**DEPARTMENT OF THE ARMY**
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE, KENTUCKY 40201-0059

http://www.lrl.usace.army.mil/

22 November 2011

Engineering Environmental Branch

Mr. Mark Patterson
Base Realignment and Closure Division; Ravenna Army Ammunition Plant
Building 1037
8451 State Route 5
Ravenna, OH 44266-9297

SUBJECT: Results for Initial Assessment of CC-RVAAP-79 DLA Group 2 Ammunition Storage Area

Dear Mr. Patterson:

This letter presents the analytical results from sampling conducted by the United States Army Corps of Engineers (USACE) on 8 March 2011 for the initial assessment of CC-RVAAP-79 DLA Group 2 Ammunition Storage Area in accordance with the approved Technical Memorandum Work Plan with Subject: Initial Assessment of DLA Area 2 Ore Storage Area dated 28 February 2011.

One primary incremental sample was collected within each sampling area as shown on Figure 1. One primary Volatile Organic Compound (VOC) discrete sample was collected from the center of sample area DL2ss-001. Quality Control and Quality Assurance samples were collected from sample area DL2ss-001 and were analyzed for the Ravenna Army Ammunition Plant full suite of chemicals.

Various ores were historically stored (stock-piled) at the Ravenna facility for the General Services Administration (GSA). The Defense Logistics Agency (DLA), Defense National Stockpile Center (DNSC) leased space at the Ravenna facility for the storage of the ore materials. Many of the ores were allowed to make direct contact with the underlying soils. Historical records indicate that brass ingots were historically stored on the ground surface in the Group 2 Ammunition Storage Area. The DLA Group 2 Ammunition Storage Area was located immediately east of the Group 2 magazine buildings. More specifically, the former ore storage piles were located east of Magazines AC-162, AC-163, AC-165 and AC-166.

Detected chemicals are screened against National Guard Trainee Facility-Wide Cleanup Goals (FWCUG) or other levels as applicable such as background values and Regional Screening Levels (RSL) in accordance with the Final Position Paper for the Application and Use of Facility-Wide Human Health Cleanup Goals (USACE, 1 June 2009). The most stringent screening level of the non-carcinogenic risk value (hazard quotient = 1) and carcinogenic risk

($10^{-5}$) are used. Screening of the detected chemicals is presented in Table1. Table 2 summarizes the list of sample analyses.

There is only one detected sample result that exceeds the applicable screening criteria. This sample was collected east of building AC-165. This exceedance occurs in sample DL2ss-001M-0002-SO where the analytical result for Manganese of 1520 mg/kg exceeds the surface soil background concentration of 1450 mg/kg. This sample is a field duplicate of sample DL2ss-001M-0001-SO which has a Manganese concentration of 803 mg/kg, which is well below the background value. This is likely attributed to the variation of naturally occurring manganese in the soil. The analytical result concentration of 1520 mg/kg is only slightly greater than the surface soil background concentration of 1450 mg/kg, and is well below the subsurface soil background concentration of 3030 mg/kg. Therefore, the concentrations of chemicals detected in the soils do not pose unacceptable risks for the Ohio Army National Guard personnel who are currently utilizing this site.

The results of this initial assessment will be included in the next phase of work for CC-RVAAP-79. A new contract to complete a Remedial Investigation at this site was awarded on 15 August 2011.

Please find Tables, Figures, Field Sampling Reports, and Analytical Laboratory reports attached.

If you have any questions, please contact Derek Kinder at 502-315-6393.

Sincerely,

Derek Kinder, P.E.
Civil/Environmental Engineer

Enclosures

## STATEMENT OF INDEPENDENT TECHNICAL REVIEW

U.S. Army Corps of Engineers has completed the preparation of the Results for Initial Assessment of CC-RVAAP-79 DLA Group 2 Ammunition Storage Area for the Ravenna Army Ammunition Plant, Ravenna, Ohio. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing Corps policy.

Derek Kinder 11/22/2011

Study/Design Team Leader Date

Significant concerns and the explanation of the resolution are as follows: None

Mark W. Noble 11-22-2011

Independent Technical Review Team Leader Date

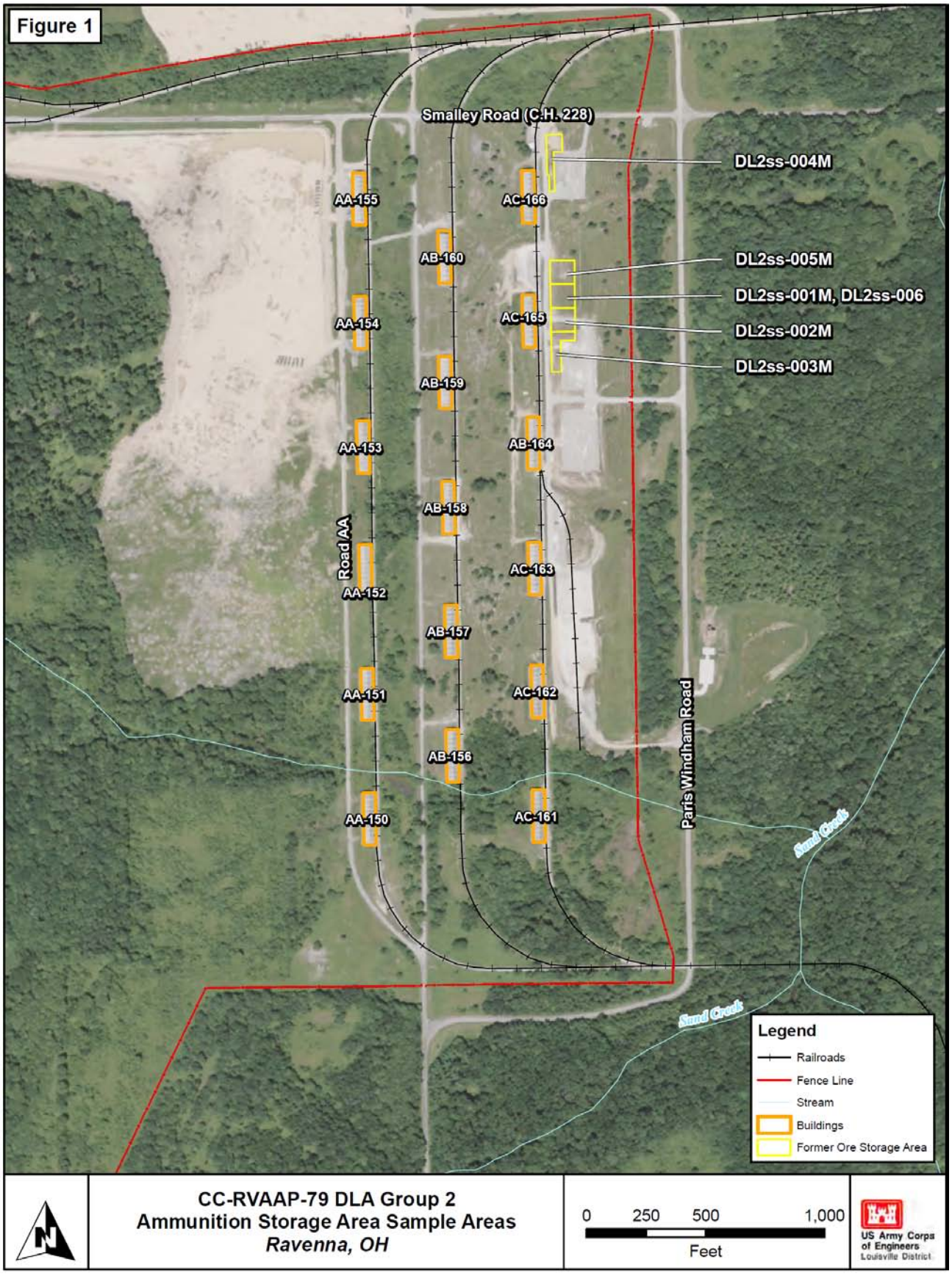
Figure 1
Smalley Road (C.H. 228)
DL2ss-004M
DL2ss-005M
DL2ss-001M, DL2ss-006
DL2ss-002M
DL2ss-003M
AA-155
AC-166
AB-160
AA-154
AC-165
AB-159
AA-153
AB-164
AB-158
Road AA
AA-152
AC-163
AB-157
AA-151
AC-162
AB-156
AA-150
AC-161
Paris Windham Road
Sand Creek
Sand Creek
Legend
Railroads
Fence Line
Stream
Buildings
Former Ore Storage Area
CC-RVAAP-79 DLA Group 2
Ammunition Storage Area Sample Areas
Ravenna, OH
0 250 500 1,000
Feet
US Army Corps of Engineers
Louisville District

