 | ug/L | | .014 | .0284 | |
| Pyrene | .0627 | ug/L | | .014 | .0284 | |
| Benzyl Butyl Phthalate | .207 | ug/L | | .014 | .0284 | |
| Benzo(a)anthracene | .015 | ug/L | <RDL | .014 | .0284 | |
| Chrysene | .0347 | ug/L | | .014 | .0284 | |
| Bis(2-Ethylhexyl)Phthalate | .717 | ug/L | | .014 | .0284 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .021 | .0426 | |
| Benzo(b)fluoranthene | | ug/L | <MDL | .021 | .0426 | |
| Benzo(k)fluoranthene | | ug/L | <MDL | .021 | .0426 | |
| Benzo(a)pyrene | | ug/L | <MDL | .021 | .0426 | |
| Indeno(1,2,3-Cd)Pyrene | | ug/L | <MDL | .021 | .0426 | |
| Dibenzo(a,h)anthracene | | ug/L | <MDL | .021 | .0426 | |
| Benzo(g,h,i)perylene | | ug/L | <MDL | .021 | .0426 | |
| 2-Methylnaphthalene | .028 | ug/L | <RDL | .021 | .0426 | |
| d14-Terphenyl | .753 | ug/L | | .014 | .0284 | |
| D6-Dimethyl Phthalate | .223 | ug/L | | .014 | .0284 | |
| D8-Acenaphthylene | | ug/L | <MDL | .014 | .0284 | |
| D10-Fluorene | | ug/L | <MDL | .014 | .0284 | |
| D10-Anthracene | | ug/L | <MDL | .014 | .0284 | |
| D10-Pyrene | .0893 | ug/L | | .014 | .0284 | |
| D12-Benzo(a)pyrene | .11 | ug/L | | .014 | .0284 | |
| Amount Analyzed | 1410 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METRO83/file s/gcms/L41561-3 rp |
| Instrument ID | | | | | | 6890n.i |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | | Lab Limits |
|---|---|---|---|
| d14-Terphenyl | 85 | | 33-141 |
| D6-Dimethyl Phthalate | 63 | | 0-150 |
| D8-Acenaphthylene | 0 | * | 0-150 |
| D10-Fluorene | 0 | * | 0-150 |
| D10-Anthracene | 0 | * | 0-150 |
| D10-Pyrene | 25 | | 0-150 |
| D12-Benzo(a)pyrene | 31 | | 0-150 |



KCSlip4 57926

SEA424225

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-4 | Matrix: STORM WTR | List Type: ORPHPAHSOURCE | | | |
| | Project: 423589-090-1 | Run ID: R118920 | | Col. Date: | 23-JAN-07 |
| | Locator: KCIA | Work Group: WG90067 | | Rec. Date: | 23-JAN-07 |
| | Site: METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | Method Code: 8270B | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | .0561 | ug/L | | .027 | .0541 | |
| Acenaphthylene | .0286 | ug/L | | .014 | .027 | |
| Dimethyl Phthalate | .022 | ug/L | <RDL | .014 | .027 | |
| Acenaphthene | | ug/L | <MDL | .014 | .027 | |
| Fluorene | .025 | ug/L | <RDL | .014 | .027 | |
| Diethyl Phthalate | .197 | ug/L | | .02 | .0405 | |
| Phenanthrene | .435 | ug/L | | .014 | .027 | |
| Anthracene | .0321 | ug/L | | .014 | .027 | |
| Di-N-Butyl Phthalate | .295 | ug/L | | .014 | .027 | |
| Fluoranthene | .93 | ug/L | | .014 | .027 | |
| Pyrene | .997 | ug/L | | .014 | .027 | |
| Benzyl Butyl Phthalate | .114 | ug/L | | .014 | .027 | |
| Benzo(a)anthracene | .304 | ug/L | | .014 | .027 | |
| Chrysene | .582 | ug/L | | .014 | .027 | |
| Bis(2-Ethylhexyl)Phthalate | 3.74 | ug/L | TA | .014 | .027 | value from 5x dilution |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .02 | .0405 | |
| Benzo(b)fluoranthene | .634 | ug/L | | .02 | .0405 | |
| Benzo(k)fluoranthene | .419 | ug/L | | .02 | .0405 | |
| Benzo(a)pyrene | .363 | ug/L | | .02 | .0405 | |
| Indeno(1,2,3-Cd)Pyrene | .328 | ug/L | | .02 | .0405 | |
| Dibenzo(a,h)anthracene | .0947 | ug/L | | .02 | .0405 | |
| Benzo(g,h,i)perylene | .378 | ug/L | | .02 | .0405 | |
| 2-Methylnaphthalene | .027 | ug/L | <RDL | .02 | .0405 | |
| d14-Terphenyl | .902 | ug/L | | .014 | .027 | |
| D6-Dimethyl Phthalate | .206 | ug/L | | .014 | .027 | |
| D8-Acenaphthylene | | ug/L | <MDL | .014 | .027 | |
| D10-Fluorene | | ug/L | <MDL | .014 | .027 | |
| D10-Anthracene | | ug/L | <MDL | .014 | .027 | |
| D10-Pyrene | .0727 | ug/L | | .014 | .027 | |
| D12-Benzo(a)pyrene | .1 | ug/L | | .014 | .027 | |
| Amount Analyzed | 1480 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/file s/gcms/L41561 4.rp |
| Instrument ID | | | | | | 6890n.i |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | | Lab Limits |
|---|---|---|---|
| d14-Terphenyl | 107 | | 33-141 |
| D6-Dimethyl Phthalate | 61 | | 0-150 |
| D8-Acenaphthylene | 0 | * | 0-150 |
| D10-Fluorene | 0 | * | 0-150 |
| D10-Anthracene | 0 | * | 0-150 |
| D10-Pyrene | 22 | | 0-150 |
| D12-Benzo(a)pyrene | 30 | | 0-150 |



KCSlip4 57927

SEA424226

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-5 | Matrix: STORM WTR | List Type: ORPHPAHSOURCE | | | |
| | Project: 423589-090-1 | Run ID: R118920 | Col. Date: 23-JAN-07 | | |
| | Locator: SPCC | Work Group: WG90067 | Rec. Date: 23-JAN-07 | | |
| | Site: METRO | QC Type: | Due Date: 22-FEB-07 | | |
| | Method Code: 8270B | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | .0439 | ug/L | | .022 | .043 | |
| Acenaphthylene | .018 | ug/L | <RDL | .011 | .0215 | |
| Dimethyl Phthalate | .0277 | ug/L | | .011 | .0215 | |
| Acenaphthene | | ug/L | <MDL | .011 | .0215 | |
| Fluorene | | ug/L | <MDL | .011 | .0215 | |
| Diethyl Phthalate | .143 | ug/L | | .016 | .0323 | |
| Phenanthrene | .0609 | ug/L | | .011 | .0215 | |
| Anthracene | | ug/L | <MDL | .011 | .0215 | |
| Di-N-Butyl Phthalate | .222 | ug/L | | .011 | .0215 | |
| Fluoranthene | .0463 | ug/L | | .011 | .0215 | |
| Pyrene | .042 | ug/L | | .011 | .0215 | |
| Benzyl Butyl Phthalate | .489 | ug/L | | .011 | .0215 | |
| Benzo(a)anthracene | | ug/L | <MDL | .011 | .0215 | |
| Chrysene | .0229 | ug/L | | .011 | .0215 | |
| Bis(2-Ethylhexyl)Phthalate | .534 | ug/L | | .011 | .0215 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .016 | .0323 | |
| Benzo(b)fluoranthene | | ug/L | <MDL | .016 | .0323 | |
| Benzo(k)fluoranthene | | ug/L | <MDL | .016 | .0323 | |
| Benzo(a)pyrene | | ug/L | <MDL | .016 | .0323 | |
| Indeno(1,2,3-Cd)Pyrene | | ug/L | <MDL | .016 | .0323 | |
| Dibenzo(a,h)anthracene | | ug/L | <MDL | .016 | .0323 | |
| Benzo(g,h,i)perylene | | ug/L | <MDL | .016 | .0323 | |
| 2-Methylnaphthalene | .02 | ug/L | <RDL | .016 | .0323 | |
| d14-Terphenyl | .686 | ug/L | | .011 | .0215 | |
| D5-Dimethyl Phthalate | .168 | ug/L | | .011 | .0215 | |
| D8-Acenaphthylene | | ug/L | <MDL | .011 | .0215 | |
| D10-Fluorene | | ug/L | <MDL | .011 | .0215 | |
| D10-Anthracene | | ug/L | <MDL | .011 | .0215 | |
| D10-Pyrene | .0879 | ug/L | | .011 | .0215 | |
| D12-Benzo(a)pyrene | .101 | ug/L | | .011 | .0215 | |
| Amount Analyzed | 1860 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/L41561-5.rp |
| Instrument ID | | | | | | 6890n.i |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | | Lab Limits |
|---|---|---|---|
| d14-Terphenyl | 102 | | 33-141 |
| D5-Dimethyl Phthalate | 63 | | 0-150 |
| D8-Acenaphthylene | 0 | * | 0-150 |
| D10-Fluorene | 0 | * | 0-150 |
| D10-Anthracene | 0 | * | 0-150 |
| D10-Pyrene | 33 | | 0-150 |
| D12-Benzo(a)pyrene | 38 | | 0-150 |