Table 1 Screening of Detected Chemicals

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| Metals | DL2SS-001M-0001-SO | Aluminum | 12600 | mg/kg | M | 34960 | HI |
| | DL2SS-001M-0001-SO | Antimony | 1.3 | mg/kg | | 1753 | HI |
| | DL2SS-001M-0001-SO | Arsenic | 8.1 | mg/kg | | 27.8 | BG |
| | DL2SS-001M-0001-SO | Barium | 124 | mg/kg | B | 3506 | HI |
| | DL2SS-001M-0001-SO | Beryllium | 0.44 | mg/kg | | 160 | RSL HI |
| | DL2SS-001M-0001-SO | Cadmium | 0.23 | mg/kg | M | 109 | CR |
| | DL2SS-001M-0001-SO | Calcium | 3350 | mg/kg | | | EN |
| | DL2SS-001M-0001-SO | Chromium | 156 | mg/kg | M | 1000000 | HI |
| | DL2SS-001M-0001-SO | Cobalt | 10.1 | mg/kg | M | 70.03 | CR |
| | DL2SS-001M-0001-SO | Copper | 443 | mg/kg | | 253680 | HI |
| | DL2SS-001M-0001-SO | Hexavalent Chromium | 3.9 | mg/kg | JM | 16.4 | HI |
| | DL2SS-001M-0001-SO | Iron | 20500 | mg/kg | M | 1000000 | HI |
| | DL2SS-001M-0001-SO | Lead | 32.2 | mg/kg | | 400 | RSL HI |
| | DL2SS-001M-0001-SO | Magnesium | 1590 | mg/kg | | | EN |
| | DL2SS-001M-0001-SO | Manganese | 803 | mg/kg | Y,M | 1450 | BG |
| | DL2SS-001M-0001-SO | Mercury | 0.031 | mg/kg | Y | 1722 | HI |
| | DL2SS-001M-0001-SO | Nickel | 12 | mg/kg | | 126391 | HI |
| | DL2SS-001M-0001-SO | Potassium | 997 | mg/kg | | | EN |
| | DL2SS-001M-0001-SO | Selenium | 0.081 | mg/kg | J | 390 | RSL HI |
| | DL2SS-001M-0001-SO | Sodium | 60.4 | mg/kg | | | EN |
| | DL2SS-001M-0001-SO | Thallium | 1.3 | mg/kg | M | 477 | HI |
| | DL2SS-001M-0001-SO | Vanadium | 17.3 | mg/kg | | 23045 | HI |
| | DL2SS-001M-0001-SO | Zinc | 292 | mg/kg | M | 1000000 | HI |
| SVOCs | DL2SS-001M-0001-SO | Benzo(a)anthracene | 53 | ug/kg | J | 47700 | CR |
| | DL2SS-001M-0001-SO | Benzo(a)pyrene | 46 | ug/kg | J | 4770 | CR |
| | DL2SS-001M-0001-SO | Benzo(b)fluoranthene | 86 | ug/kg | | 47700 | CR |
| | DL2SS-001M-0001-SO | Benzo(g,h,i)perylene | 40 | ug/kg | J | 38151000 | HI for Pyrene[1] |
| | DL2SS-001M-0001-SO | Benzo(k)fluoranthene | 48 | ug/kg | J | 477000 | CR |
| | DL2SS-001M-0001-SO | Benzoic acid | 450 | ug/kg | J | 240000000 | RSL HI |
| | DL2SS-001M-0001-SO | Bis(2-ethylhexyl)phthalate | 110 | ug/kg | J | 3500 | RSL CR |
| | DL2SS-001M-0001-SO | Chrysene | 74 | ug/kg | J | 4774000 | CR |
| | DL2SS-001M-0001-SO | Di-n-butylphthalate | 120 | ug/kg | J | 6100000 | RSL HI |
| | DL2SS-001M-0001-SO | Fluoranthene | 150 | ug/kg | | 50868000 | HI |
| | DL2SS-001M-0001-SO | Indeno(1,2,3-cd)pyrene | 39 | ug/kg | J | 47700 | CR |
| | DL2SS-001M-0001-SO | Phenanthrene | 76 | ug/kg | J | 17000000 | RSL HI for Anthracene[1] |
| | DL2SS-001M-0001-SO | Pyrene | 90 | ug/kg | | 38151000 | HI |

J Estimated value
B Analyte detected in associated Method Blank
M Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits
Y Replicate/Duplicate precision outside acceptance limits

HI = National Guard Trainee FWCUG Hazard Index = 1
CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$
BG = Background Value
EN = Essential Nutrient
RSL HI = Regional Screening Level Hazard Index = 1
RSL CR = Regional Screening Level Cancer Risk $10^{-5}$
[1] = Surrogate Chemical

Table 1 Screening of Detected Chemicals

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| Metals | DL2SS-001M-0002-SO | Aluminum | 12500 | mg/kg | | 34960 | HI |
| | DL2SS-001M-0002-SO | Antimony | 0.59 | mg/kg | | 1753 | HI |
| | DL2SS-001M-0002-SO | Arsenic | 9.2 | mg/kg | | 27.8 | BG |
| | DL2SS-001M-0002-SO | Barium | 119 | mg/kg | B | 3506 | HI |
| | DL2SS-001M-0002-SO | Beryllium | 0.53 | mg/kg | | 160 | RSL HI |
| | DL2SS-001M-0002-SO | Cadmium | 0.22 | mg/kg | | 109 | CR |
| | DL2SS-001M-0002-SO | Calcium | 3550 | mg/kg | | | EN |
| | DL2SS-001M-0002-SO | Chromium | 69.2 | mg/kg | | 1000000 | HI |
| | DL2SS-001M-0002-SO | Cobalt | 10 | mg/kg | | 70.03 | CR |
| | DL2SS-001M-0002-SO | Copper | 358 | mg/kg | | 253680 | HI |
| | DL2SS-001M-0002-SO | Hexavalent Chromium | 2.8 | mg/kg | J | 16.4 | HI |
| | DL2SS-001M-0002-SO | Iron | 20800 | mg/kg | | 1000000 | HI |
| | DL2SS-001M-0002-SO | Lead | 34 | mg/kg | | 400 | RSL HI |
| | DL2SS-001M-0002-SO | Magnesium | 1610 | mg/kg | | | EN |
| | DL2SS-001M-0002-SO | Manganese | 1520 | mg/kg | | 1450 | BG |
| | DL2SS-001M-0002-SO | Mercury | 0.023 | mg/kg | | 1722 | HI |
| | DL2SS-001M-0002-SO | Nickel | 12.8 | mg/kg | | 126391 | HI |
| | DL2SS-001M-0002-SO | Potassium | 748 | mg/kg | | | EN |
| | DL2SS-001M-0002-SO | Sodium | 42 | mg/kg | | | EN |
| | DL2SS-001M-0002-SO | Thallium | 1.4 | mg/kg | | 477 | HI |
| | DL2SS-001M-0002-SO | Vanadium | 17.7 | mg/kg | | 23045 | HI |
| | DL2SS-001M-0002-SO | Zinc | 245 | mg/kg | | 1000000 | HI |
| SVOCs | DL2SS-001M-0002-SO | Benzo(a)anthracene | 45 | ug/kg | J | 47700 | CR |
| | DL2SS-001M-0002-SO | Benzo(a)pyrene | 49 | ug/kg | J | 4770 | CR |
| | DL2SS-001M-0002-SO | Benzo(b)fluoranthene | 87 | ug/kg | | 47700 | CR |
| | DL2SS-001M-0002-SO | Benzo(g,h,i)perylene | 36 | ug/kg | J | 38151000 | HI for Pyrene |
| | DL2SS-001M-0002-SO | Benzo(k)fluoranthene | 42 | ug/kg | J | 477000 | CR |
| | DL2SS-001M-0002-SO | Chrysene | 59 | ug/kg | J | 4774000 | CR |
| | DL2SS-001M-0002-SO | Fluoranthene | 69 | ug/kg | J | 50868000 | HI |
| | DL2SS-001M-0002-SO | Indeno(1,2,3-cd)pyrene | 39 | ug/kg | J | 47700 | CR |
| | DL2SS-001M-0002-SO | Phenanthrene | 26 | ug/kg | J | 17000000 | RSL HI for Anthracene[1] |
| | DL2SS-001M-0002-SO | Pyrene | 58 | ug/kg | J | 38151000 | HI |

J Estimated value
B Analyte detected in associated Method Blank

HI = National Guard Trainee FWCUG Hazard Index = 1
CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$
BG = Background Value
EN = Essential Nutrient
RSL HI = Regional Screening Level Hazard Index = 1
RSL CR = Regional Screening Level Cancer Risk $10^{-5}$
[1] = Surrogate Chemical
Highlighted = Result > Screening Criteria

Table 1 Screening of Detected Chemicals

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| Metals | DL2SS-001M-0003-SO | Manganese | 1200000 | µg/Kg | | 1450000 | BG |
| | DL2SS-001M-0003-SO | Magnesium | 1600000 | µg/Kg | | | EN |
| | DL2SS-001M-0003-SO | Cobalt | 10000 | µg/Kg | | 70030 | CR |
| | DL2SS-001M-0003-SO | Barium | 100000 | µg/Kg | | 3506000 | HI |
| | DL2SS-001M-0003-SO | Nickel | 11000 | µg/Kg | | 126391000 | HI |
| | DL2SS-001M-0003-SO | Aluminum | 11000000 | µg/Kg | | 34960000 | HI |
| | DL2SS-001M-0003-SO | Chromium | 12000 | µg/Kg | | 1000000000 | HI |
| | DL2SS-001M-0003-SO | Calcium | 2300000 | µg/Kg | | | EN |
| | DL2SS-001M-0003-SO | Lead | 20000 | µg/Kg | | 400000 | RSL HI |
| | DL2SS-001M-0003-SO | Vanadium | 21000 | µg/Kg | | 23045000 | HI |
| | DL2SS-001M-0003-SO | Thallium | 210 | µg/Kg | | 477000 | HI |
| | DL2SS-001M-0003-SO | Iron | 23000000 | µg/Kg | | 1000000000 | HI |
| | DL2SS-001M-0003-SO | Antimony | 310 | µg/Kg | | 1753000 | HI |
| | DL2SS-001M-0003-SO | Zinc | 330000 | µg/Kg | | 1000000000 | HI |
| | DL2SS-001M-0003-SO | Cadmium | 380 | µg/Kg | | 109000 | CR |
| | DL2SS-001M-0003-SO | Copper | 410000 | µg/Kg | | 253680000 | HI |
| | DL2SS-001M-0003-SO | Beryllium | 470 | µg/Kg | | 160000 | RSL HI |
| | DL2SS-001M-0003-SO | Selenium | 620 | µg/Kg | | 390000 | RSL HI |
| | DL2SS-001M-0003-SO | Potassium | 770000 | µg/Kg | | | EN |
| | DL2SS-001M-0003-SO | Arsenic | 8200 | µg/Kg | | 27800 | BG |
| | DL2SS-001M-0003-SO | Silver | 35 | µg/Kg | | 31049000 | HI |
| | DL2SS-001M-0003-SO | Sodium | 39000 | µg/Kg | J | | EN |
| | DL2SS-001M-0003-SO | Mercury | 35 | µg/Kg | | 1722 | HI |
| SVOCs | DL2SS-001M-0003-SO | Di-n-butyl phthalate | 10 | µg/Kg | J | 6100000 | RSL HI |
| | DL2SS-001M-0003-SO | Anthracene | 12 | µg/Kg | J | 17000000 | RSL HI |
| | DL2SS-001M-0003-SO | Phenanthrene | 17 | µg/Kg | J | 17000000 | RSL HI for Anthracene[1] |
| | DL2SS-001M-0003-SO | Bis(2-ethylhexyl) phthalate | 21 | µg/Kg | J | 3500 | RSL CR |
| | DL2SS-001M-0003-SO | Benzo(g,h,i)perylene | 21 | µg/Kg | J | 38151000 | HI for Pyrene |
| | DL2SS-001M-0003-SO | Butylbenzyl phthalate | 22 | µg/Kg | J | 12000000 | RSL CR |
| | DL2SS-001M-0003-SO | Benzo(a)pyrene | 34 | µg/Kg | J | 4770 | CR |
| | DL2SS-001M-0003-SO | Benzo(a)anthracene | 35 | µg/Kg | J | 47700 | CR |
| | DL2SS-001M-0003-SO | Chrysene | 44 | µg/Kg | J | 4774000 | CR |
| | DL2SS-001M-0003-SO | Pyrene | 45 | µg/Kg | J | 38151000 | HI |
| | DL2SS-001M-0003-SO | Fluoranthene | 52 | µg/Kg | J | 50868000 | HI |
| | DL2SS-001M-0003-SO | Acenaphthylene | 9.3 | µg/Kg | J | 3400000 | RSL HI for Acenapthene[1] |
| | DL2SS-001M-0003-SO | Benzo(k)fluoranthene | 24 | µg/Kg | Jm | 477000 | CR |
| | DL2SS-001M-0003-SO | Benzo(b)fluoranthene | 60 | µg/Kg | Jm | 47700 | CR |