KCSlip4 57928

SEA424227

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/05/07 08:52 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41562-1 | Matrix: | BLANK WTR | List Type: | ORPHPAHSOURCE | |
| | Project: | 423589-090-1 | Run ID: | R118920 | Col. Date: 25-JAN-07 |
| | Locator: | BWR | Work Group: | WG90067 | Rec. Date: 25-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 24-FEB-07 |
| | Method Code: | 8270B | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Naphthalene | | ug/L | <MDL | .02 | .04 | |
| Acenaphthylene | | ug/L | <MDL | .01 | .02 | |
| Dimethyl Phthalate | | ug/L | <MDL | .01 | .02 | |
| Acenaphthene | | ug/L | <MDL | .01 | .02 | |
| Fluorene | | ug/L | <MDL | .01 | .02 | |
| Diethyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Phenanthrene | | ug/L | <MDL | .01 | .02 | |
| Anthracene | | ug/L | <MDL | .01 | .02 | |
| Di-N-Butyl Phthalate | .0421 | ug/L | B | .01 | .02 | |
| Fluoranthene | | ug/L | <MDL | .01 | .02 | |
| Pyrene | | ug/L | <MDL | .01 | .02 | |
| Benzyl Butyl Phthalate | .015 | ug/L | <RDL,B | .01 | .02 | |
| Benzo(a)anthracene | | ug/L | <MDL | .01 | .02 | |
| Chrysene | | ug/L | <MDL | .01 | .02 | |
| Bis(2-Ethylhexyl)Phthalate | .0838 | ug/L | B | .01 | .02 | |
| Di-N-Octyl Phthalate | | ug/L | <MDL | .015 | .03 | |
| Benzo(b)fluoranthene | | ug/L | <MDL | .015 | .03 | |
| Benzo(k)fluoranthene | | ug/L | <MDL | .015 | .03 | |
| Benzo(a)pyrene | | ug/L | <MDL | .015 | .03 | |
| Indeno(1,2,3-Cd)Pyrene | | ug/L | <MDL | .015 | .03 | |
| Dibenzo(a,h)anthracene | | ug/L | <MDL | .015 | .03 | |
| Benzo(g,h,i)perylene | | ug/L | <MDL | .015 | .03 | |
| 2-Methylnaphthalene | | ug/L | <MDL | .015 | .03 | |
| d14-Terphenyl | .552 | ug/L | | .01 | .02 | |
| D6-Dimethyl Phthalate | .124 | ug/L | | .01 | .02 | |
| D8-Acenaphthylene | .0931 | ug/L | | .01 | .02 | |
| D10-Fluorene | .106 | ug/L | | .01 | .02 | |
| D10-Anthracene | .121 | ug/L | | .01 | .02 | |
| D10-Pyrene | .166 | ug/L | | .01 | .02 | |
| D12-Benzo(a)pyrene | .192 | ug/L | | .01 | .02 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1000 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 28-FEB-07 |
| Operator ID | | | | | | Dave Fada |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gcms/L41562-1.rp |
| Instrument ID | | | | | | 6890n.i |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| d14-Terphenyl | 88 | 33-141 |
| D6-Dimethyl Phthalate | 49 | 0-150 |
| D8-Acenaphthylene | 37 | 0-150 |
| D10-Fluorene | 42 | 0-150 |
| D10-Anthracene | 49 | 0-150 |
| D10-Pyrene | 67 | 0-150 |
| D12-Benzo(a)pyrene | 77 | 0-150 |



KCSlip4 57929

SEA424228

King County Environmental Laboratory

WORK GROUP REPORT (wk02)

Mar 01 2007, 12:34 pm

Work Group: WG90068 (BL#688 PCBLL) for Department: 7 - Organics, Trace

Created: 01-FEB-07 PrepDate: 26-JAN-07 Due: Operator: JG

| Sample | Project Number | Project Description | PKey | C | Product | Matrix | Stat | Un | Workdate | Duedate |
|---|---|---|---|---|---|---|---|---|---|---|
| L41561-1 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBLL | STORM WTR | PREP | U | 30-JAN-07 | 22-FEB-07 |
| L41561-2 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBLL | STORM WTR | PREP | U | 30-JAN-07 | 22-FEB-07 |
| L41561-3 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBLL | STORM WTR | PREP | U | 30-JAN-07 | 22-FEB-07 |
| L41561-4 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBLL | STORM WTR | PREP | U | 30-JAN-07 | 22-FEB-07 |
| L41561-5 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBLL | STORM WTR | PREP | U | 30-JAN-07 | 22-FEB-07 |
| L41562-1 | 423589-090-1 | Lower Duwamish Phthalate Studies | S | | PCBLL | BLANK WTR | PREP | U | 01-FEB-07 | 24-FEB-07 |
| WG90068-1 | SB | | S | | PCBLL | BLANK WTR | PREP | U | 01-FEB-07 | |
| WG90068-2 | MB | | S | | PCBLL | BLANK WTR | PREP | U | 01-FEB-07 | |
| WG90068-3 | SBD | | S | | PCBLL | BLANK WTR | PREP | U | 01-FEB-07 | |
| WG90068-4 | MB | | S | | PCBLL | BLANK WTR | PREP | U | 01-FEB-07 | |

Comments:

| | |
|---|---|
| L41561-1 | carboys |
| L41561-2 | carboys |
| L41561-3 | carboys |
| L41561-4 | carboys |
| L41561-5 | carboys |
| L41562-1 | blank water |
| WG90068-1 | WG90068-2 |
| WG90068-2 | MB070126 |
| WG90068-3 | WG90068-1 WG90068-2 |
| WG90068-4 | MB070131 |



KCSlip4 57930

SEA424229

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *03-05-07*

**WG #(s):** *WG90068*

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

**Project #(s):** *423589*

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

## 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:
☐ 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:** *2. The SB and SBD (WG90068-1,3) had recoveries for aroclor 1260 that were low (lab limits 72-128) at 64 and 63% recovery. 12. TCX recovery in PCB-06 is <85% on the front column. DCB as well as aroclor 1260 recoveries were >115% on the front column in PCB-07. 17. Not all congeners for aroclor 1016 were confirmed in the SB (WG90068-1).*