J Estimated concentration
M Manual integration used to determine area response

HI = National Guard Trainee FWCUG Hazard Index = 1
CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$
BG = Background Value
EN = Essential Nutrient
RSL HI = Regional Screening Level Hazard Index = 1
RSL CR = Regional Screening Level Cancer Risk $10^{-5}$
[1] = Surrogate Chemical
Highlighted = Result > Screening Criteria

Table 1 Screening of Detected Chemicals

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| Metals | DL2SS-002M-0001-SO | Aluminum | 12400 | mg/kg | | 34960 | HI |
| | DL2SS-002M-0001-SO | Antimony | 0.46 | mg/kg | | 1753 | HI |
| | DL2SS-002M-0001-SO | Arsenic | 8.7 | mg/kg | | 27.8 | BG |
| | DL2SS-002M-0001-SO | Barium | 115 | mg/kg | B | 3506 | HI |
| | DL2SS-002M-0001-SO | Beryllium | 0.66 | mg/kg | | 160 | RSL HI |
| | DL2SS-002M-0001-SO | Cadmium | 0.28 | mg/kg | | 109 | CR |
| | DL2SS-002M-0001-SO | Calcium | 11700 | mg/kg | | | EN |
| | DL2SS-002M-0001-SO | Chromium | 66.7 | mg/kg | | 1000000 | HI |
| | DL2SS-002M-0001-SO | Cobalt | 7.2 | mg/kg | | 70.03 | CR |
| | DL2SS-002M-0001-SO | Copper | 722 | mg/kg | | 253680 | HI |
| | DL2SS-002M-0001-SO | Hexavalent Chromium | 4.9 | mg/kg | J | 16.4 | HI |
| | DL2SS-002M-0001-SO | Iron | 21000 | mg/kg | | 1000000 | HI |
| | DL2SS-002M-0001-SO | Lead | 36.4 | mg/kg | | 400 | RSL HI |
| | DL2SS-002M-0001-SO | Magnesium | 1750 | mg/kg | | | EN |
| | DL2SS-002M-0001-SO | Manganese | 886 | mg/kg | | 1450 | BG |
| | DL2SS-002M-0001-SO | Mercury | 0.029 | mg/kg | | 1722 | HI |
| | DL2SS-002M-0001-SO | Nickel | 10.8 | mg/kg | | 126391 | HI |
| | DL2SS-002M-0001-SO | Potassium | 859 | mg/kg | | | EN |
| | DL2SS-002M-0001-SO | Sodium | 60.9 | mg/kg | | | EN |
| | DL2SS-002M-0001-SO | Thallium | 0.73 | mg/kg | | 477 | HI |
| | DL2SS-002M-0001-SO | Vanadium | 15.6 | mg/kg | | 23045 | HI |
| | DL2SS-002M-0001-SO | Zinc | 508 | mg/kg | | 1000000 | HI |

J Estimated value
B Analyte detected in associated Method Blank

HI = National Guard Trainee FWCUG Hazard Index = 1
CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$
BG = Background Value
EN = Essential Nutrient
RSL HI = Regional Screening Level Hazard Index = 1
RSL CR = Regional Screening Level Cancer Risk $10^{-5}$

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| Metals | DL2SS-003M-0001-SO | Aluminum | 13300 | mg/kg | | 34960 | HI |
| | DL2SS-003M-0001-SO | Antimony | 0.73 | mg/kg | | 1753 | HI |
| | DL2SS-003M-0001-SO | Arsenic | 9.3 | mg/kg | | 27.8 | BG |
| | DL2SS-003M-0001-SO | Barium | 73.1 | mg/kg | B | 3506 | HI |
| | DL2SS-003M-0001-SO | Beryllium | 0.47 | mg/kg | | 160 | RSL HI |
| | DL2SS-003M-0001-SO | Cadmium | 0.17 | mg/kg | | 109 | CR |
| | DL2SS-003M-0001-SO | Calcium | 4690 | mg/kg | | | EN |
| | DL2SS-003M-0001-SO | Chromium | 89.7 | mg/kg | | 1000000 | HI |
| | DL2SS-003M-0001-SO | Cobalt | 7 | mg/kg | | 70.03 | CR |
| | DL2SS-003M-0001-SO | Copper | 159 | mg/kg | | 253680 | HI |
| | DL2SS-003M-0001-SO | Iron | 20500 | mg/kg | | 1000000 | HI |
| | DL2SS-003M-0001-SO | Lead | 35.8 | mg/kg | | 400 | RSL HI |
| | DL2SS-003M-0001-SO | Magnesium | 2010 | mg/kg | | | EN |
| | DL2SS-003M-0001-SO | Manganese | 628 | mg/kg | | 1450 | BG |
| | DL2SS-003M-0001-SO | Mercury | 0.024 | mg/kg | | 1722 | HI |
| | DL2SS-003M-0001-SO | Nickel | 12.9 | mg/kg | | 126391 | HI |
| | DL2SS-003M-0001-SO | Potassium | 731 | mg/kg | | | EN |
| | DL2SS-003M-0001-SO | Sodium | 42.6 | mg/kg | | | EN |
| | DL2SS-003M-0001-SO | Thallium | 0.6 | mg/kg | | 477 | HI |
| | DL2SS-003M-0001-SO | Vanadium | 16.9 | mg/kg | | 23045 | HI |
| | DL2SS-003M-0001-SO | Zinc | 128 | mg/kg | | 1000000 | HI |

B Analyte detected in associated Method Blank

HI = National Guard Trainee FWCUG Hazard Index = 1
CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$
BG = Background Value
EN = Essential Nutrient
RSL HI = Regional Screening Level Hazard Index = 1
RSL CR = Regional Screening Level Cancer Risk $10^{-5}$