March 9, 2007
DAFOrganicsg070305.doc

## 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: *
- ☐ Other

**Corrective Action Description:** *2. This method is still in development, any recovery limits are more associated with typical samples. The QC sheet shows an asterisk for both SB and SBD recovery. 12. All surrogates and aroclors were reported from the back column. All were within range. 17. Due to the combined extraction with BNAs for this analysis several of the congeners are overlapped with BNA spike compounds. This results in some congeners being deleted due to enhanced recoveries. Interestingly the SBD (WG90068-3) had fewer interferents in this analysis than in the past.*

## VI. Potential Effects on Data Quality:

- ☒ None; corrective action entirely corrected anomaly (explanation optional):
- ☐ Potential effect explanation (explanation mandatory):

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *JSF* | [signature] | 3-9-07 |
| **Reviewer:** *Gretchen Nerlin* | [signature] | 3/13/07 |
| **Supervisor:** *Dana Walker* | Dana Walker | 3/14/07 |
| **QA Officer:** *Colin Elliott* (For QA1 only) | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *01/31/2007*

WG #(s): *WG90068*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L41561-1, L41561-4, L41561-5*

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

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

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

14 ☒ Holding time exceeded by: *1 day*
15 ☐ Insufficient sample amount.
16 ☐ Inappropriate storage, container or preservation.
17 ☐ Other

**Anomaly Description:** *Samples were processed using solid-phase extraction beyond the seven (7) day holding time for sample preparation. Samples were processed on day eight (8), exceeding the holding time by one (1) day.*

## 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: *H = 7 day holding time for sample preparation exceeded (8 days).*
☐ Other

**Corrective Action Description:**

## VI. Potential Effects on Data Quality:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The carboy samplers were deployed in the field for thirteen (13) days (01/10/2007 - 01/23/2007) prior to retrieval and return to the laboratory. They were then refrigerated until analysis. It is unlikely that the holding time exceedance of one (1) day (while samples were stored at 4°C) had a significant impact on the final results.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Jack Gudeman* | Jack C. Gudeman | 03/09/07 |
| **Reviewer:** JSF | [illegible] | 3-9-07 |
| **Supervisor:** *Dana Walker* | Dana Walker | 3/14/07 |
| **QA Officer:** *Colin Elliott* (For QA1 only) | | |
| **cc: LPM:** | | |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab QC Report - 03/06/07 10:31
Run ID: R118943 Workgroup: WG90068 (BL#688 PCBLL)

SBD:WG90068-3 SB:WG90068-1 MB:WG90068-2 Matrix: BLANK WTR Listtype: ORPCBLL Method: EPA 8081A/8082 (7-3-03-002) Project: Pkey: STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

| Parameter | Mdl | Rdl | Units | MB Value | Truevalue | SB Value | % Rec. | Qual | LabLimit | Truevalue | SBD Value | % Rec | Qual | LabLimit | RPD | Qual | LabLimit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | .025 | .05 | ug/L | <MDL | 0.150 | .127 | 85 | | 65-129 | 0.150 | .108 | 72 | | 65-129 | 17 | | |
| Aroclor 1260 | .025 | .05 | ug/L | <MDL | 0.150 | .0964 | 64 | * | 72-128 | 0.150 | .0938 | 63 | * | 72-128 | 2 | | |

MB:WG90068-2 Matrix: BLANK WTR Listtype: ORPCBLL Method: EPA 8081A/8082 (7-3-03-002) Project: Pkey: STD
(Method Blank)

| Parameter | Mdl | Rdl | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Aroclor 1016 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1221 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1232 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1242 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1248 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1254 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1260 | .025 | .05 | ug/L | <MDL | |

MB:WG90068-4 Matrix: BLANK WTR Listtype: ORPCBLL Method: EPA 8081A/8082 (7-3-03-002) Project: Pkey: STD
(Method Blank)

| Parameter | Mdl | Rdl | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Aroclor 1016 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1221 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1232 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1242 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1248 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1254 | .025 | .05 | ug/L | <MDL | |
| Aroclor 1260 | .025 | .05 | ug/L | <MDL | |



KCSlip4 57935
SEA424234

| Sample # (Lab Limits) | Decachlorobiph- enyl 12-158 | 2,4,5,6-Tetrac- hloro-m-xylene 10-118 |
|---|---|---|
| L41561-1 | 85 | 35 |
| L41561-2 | 79 | 38 |
| L41561-3 | 81 | 36 |
| L41561-4 | 79 | 33 |
| L41561-5 | 79 | 35 |
| L41562-1 | 69 | 24 |
| WG90068-1 | 46 | 27 |
| WG90068-2 | 78 | 30 |
| WG90068-3 | 46 | 21 |
| WG90068-4 | 78 | 30 |

==========

If the following parameters are reported, values in the RPD column are their Absolute Differences:

- pH
- pH, Field
- Salinity
- Salinity, Field
- Sample Depth
- Sample Temperature, Field



KCSlip4 57936
SEA424235

Round 18 - Samples
Round 20 - Rinse Blank

# LIQUID SAMPLE EXTRACTION RECORD FOR BNA ANALYSIS
## TRACE ORGANICS LABORATORY

Acetone Lot# 064335
MeCL2 Lot# C5122
QC BATCH NO.: BL#688

PHPAHSOURCE/PCBLL via SPE

WORKGROUP NO.: { PHPAHSOURCE = WG90067 / PCBLL = WG90068 }
PCB FieldSurr = 1344
PCB HouseSurr = 1352
PCB MS LL = 1261

EPA SW-846 EXTRACTION METHOD:
CONT. L-L EPA 3520 SEP. FUNNEL EPA 3510

BNA SURROGATE SPIKE: 1315 + 1343 (DMCs)
BNA MATRIX SPIKE: 1246

| Date/ Analyst | Sample Number | Project Number | Sample Description | coc | pH | Initial Amt. (ml) | Spike Amount (ul) | Vf (ml) | Conc. Anlyst | Turn Over Date | Comments | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JG 01/26/07 | WG90067-1 WG90068-1 | QC | SB | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl 1246-50µl 1261-100µl | 1.0 | JG | 02/28/07 03/01/07 | 10 ml MeOH | 8.9 |
| | WG90067-2 WG90068-2 | QC | MB | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl | 1.0 | JG | 02/28/07 03/01/07 | 10 ml MeOH | 7.9 |
| | L41562-1 | 423589-090-001 | BWR-BK-012407-012407 | | 6 | 2000 | | 1.0 | JG | 02/28/07 03/01/07 | 10 ml MeOH | 8.8 |
| | L41561-2 | ↓ | CER-01-011007-012307 | | 6 | 1610 | ↓ | 1.0 | ↓ | 02/28/07 03/01/07 | 7.5 ml MeOH std 1343+1344 spiked pre-deployment | 7.8 |
| | L41561-3 | ↓ | DZ-01-011007-012307 | | 5 | 1410 | ↓ | 1.0 | ↓ | | 7.0 ml MeOH std 1343+1344 spiked pre-deployment. | 7.3 |
| JG 01/31/07 | WG90067-3 WG90068-3 | QC | SBD | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl 1246-50µl 1261-100µl | 1.0 | JG | 02/28/07 03/01/07 | 10 ml MeOH | 9.0 |
| | WG90067-4 WG90068-4 | QC | MB | | 6 | 2000 | 1343-25µl 1315-100µl 1344-100µl 1352-100µl | 1.0 | JG | 02/28/07 03/01/07 | 10 ml MeOH excessive blow down to 0.25ml for PHPAHSOURCE. | 10.9 |
| | L41561-5 | 423589-090-001 | SPCC-01-011007-012307 | | 5 | 1860 | | 1.0 | JG | 02/28/07 03/01/07 | 8 ml MeOH std 1343+1344 spiked pre-deployment. | 9.0 |
| | L41561-1 | ↓ | BWR-01-011007-012307 | | 5 | 1420 | ↓ | 1.0 | ↓ | 02/28/07 03/01/07 | std 1343+1344 spiked pre-deployment. 7 ml MeOH | 7.2 |
| | L41561-4 | ↓ | KCIA-01-011007-012307 | | 5 | 1480 | ↓ | 1.0 | ↓ | 02/28/07 03/01/07 | 7 ml MeOH std 1343+1344 spiked pre-deployment. | — |

* All splits for PCBLL analysis cleaned via alumina and $H_2SO_4$. N-evap for PCBLL split in 10ml culture tubes.

* All samples processed via SPE using Speedisk Lot C03N14.