Table 1 Screening of Detected Chemicals

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| Metals | DL2SS-004M-0001-SO | Aluminum | 12300 | mg/kg | | 34960 | HI |
| | DL2SS-004M-0001-SO | Antimony | 0.82 | mg/kg | | 1753 | HI |
| | DL2SS-004M-0001-SO | Arsenic | 8.5 | mg/kg | | 27.8 | BG |
| | DL2SS-004M-0001-SO | Barium | 80.3 | mg/kg | B | 3506 | HI |
| | DL2SS-004M-0001-SO | Beryllium | 0.49 | mg/kg | | 160 | RSL HI |
| | DL2SS-004M-0001-SO | Cadmium | 0.25 | mg/kg | | 109 | CR |
| | DL2SS-004M-0001-SO | Calcium | 5740 | mg/kg | | | EN |
| | DL2SS-004M-0001-SO | Chromium | 95.4 | mg/kg | | 1000000 | HI |
| | DL2SS-004M-0001-SO | Cobalt | 7.3 | mg/kg | | 70.03 | CR |
| | DL2SS-004M-0001-SO | Copper | 72.5 | mg/kg | | 253680 | HI |
| | DL2SS-004M-0001-SO | Hexavalent Chromium | 4.9 | mg/kg | J | 16.4 | HI |
| | DL2SS-004M-0001-SO | Iron | 18500 | mg/kg | | 1000000 | HI |
| | DL2SS-004M-0001-SO | Lead | 32.2 | mg/kg | | 400 | RSL HI |
| | DL2SS-004M-0001-SO | Magnesium | 2040 | mg/kg | | | EN |
| | DL2SS-004M-0001-SO | Manganese | 748 | mg/kg | | 1450 | BG |
| | DL2SS-004M-0001-SO | Mercury | 0.028 | mg/kg | | 1722 | HI |
| | DL2SS-004M-0001-SO | Nickel | 14.5 | mg/kg | | 126391 | HI |
| | DL2SS-004M-0001-SO | Potassium | 937 | mg/kg | | | EN |
| | DL2SS-004M-0001-SO | Sodium | 56.6 | mg/kg | | | EN |
| | DL2SS-004M-0001-SO | Thallium | 0.64 | mg/kg | | 477 | HI |
| | DL2SS-004M-0001-SO | Vanadium | 14.9 | mg/kg | | 23045 | HI |
| | DL2SS-004M-0001-SO | Zinc | 116 | mg/kg | | 1000000 | HI |

J Estimated value
B Analyte detected in associated Method Blank

HI = National Guard Trainee FWCUG Hazard Index = 1
CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$
BG = Background Value
EN = Essential Nutrient
RSL HI = Regional Screening Level Hazard Index = 1
RSL CR = Regional Screening Level Cancer Risk $10^{-5}$

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| Metals | DL2SS-005M-0001-SO | Aluminum | 12900 | mg/kg | | 34960 | HI |
| | DL2SS-005M-0001-SO | Antimony | 0.32 | mg/kg | | 1753 | HI |
| | DL2SS-005M-0001-SO | Arsenic | 9.7 | mg/kg | | 27.8 | BG |
| | DL2SS-005M-0001-SO | Barium | 62.4 | mg/kg | B | 3506 | HI |
| | DL2SS-005M-0001-SO | Beryllium | 0.46 | mg/kg | | 160 | RSL HI |
| | DL2SS-005M-0001-SO | Cadmium | 0.21 | mg/kg | | 109 | CR |
| | DL2SS-005M-0001-SO | Calcium | 1870 | mg/kg | | | EN |
| | DL2SS-005M-0001-SO | Chromium | 38.2 | mg/kg | | 1000000 | HI |
| | DL2SS-005M-0001-SO | Cobalt | 7.5 | mg/kg | | 70.03 | CR |
| | DL2SS-005M-0001-SO | Copper | 194 | mg/kg | | 253680 | HI |
| | DL2SS-005M-0001-SO | Iron | 20100 | mg/kg | | 1000000 | HI |
| | DL2SS-005M-0001-SO | Lead | 31.4 | mg/kg | | 400 | RSL HI |
| | DL2SS-005M-0001-SO | Magnesium | 1900 | mg/kg | | | EN |
| | DL2SS-005M-0001-SO | Manganese | 782 | mg/kg | | 1450 | BG |
| | DL2SS-005M-0001-SO | Mercury | 0.028 | mg/kg | | 1722 | HI |
| | DL2SS-005M-0001-SO | Nickel | 12.7 | mg/kg | | 126391 | HI |
| | DL2SS-005M-0001-SO | Potassium | 578 | mg/kg | | | EN |
| | DL2SS-005M-0001-SO | Sodium | 25 | mg/kg | | | EN |
| | DL2SS-005M-0001-SO | Thallium | 0.68 | mg/kg | | 477 | HI |
| | DL2SS-005M-0001-SO | Vanadium | 17 | mg/kg | | 23045 | HI |
| | DL2SS-005M-0001-SO | Zinc | 180 | mg/kg | | 1000000 | HI |

B Analyte detected in associated Method Blank

HI = National Guard Trainee FWCUG Hazard Index = 1
CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$
BG = Background Value
EN = Essential Nutrient
RSL HI = Regional Screening Level Hazard Index = 1
RSL CR = Regional Screening Level Cancer Risk $10^{-5}$

Table 1 Screening of Detected Chemicals

| | Sample Description | Analyte | Result | Units | Qualifiers | Screening Value | Screening Value Note |
|---|---|---|---|---|---|---|---|
| VOCs | DLSS-006-0003-SO | Acetone | 110 | µg/Kg-dry | | 61000000 | RSL HI |
| | DLSS-006-0003-SO | 2-Butanone | 8.2 | µg/Kg-dry | | 28000000 | RSL HI |

HI = National Guard Trainee FWCUG Hazard Index = 1

CR = National Guard Trainee FWCUG Cancer Risk $10^{-5}$

BG = Background Value

EN = Essential Nutrient

RSL HI = Regional Screening Level Hazard Index = 1

RSL CR = Regional Screening Level Cancer Risk $10^{-5}$

Table 2 Summary List of Samples and Analysis

| Description | | | Analysis | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Location | Sample Type | Sample ID | EXPL | PROP | MET | PCP | SVOC | PCB | PEST | VOC |
| Group 2 | Primary | DL2ss-001M-0001-SO | x | x | x | x | x | x | x | |
| Group 2 | Blind Duplicate | DL2ss-001M-0002-SO | x | x | x | x | x | x | x | |
| Group 2 | Field Duplicate | DL2ss-001M-0003-SO | x | x | x | x | x | x | x | |
| Group 2 | MS | | x | x | x | x | x | x | x | |
| Group 2 | MSD | | x | x | x | x | x | x | x | |
| Group 2 | VOC | DL2ss-006-0001-SO | | | | | | | | x |
| Group 2 | VOC Blind Duplicate | DL2ss-006-0002-SO | | | | | | | | x |
| Group 2 | VOC Field Duplicate | DL2ss-006-0003-SO | | | | | | | | x |
| Group 2 | VOC MS | | | | | | | | | x |
| Group 2 | VOC MSD | | | | | | | | | x |
| Group 2 | Primary | DL2ss-002M-0001-SO | | | x | | | | | |
| Group 2 | Primary | DL2ss-003M-0001-SO | | | x | | | | | |
| Group 2 | Primary | DL2ss-004M-0001-SO | | | x | | | | | |
| Group 2 | Primary | DL2ss-005M-0001-SO | | | x | | | | | |

Triplicate

# Field Sampling Report

**Project Name:** RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO SAMPLING AT GROUP 2 ORE STORAGE AREAS

**Location ID:** DL2ss-001M-001-SO, 0002-SO, 0003-SO

**Date:** 3/8/11 **Weather Conditions** Clear, Cool **Temperature** 33°F

## Sampling Information

| Source | Groundwater / Product | | Surface Water | | Soils / Sediments / Sludge | | | |
|---|---|---|---|---|---|---|---|---|
| **Method** | Bailer | | Sample Bottle | | Scoop | | Trowel | |
| | Pump | | Bacon Bomb | | Bowl | | Hand Auger | |
| | Micro-purge | | | | Push Probe | X | Plastic Liner | |
| **Type/Construction** | | | | | Mattocks | | | |
| **Miscellaneous** | **Well Purging Form** Yes - No | | | | | | | |