KCSlip4 57937
SEA424236

| Data File Name | Sample Name | Date Acquired | Vial Numbe | Sample Amount | Sample Multiplie | Isodrin (RT) | Isodrin (Height) | Leptophos (RT) | Leptophos (Height) | Isodrin #2 (RT) | Isodrin #2 (Height) | Leptoph (RT) | Leptophos #2 (Height) | Misc Info | Data File Path |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COND-01.D | conditioner | 3/5/2007 9:45 | 1 | 0 | 1 | | | | | | | | | | S:\MSDCHEM\2\DATA\070305\ |
| BLANK-01.D | blank | 3/5/2007 10:22 | 2 | 0 | 1 | | | | | | | | | | S:\MSDCHEM\2\DATA\070305\ |
| PCB-01.D | 1366D 1016/1260 500/50 | 3/5/2007 10:58 | 3 | 0 | 1 | 15.286 | 100969857 | 23.626 | 160229358 | 12.926 | 267005878 | 19.317 | 481300715 | | S:\MSDCHEM\2\DATA\070305\ |
| PCB-02.D | 1209.2 1248 500/50 | 3/5/2007 11:35 | 4 | 0 | 1 | 15.284 | 105884963 | 23.625 | 172118795 | 12.927 | 270537416 | 19.317 | 481841209 | | S:\MSDCHEM\2\DATA\070305\ |
| PCB-03.D | 1210.2 1254 500/50 | 3/5/2007 12:11 | 5 | 0 | 1 | 15.284 | 85735911 | 23.625 | 140169313 | 12.928 | 228753792 | 19.319 | 402153428 | | S:\MSDCHEM\2\DATA\070305\ |
| PCB-04.D | 1208.2 1221 500/50 | 3/5/2007 12:48 | 6 | 0 | 1 | 15.286 | 101419855 | 23.626 | 163279862 | 12.926 | 264095590 | 19.317 | 463107013 | | S:\MSDCHEM\2\DATA\070305\ |
| PCB-05.D | 1207.2 1232 500/50 | 3/5/2007 13:25 | 7 | 0 | 1 | 15.285 | 85923817 | 23.624 | 140721761 | 12.927 | 232363939 | 19.319 | 414090001 | | S:\MSDCHEM\2\DATA\070305\ |
| PCB-06.D | 1208.2 1242 500/50 | 3/5/2007 14:01 | 8 | 0 | 1 | 15.285 | 88313648 | 23.625 | 139693760 | 12.926 | 236667984 | 19.319 | 401703317 | | S:\MSDCHEM\2\DATA\070305\ |
| WG90088-1.D | SB | 3/5/2007 14:38 | 9 | 2000 | 1 | 15.286 | 83137554 | 23.626 | 137893955 | 12.927 | 224531022 | 19.317 | 399226852 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| WG90088-2.D | MB | 3/5/2007 15:14 | 10 | 2000 | 1 | 15.285 | 83888189 | 23.626 | 137604244 | 12.927 | 213561959 | 19.316 | 375478291 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| WG90088-3.D | SBD | 3/5/2007 15:51 | 11 | 2000 | 1 | 15.286 | 83603803 | 23.626 | 136400993 | 12.927 | 222135859 | 19.318 | 395262502 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| WG90088-4.D | MB | 3/5/2007 16:28 | 12 | 2000 | 1 | 15.286 | 75153044 | 23.626 | 144257067 | 12.927 | 220238661 | 19.318 | 394607889 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| L41561-1.D | L41561-1 | 3/5/2007 17:04 | 13 | 1420 | 1 | 15.286 | 74138012 | 23.626 | 139552478 | 12.926 | 215788787 | 19.316 | 385363482 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| L41561-2.D | L41561-2 | 3/5/2007 17:41 | 14 | 1610 | 1 | 15.285 | 77055723 | 23.627 | 146798863 | 12.927 | 219658718 | 19.319 | 402434009 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| L41561-3.D | L41561-3 | 3/5/2007 18:17 | 15 | 1410 | 1 | 15.285 | 72117056 | 23.627 | 141448766 | 12.927 | 214419242 | 19.317 | 399614421 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| L41561-4.D | L41561-4 | 3/5/2007 18:54 | 16 | 1480 | 1 | 15.286 | 73772872 | 23.625 | 145467889 | 12.927 | 224400714 | 19.316 | 415542655 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| L41561-5.D | L41561-5 | 3/5/2007 19:31 | 17 | 1660 | 1 | 15.286 | 74016331 | 23.625 | 153237519 | 12.925 | 228556762 | 19.314 | 436944899 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| L41562-1.D | L41562-1 | 3/5/2007 20:07 | 18 | 2000 | 1 | 15.284 | 77387523 | 23.622 | 147992595 | 12.924 | 231255223 | 19.313 | 403668262 | BL688 PCBLL LOWER DUWAMISH WATERS | S:\MSDCHEM\2\DATA\070305\ |
| PCB-07.D | 1366D 1016/1260 500/50 | 3/5/2007 20:44 | 3 | 0 | 1 | 15.284 | 85580234 | 23.623 | 170005522 | 12.924 | 259774333 | 19.314 | 475734475 | | S:\MSDCHEM\2\DATA\070305\ |
| PCB-08.D | 1209.2 1248 500/50 | 3/5/2007 21:21 | 4 | 0 | 1 | 15.283 | 91586919 | 23.622 | 175311904 | 12.924 | 262188628 | 19.314 | 469622806 | | S:\MSDCHEM\2\DATA\070305\ |
| | | | | | Ave. | 15.285 | 84548075 | 23.625 | 149632480 | 12.926 | 235330446 | 19.317 | 422094233 | | |
| | | | | | Std. Dev. | 0.001 | 10291213 | 0.001 | 13040444 | 0.001 | 19825918 | 0.002 | 35798806 | | |
| | | | | | %RSD | | 12% | | 9% | | 8% | | 8% | | |



KCSlip4 57938
SEA424237

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/06/07 10:34 - Data Source: ELD

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sample#: | WG90068-1 | Matrix: | BLANK WTR | List Type: | ORPCBLL | | |
| | | Project: | | Run ID: | R118943 | Col. Date: | |
| | | Locator: | SB | Work Group: | WG90068 | Rec. Date: | 01-FEB-07 |
| | | Site: | NONE | QC Type: | SB | Due Date: | |
| | | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | .127 | ug/L | | .025 | .05 | |
| Aroclor 1221 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1232 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1242 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1248 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1254 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1260 | .0964 | ug/L | | .025 | .05 | |
| Decachlorobiphenyl | .023 | ug/L | | .0025 | .005 | |
| 2,4,5,6-Tetrachloro-m-xylene | .0136 | ug/L | | .0025 | .005 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROSJ/file s/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 46 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 27 | 10-118 |



KCSlip4 57939

SEA424238

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/06/07 10:34 - Data Source: ELD