**Sample Collection:** 1010 hrs **Sample Type:** Composite - (MI) - Grab If MI, # of increments taken: 30 **Location:** Plotted on Map - (Staked in Field) Estimated -

**Sample Depth:** 0-1 FT (below surface) Measured - (Surveyed) **Decon:** Dedicated - Each Day - (Each Location)

| **Field Parameters** (at time of sample) | | **Analytical Parameters** | | | | **Other Parameters** | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PID / FID Readings:** | ppm | VOC | | TPH GRO | | Corrosivity | | | |
| Background: | | SVOC | X | TPH DRO | | Reactivity Sulfide/Cyanide | | | |
| | | Explosives | X | Chromium +6 | X | Ignitability | | | |
| Sample: | ppm | Propellants | X | Nitrate | | | | | |
| **Water Level** | FT | TAL Metals + Hg | X | Asbestos | | **QA Samples** | | | |
| **Temperature** | °C | Pesticides/PCBs | X | Pentachlorophenol | | MS/MSD | (Yes) / No 0001 | | NA |
| **Sp. Conductance:** | uMHOs | Cyanides | | | | Duplicate ID | (Yes) / No | | NA |
| **pH** | units | TOC | | | | Equipment Rinse ID | Yes / No | | NA |
| **Turbidity** | N.T.U. | Grain Size | | | | Trip Blank ID | Yes / No | | NA |

**Sample Description**

Color: _____ Odor: _____

Staining: _____

Texture: _____

Sorting: _____

Plasticity: _____

Moisture: _____

0-1" dark organic material

1"-5" gray cohesive clay + silt

5"-12" light brown to reddish cohesive dry clay w/ silt + sand

***Soil sample description should include:***

*Munsell Color Odor Staining Texture Sorting Plasticity Moisture*

***Water sample description should include:***

*Color Odor Sheen Turbidity*

**Split Sample**

**Split Sample ID:** _____

**Name:** _____

**Agency/Company:** _____

**Address:** _____

**QA/QC Provided:** MS/MSD - Duplicate - Trip Blanks - Field Blanks

**Parameters:** Same as Above - As Listed

Logged By: Derek Kinder / Eric Cheng (Please Print)

Signature: _____

Reviewed by: ERIC CHENG (Please Print)

Signature: _____ Date: 3/14/11

# Field Sampling Report

**Project Name:** RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO SAMPLING AT GROUP 2 ORE STORAGE AREAS

**Location ID:** DL2ss-002M-0001-SO

**Date:** 3/8/11 **Weather Conditions** Partly Cloudy, Cool **Temperature** 37°F

## Sampling Information

| Source | Groundwater / Product | | Surface Water | | Soils / Sediments / Sludge | | | |
|---|---|---|---|---|---|---|---|---|
| **Method** | Bailer | | Sample Bottle | | Scoop | | Trowel | |
| | Pump | | Bacon Bomb | | Bowl | | Hand Auger | |
| | Micro-purge | | | | Push Probe | X | Plastic Liner | |
| **Type/Construction** | | | | | Mattocks | | | |
| **Miscellaneous** | **Well Purging Form** Yes - No | | | | | | | |

**Sample Collection:** 11:30 hrs **Sample Type:** Composite - (MI) - Grab If MI, # of increments taken: 30 **Location:** Plotted on Map - (Staked in Field) Estimated -

**Sample Depth:** 0-1 FT (below surface) Measured - (Surveyed) **Decon:** Dedicated - Each Day - (Each Location)

| **Field Parameters** (at time of sample) | | **Analytical Parameters** | | | | **Other Parameters** | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PID / FID Readings:** | | VOC | | TPH GRO | | Corrosivity | | | |
| Background: | ppm | SVOC | | TPH DRO | | Reactivity Sulfide/Cyanide | | | |
| | | Explosives | | Chromium +6 | X | Ignitability | | | |
| Sample: | ppm | Propellants | | Nitrate | | | | | |
| **Water Level** | FT | TAL Metals +Hg | X | Asbestos | | **QA Samples** | | | |
| **Temperature** | °C | Pesticides/PCBs | | Pentachlorophenol | | MS/MSD | Yes / No | | NA |
| **Sp. Conductance:** | uMHOs | Cyanides | | | | Duplicate ID | Yes / No | | NA |
| **pH** | units | TOC | | | | Equipment Rinse ID | Yes / No | | NA |
| **Turbidity** | N.T.U. | Grain Size | | | | Trip Blank ID | Yes / No | | NA |

### Sample Description

Color: Odor: Staining:

Texture: Sorting:

Plasticity:

Moisture:

0-1" dark organic topsoil
1-5" brown silty clay
5-12" light brown to light red cohesive clay

*Soil sample description should include:*

*Munsell Color Odor Staining Texture Sorting Plasticity Moisture*

*Water sample description should include:*

*Color Odor Sheen Turbidity*

### Split Sample

**Split Sample ID:**

**Name:**

**Agency/Company:**

**Address:**

**QA/QC Provided:** MS/MSD - Duplicate - Trip Blanks - Field Blanks

**Parameters:** Same as Above - As Listed

Logged By: Eric Cheng (Please Print)

Signature: Eric Cheng

Reviewed by: Derek Kinder (Please Print)

Signature: Derek Kinder Date: 3/10/11

# Field Sampling Report

**Project Name:** RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO SAMPLING AT GROUP 2 ORE STORAGE AREAS

**Location ID:** DL2 ss-003M-0001-SO  **Weather Conditions:** partly cloudy / ~~clear~~, cool  **Temperature:** 37°F

**Date:** 3/8/11

## Sampling Information

| Source | Groundwater / Product | | Surface Water | | Soils / Sediments / Sludge | | | |
|---|---|---|---|---|---|---|---|---|
| Method | Bailer | | Sample Bottle | | Scoop | | Trowel | |
| | Pump | | Bacon Bomb | | Bowl | | Hand Auger | |
| | Micro-purge | | | | Push Probe | X | Plastic Liner | |
| Type/Construction | | | | | Mattocks | | | |
| Miscellaneous | Well Purging Form Yes - No | | | | | | | |

**Sample Collection:** 1110 hrs  **Sample Type:** Composite - (M) - Grab  If MI, # of increments taken: 30  **Location:** Plotted on Map - Staked in Field - Estimated -