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sample#: | WG90068-2 | Matrix: | BLANK WTR | List Type: | ORPCBLL | | |
| | | Project: | | Run ID: | R118943 | Col. Date: | |
| | | Locator: | MB | Work Group: | WG90068 | Rec. Date: | 01-FEB-07 |
| | | Site: | NONE | QC Type: | MB | Due Date: | |
| | | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1221 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1232 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1242 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1248 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1254 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1260 | | ug/L | <MDL | .025 | .05 | |
| Decachlorobiphenyl | .039 | ug/L | | .0025 | .005 | |
| 2,4,5,6-Tetrachloro-m-xylene | .0149 | ug/L | | .0025 | .005 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROSJ/files/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 78 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 30 | 10-118 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/09/07 04:13 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90068-3 | Matrix: | BLANK WTR | List Type: | ORPCBLL | |
| | Project: | | Run ID: | R118943 | Col. Date: |
| | Locator: | SBD | Work Group: | WG90068 | Rec. Date: 01-FEB-07 |
| | Site: | NONE | QC Type: | SBD | Due Date: |
| | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | .108 | ug/L | | .025 | .05 | |
| Aroclor 1221 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1232 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1242 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1248 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1254 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1260 | .0938 | ug/L | | .025 | .05 | |
| Decachlorobiphenyl | .0228 | ug/L | | .0025 | .005 | |
| 2,4,5,6-Tetrachloro-m-xylene | .0104 | ug/L | | .0025 | .005 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 46 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 21 | 10-118 |



KCSlip4 57941

SEA424240

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/09/07 04:13 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: WG90068-4 | Matrix: | BLANK WTR | List Type: | ORPCBLL | |
| | Project: | | Run ID: | R118943 | Col. Date: |
| | Locator: | MB | Work Group: | WG90068 | Rec. Date: 01-FEB-07 |
| | Site: | NONE | QC Type: | MB | Due Date: |
| | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1221 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1232 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1242 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1248 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1254 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1260 | | ug/L | <MDL | .025 | .05 | |
| Decachlorobiphenyl | .0388 | ug/L | | .0025 | .005 | |
| 2,4,5,6-Tetrachloro-m-xylene | .015 | ug/L | | .0025 | .005 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 78 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 30 | 10-118 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/09/07 04:13 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-1 | Matrix: | STORM WTR | List Type: | ORPCBLL | |
| | Project: | 423589-090-1 | Run ID: | R118943 | Col. Date: 23-JAN-07 |
| | Locator: | BWR | Work Group: | WG90068 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL,H,TA | .035 | .0704 | Extracted past hold time |
| Aroclor 1221 | | ug/L | <MDL,H,TA | .035 | .0704 | Extracted past hold time |
| Aroclor 1232 | | ug/L | <MDL,H,TA | .035 | .0704 | Extracted past hold time |
| Aroclor 1242 | | ug/L | <MDL,H,TA | .035 | .0704 | Extracted past hold time |
| Aroclor 1248 | | ug/L | <MDL,H,TA | .035 | .0704 | Extracted past hold time |
| Aroclor 1254 | | ug/L | <MDL,H,TA | .035 | .0704 | Extracted past hold time |
| Aroclor 1260 | | ug/L | <MDL,H,TA | .035 | .0704 | Extracted past hold time |
| Decachlorobiphenyl | .06 | ug/L | H,TA | .0035 | .00704 | Extracted past hold time |
| 2,4,5,6-Tetrachloro-m-xylene | .0244 | ug/L | H,TA | .0035 | .00704 | Extracted past hold time |
| Amount Analyzed | 1420 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROE3/files/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 85 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 35 | 10-118 |



KCSlip4 57943

SEA424242

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/06/07 10:34 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-2 | Matrix: | STORM WTR | List Type: | ORPCBLL | |
| | Project: | 423589-090-1 | Run ID: | R118943 | Col. Date: 23-JAN-07 |
| | Locator: | CER | Work Group: | WG90068 | Rec. Date: 23-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 22-FEB-07 |
| | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL | .031 | .0621 | |
| Aroclor 1221 | | ug/L | <MDL | .031 | .0621 | |
| Aroclor 1232 | | ug/L | <MDL | .031 | .0621 | |
| Aroclor 1242 | | ug/L | <MDL | .031 | .0621 | |
| Aroclor 1248 | | ug/L | <MDL | .031 | .0621 | |
| Aroclor 1254 | | ug/L | <MDL | .031 | .0621 | |
| Aroclor 1260 | | ug/L | <MDL | .031 | .0621 | |
| Decachlorobiphenyl | .0488 | ug/L | | .0031 | .00621 | |
| 2,4,5,6-Tetrachloro-m-xylene | .0237 | ug/L | | .0031 | .00621 | |
| Amount Analyzed | 1610 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/file s/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 79 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 38 | 10-118 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/06/07 10:34 - Data Source: ELD

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sample#: | L41561-3 | Matrix: | STORM WTR | List Type: | ORPCBLL | | |
| | | Project: | 423589-090-1 | Run ID: | R118943 | Col. Date: | 23-JAN-07 |
| | | Locator: | DZ | Work Group: | WG90068 | Rec. Date: | 23-JAN-07 |
| | | Site: | METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | | Method Code: | EPA 8081A/8082 (7 3 03-002) | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL | .035 | .0709 | |
| Aroclor 1221 | | ug/L | <MDL | .035 | .0709 | |
| Aroclor 1232 | | ug/L | <MDL | .035 | .0709 | |
| Aroclor 1242 | | ug/L | <MDL | .035 | .0709 | |
| Aroclor 1248 | | ug/L | <MDL | .035 | .0709 | |
| Aroclor 1254 | | ug/L | <MDL | .035 | .0709 | |
| Aroclor 1260 | | ug/L | <MDL | .035 | .0709 | |
| Decachlorobiphenyl | .0576 | ug/L | | .0035 | .00709 | |
| 2,4,5,6-Tetrachloro-m-xylene | .0258 | ug/L | | .0035 | .00709 | |
| Amount Analyzed | 1410 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 81 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 36 | 10-118 |



KCSlip4 57945

SEA424244

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/09/07 04:13 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41561-4 | Matrix: STORM WTR | List Type: ORPCBLL | | | |
| | Project: 423589-090-1 | Run ID: R118943 | | Col. Date: | 23-JAN-07 |
| | Locator: KCIA | Work Group: WG90068 | | Rec. Date: | 23-JAN-07 |
| | Site: METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | Method Code: EPA 8081A/8082 (7-3-03-002) | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL,H,TA | .034 | .0676 | Extracted past hold time |
| Aroclor 1221 | | ug/L | <MDL,H,TA | .034 | .0676 | Extracted past hold time |
| Aroclor 1232 | | ug/L | <MDL,H,TA | .034 | .0676 | Extracted past hold time |
| Aroclor 1242 | | ug/L | <MDL,H,TA | .034 | .0676 | Extracted past hold time |
| Aroclor 1248 | | ug/L | <MDL,H,TA | .034 | .0676 | Extracted past hold time |
| Aroclor 1254 | | ug/L | <MDL,H,TA | .034 | .0676 | Extracted past hold time |
| Aroclor 1260 | | ug/L | <MDL,H,TA | .034 | .0676 | Extracted past hold time |
| Decachlorobiphenyl | .0532 | ug/L | H,TA | .0034 | .00676 | Extracted past hold time |
| 2,4,5,6-Tetrachloro-m-xylene | .0226 | ug/L | H,TA | .0034 | .00676 | Extracted past hold time |
| Amount Analyzed | 1480 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 79 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 33 | 10-118 |



KCSlip4 57946

SEA424245

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/09/07 04:13 - Data Source: ELD

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sample#: | L41561-5 | Matrix: | STORM WTR | List Type: | ORPCBLL | | |
| | | Project: | 423589-090-1 | Run ID: | R118943 | Col. Date: | 23-JAN-07 |
| | | Locator: | SPCC | Work Group: | WG90068 | Rec. Date: | 23-JAN-07 |
| | | Site: | METRO | QC Type: | | Due Date: | 22-FEB-07 |
| | | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL,H,TA | .027 | .0538 | Extracted past hold time |
| Aroclor 1221 | | ug/L | <MDL,H,TA | .027 | .0538 | Extracted past hold time |
| Aroclor 1232 | | ug/L | <MDL,H,TA | .027 | .0538 | Extracted past hold time |
| Aroclor 1242 | | ug/L | <MDL,H,TA | .027 | .0538 | Extracted past hold time |
| Aroclor 1248 | | ug/L | <MDL,H,TA | .027 | .0538 | Extracted past hold time |
| Aroclor 1254 | | ug/L | <MDL,H,TA | .027 | .0538 | Extracted past hold time |
| Aroclor 1260 | | ug/L | <MDL,H,TA | .027 | .0538 | Extracted past hold time |
| Decachlorobiphenyl | .0425 | ug/L | H,TA | .0027 | .00538 | Extracted past hold time |
| 2,4,5,6-Tetrachloro-m-xylene | .019 | ug/L | H,TA | .0027 | .00538 | Extracted past hold time |
| Amount Analyzed | 1860 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROE3/files/gc/wq90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 31-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 79 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 35 | 10-118 |

KING COUNTY METRO ENVIRONMENTAL LABORATORY
Lab Review Report - 03/06/07 10:34 - Data Source: ELD

| | | | | | |
|---|---|---|---|---|---|
| Sample#: L41562-1 | Matrix: | BLANK WTR | List Type: | ORPCBLL | |
| | Project: | 423589-090-1 | Run ID: | R118943 | Col. Date: 25-JAN-07 |
| | Locator: | BWR | Work Group: | WG90068 | Rec. Date: 25-JAN-07 |
| | Site: | METRO | QC Type: | | Due Date: 24-FEB-07 |
| | Method Code: | EPA 8081A/8082 (7-3-03-002) | | | |

| Parameter | Value | Units | Valq | Mdl | Rdl | Textvalue |
|---|---|---|---|---|---|---|
| Aroclor 1016 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1221 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1232 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1242 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1248 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1254 | | ug/L | <MDL | .025 | .05 | |
| Aroclor 1260 | | ug/L | <MDL | .025 | .05 | |
| Decachlorobiphenyl | .0344 | ug/L | | .0025 | .005 | |
| 2,4,5,6-Tetrachloro-m-xylene | .0119 | ug/L | | .0025 | .005 | |
| Amount Analyzed | 2000 | ml | | | | |
| Standard Amount | 1 | ml | | | | |
| Dilution Factor | 1 | none | | | | |
| Date Analyzed | | | | | | 05-MAR-07 |
| Operator ID | | | | | | JSF |
| Porthandler File | | | | | | /usr/users/seed2/METROS3/files/gc/wg90068.txt |
| Instrument ID | | | | | | HP6890ECD-G |
| Prep Date | | | | | | 26-JAN-07 |

SURROGATE RECOVERY INFORMATION

| Parameter | % Rec | Lab Limits |
|---|---|---|
| Decachlorobiphenyl | 69 | 12-158 |
| 2,4,5,6-Tetrachloro-m-xylene | 24 | 10-118 |



KCSlip4 57948

SEA424247