**Sample Depth:** 0-1 FT (below surface)  Measured (Surveyed)  **Decon:** Dedicated - Each Day - (Each Location)

| Field Parameters (at time of sample) | | Analytical Parameters | | | | Other Parameters | | | |
|---|---|---|---|---|---|---|---|---|---|
| PID / FID Readings: | | VOC | | TPH GRO | | Corrosivity | | | |
| Background: | ppm | SVOC | | TPH DRO | | Reactivity Sulfide/Cyanide | | | |
| | | Explosives | | Chromium +6 | X | Ignitability | | | |
| Sample: | ppm | Propellants | | Nitrate | | | | | |
| Water Level | FT | TAL Metals +Hg | X | Asbestos | | QA Samples | | | |
| Temperature | °C | Pesticides/PCBs | | Pentachlorophenol | | MS/MSD | Yes / No | | NA |
| Sp. Conductance: | uMHOs | Cyanides | | | | Duplicate ID | Yes / No | | NA |
| pH | units | TOC | | | | Equipment Rinse ID | Yes / No | | NA |
| Turbidity | N.T.U. | Grain Size | | | | Trip Blank ID | Yes / No | | NA |

**Sample Description**

Color: Col  Odor: Odor:  Staining: Staining:

Texture: Texture:  Sorting: Sorting:

Plasticity: Plasticity:

Moisture: Moisture:

0-1" dark organic material
1"-5" grey cohesive clay+silt
5"-12" light brown to redish cohesive dry clay w/silt + sand

*Soil sample description should include:*

*Munsell Color  Odor  Staining  Texture  Sorting  Plasticity  Moisture*

***Water sample description should include:***

*Color  Odor  Sheen  Turbidity*

**Split Sample**

**Split Sample ID:**

**Name:**

**Agency/Company:**

**Address:**

**QA/QC Provided:** MS/MSD - Duplicate - Trip Blanks - Field Blanks

**Parameters:** Same as Above - As Listed

Logged By: Derek Kinder (Please Print)  Reviewed by: ERIC CHENG (Please Print)

Signature:  Signature:  Date: 3/14/11

# Field Sampling Report

**Project Name:** RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO SAMPLING AT GROUP 2 ORE STORAGE AREAS

**Location ID:** NLSS-004M-0001-SO

**Date:** 3/8/11 **Weather Conditions** Clear, Cool **Temperature** 30°F

## Sampling Information

| Source | Groundwater / Product | | Surface Water | | Soils / Sediments / Sludge | | | |
|---|---|---|---|---|---|---|---|---|
| **Method** | Bailer | | Sample Bottle | | Scoop | | Trowel | |
| | Pump | | Bacon Bomb | | Bowl | | Hand Auger | |
| | Micro-purge | | | | Push Probe | X | Plastic Liner | |
| **Type/Construction** | | | | | Mattocks | | | |
| **Miscellaneous** | **Well Purging Form** Yes - No | | | | | | | |

**Sample Collection:** 0930 hrs **Sample Type:** Composite - (MI) - Grab If MI, # of increments taken: 30 **Location:** Plotted on Map (Staked in Field) Estimated -

**Sample Depth:** 0-1 FT (below surface) Measured - (Surveyed) **Decon:** Dedicated - Each Day - (Each Location)

| **Field Parameters** (at time of sample) | | **Analytical Parameters** | | | | **Other Parameters** | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PID / FID Readings:** | ppm | VOC | | TPH GRO | | Corrosivity | | | |
| Background: | | SVOC | | TPH DRO | | Reactivity Sulfide/Cyanide | | | |
| | | Explosives | | Chromium +6 | X | Ignitability | | | |
| Sample: | ppm | Propellants | | Nitrate | | | | | |
| **Water Level** | FT | TAL Metals +HG | X | Asbestos | | **QA Samples** | | | |
| **Temperature** | °C | Pesticides/PCBs | | Pentachlorophenol | | MS/MSD | Yes / No | | NA |
| **Sp. Conductance:** | uMHOs | Cyanides | | | | Duplicate ID | Yes / No | | NA |
| **pH** | units | TOC | | | | Equipment Rinse ID | Yes / No | | NA |
| **Turbidity** | N.T.U. | Grain Size | | | | Trip Blank ID | Yes / No | | NA |

**Sample Description**

Color: Dark Brown Monolithic fill

Odor: Staining:

Texture: Sorting:

Plasticity:

Moisture:

Loose silty Clay

*Soil sample description should include:*

*Munsell Color Odor Staining Texture Sorting Plasticity Moisture*

***Water sample description should include:***

*Color Odor Sheen Turbidity*

**Split Sample**

**Split Sample ID:**

**Name:**

**Agency/Company:**

**Address:**

**QA/QC Provided:** MS/MSD - Duplicate - Trip Blanks - Field Blanks

**Parameters:** Same as Above - As Listed

Logged By: Derek Kinder (Please Print) Signature:

Reviewed by: Eric Cheng (Please Print) Signature: Date: 3/14/11

# Field Sampling Report

**Project Name:** RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO SAMPLING AT GROUP 2 ORE STORAGE AREAS

**Location ID:** DL2-005M-0001-SO

**Date:** 3/8/11 **Weather Conditions** Clear, Cool **Temperature** 33°F

## Sampling Information

| Source | Groundwater / Product | | Surface Water | | Soils / Sediments / Sludge | | | |
|---|---|---|---|---|---|---|---|---|
| **Method** | Bailer | | Sample Bottle | | Scoop | | Trowel | |
| | Pump | | Bacon Bomb | | Bowl | | Hand Auger | |
| | Micro-purge | | | | Push Probe | X | Plastic Liner | |
| **Type/Construction** | | | | | Mattocks | | | |
| **Miscellaneous** | **Well Purging Form** Yes - No | | | | | | | |

**Sample Collection:** 1010 hrs

**Sample Type:** Composite - (MI) - Grab
If MI, # of increments taken: 30

**Location:** Plotted on Map - (Staked in Field)
Estimated -

**Sample Depth:** 0-1 FT (below surface)

Measured - (Surveyed)

**Decon:** Dedicated - Each Day - (Each Location)

| **Field Parameters** (at time of sample) | | **Analytical Parameters** | | | | **Other Parameters** | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PID / FID Readings:** | | VOC | | TPH GRO | | Corrosivity | | | |
| Background: | ppm | SVOC | | TPH DRO | | Reactivity Sulfide/Cyanide | | | |
| | | Explosives | | Chromium +6 | X | Ignitability | | | |
| Sample: | ppm | Propellants | | Nitrate | | | | | |
| **Water Level** | FT | TAL Metals +Hg | X | Asbestos | | **QA Samples** | | | |
| **Temperature** | °C | Pesticides/PCBs | | Pentachlorophenol | | MS/MSD | Yes / No | | NA |
| **Sp. Conductance:** | uMHOs | Cyanides | | | | Duplicate ID | Yes / No | | NA |
| **pH** | units | TOC | | | | Equipment Rinse ID | Yes / No | | NA |
| **Turbidity** | N.T.U. | Grain Size | | | | Trip Blank ID | Yes / No | | NA |

### Sample Description

Color: Odor: Staining:

Texture: Sorting:

Plasticity:

Moisture:

Light Brown to Yellowish Clay
Moisture - w/ Silt

*Soil sample description should include:*

*Munsell Color Odor Staining Texture Sorting Plasticity Moisture*

*Water sample description should include:*

*Color Odor Sheen Turbidity*

### Split Sample

**Split Sample ID:**

**Name:**

**Agency/Company:**

**Address:**

**QA/QC Provided:** MS/MSD - Duplicate - Trip Blanks - Field Blanks

**Parameters:** Same as Above - As Listed

**Logged By:** Derek Kinder / Tom Chapman (Please Print)

**Signature:**

**Reviewed by:** ERIC CHENG (Please Print)

**Signature:**

**Date:** 3/14/11

VOCs

# Field Sampling Report

**Project Name:** RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO SAMPLING AT GROUP 2 ORE STORAGE AREAS

**Location ID:** DL2ss-006-0001-SO, DL2ss-006-0002-SO, DL2ss-0003-SO Triplicate

**Date:** 3/8/11 **Weather Conditions** Partly Cloudy, Cool **Temperature** 37°F

## Sampling Information

| Source | Groundwater / Product | | Surface Water | | Soils / Sediments / Sludge | | | |
|---|---|---|---|---|---|---|---|---|
| Method | Bailer | | Sample Bottle | | Scoop | | Trowel | |
| | Pump | | Bacon Bomb | | Bowl | | Hand Auger | |
| | Micro-purge | | | | ~~Push Probe~~ DSK | X | Plastic Liner | |
| Type/Construction | | | | | Mattocks | | TerraCore | X |
| Miscellaneous | Well Purging Form Yes - No | | | | | | | |

**Sample Collection:** 1115 hrs

**Sample Type:** Composite - MI - (Grab) If MI, # of increments taken: _____

**Location:** Plotted on Map - (Staked in Field) Estimated -

**Sample Depth:** 0-1' FT (below surface)

Measured - (Surveyed)

**Decon:** (Dedicated) - Each Day - Each Location

Taken from appx middle of sampling area.

| Field Parameters (at time of sample) | | Analytical Parameters | | | | Other Parameters | | | |
|---|---|---|---|---|---|---|---|---|---|
| PID / FID Readings: | | VOC | X | TPH GRO | | Corrosivity | | | |
| Background: | ppm | SVOC | | TPH DRO | | Reactivity Sulfide/Cyanide | | | |
| | | Explosives | | Chromium +6 | | Ignitability | | | |
| Sample: | ppm | Propellants | | Nitrate | | | | | |
| Water Level | FT | TAL Metals | | Asbestos | | QA Samples | | | |
| Temperature | °C | Pesticides/PCBs | | Pentachlorophenol | | MS/MSD | (Yes) / No 0001 | | NA |
| Sp. Conductance: | uMHOs | Cyanides | | | | Duplicate ID | (Yes) / No | | NA |
| pH | units | TOC | | | | Equipment Rinse ID | Yes / No | | NA |
| Turbidity | N.T.U. | Grain Size | | | | Trip Blank ID | Yes / No | | NA |

**Sample Description**

Color: _____ Odor: _____ Staining: _____

Texture: _____ Sorting: _____

Plasticity: _____

Moisture: _____

light brown to red and grey cohesive wet clay w/ silt & sand

*Soil sample description should include:*

*Munsell Color Odor Staining Texture Sorting Plasticity Moisture*

*Water sample description should include:*

*Color Odor Sheen Turbidity*

**Split Sample**

**Split Sample ID:** _____

**Name:** _____

**Agency/Company:** _____

**Address:** _____

**QA/QC Provided:** MS/MSD - Duplicate - Trip Blanks - Field Blanks

**Parameters:** Same as Above - As Listed

Logged By: Derek Kinder (Please Print)

Signature: DSK

Reviewed by: ERIC CHENG (Please Print)

Signature: EC Date: 3/14/11

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***ANALYTICAL REPORT***

This report at a minimum contains the following information:

- Analytical Report of Test Results
- Description of QC Qualifiers
- Chain of Custody (copy)
- Sample Condition Report
- Quality Control Summary
- Case Narrative (if applicable)
- Correspondence with Client (if applicable)

*For analyses that require NELAP accreditation, all analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted in this document.*

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# ANALYTICAL REPORT

USACE - LOUISVILLE
DEREK KINDER
600 DR MLKJ PLACE
PO BOX 59 ROOM 921
LOUISVILLE, KY 40201-0059

Project Name: RAVENNA - GROUP 2 ORE
Contract #: 2263
Project #: W912QR-10-D-0024
Folder #: 83966
Purchase Order #: TASK ORDER 0010


Arrival Temperature: See COC
Report Date: 3/31/2011
Date Received: 3/9/2011
Reprint Date: 3/31/2011

CT LAB#: 898909 Sample Description: DL2SS-001M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 99.3 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| Hexavalent Chromium | 3.9 | mg/kg | 2.6 | 8.7 | 10 | 1 | J M | 3/21/2011 14:00 | 03/22/2011 13:00 | EJC | EPA 3060A/7196A ^ |
| Nitrocellulose | <13 | mg/kg | 13 | 44 | 100 | 1 | M | 3/22/2011 09:00 | 03/26/2011 09:19 | RLD | EPA 9056M |
| **Metals Results** | | | | | | | | | | | |
| Aluminum | 12600 | mg/kg | 0.040 | 0.12 | 0.24 | 1 | M | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Antimony | 1.3 | mg/kg | 0.081 | 0.27 | 0.54 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Arsenic | 8.1 | mg/kg | 0.13 | 0.45 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Barium | 124 | mg/kg | 0.0081 | 0.027 | 0.048 | 1 | B | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Beryllium | 0.44 | mg/kg | 0.0040 | 0.012 | 0.024 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Cadmium | 0.23 | mg/kg | 0.0060 | 0.021 | 0.042 | 1 | M | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Calcium | 3350 | mg/kg | 0.060 | 0.20 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Chromium | 156 | mg/kg | 0.019 | 0.063 | 0.25 | 1 | M | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Cobalt | 10.1 | mg/kg | 0.015 | 0.049 | 0.099 | 1 | M | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Copper | 443 | mg/kg | 0.60 | 2.0 | 3.8 | 10 | | 3/15/2011 10:00 | 03/16/2011 21:08 | NAH | EPA 6010C ^ |
| Iron | 20500 | mg/kg | 3.0 | 10 | 18 | 10 | M | 3/15/2011 10:00 | 03/16/2011 21:08 | NAH | EPA 6010C ^ |
| Lead | 32.2 | mg/kg | 0.040 | 0.14 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Magnesium | 1590 | mg/kg | 0.12 | 0.40 | 0.73 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898909 Sample Description: DL2SS-001M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Manganese | 803 | mg/kg | 0.16 | 0.52 | 1.2 | 10 | Y,M | 3/15/2011 10:00 | 03/16/2011 21:08 | NAH | EPA 6010C ^ |
| Nickel | 12.0 | mg/kg | 0.018 | 0.061 | 0.12 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Selenium | 0.081 | mg/kg | 0.070 | 0.21 | 0.42 | 1 | J | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Silver | <0.017 | mg/kg | 0.017 | 0.056 | 0.22 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Thallium | 1.3 | mg/kg | 0.040 | 0.14 | 0.56 | 1 | M | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Vanadium | 17.3 | mg/kg | 0.011 | 0.034 | 0.14 | 1 | | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Zinc | 292 | mg/kg | 0.040 | 0.12 | 0.48 | 1 | M | 3/15/2011 10:00 | 03/16/2011 22:38 | NAH | EPA 6010C ^ |
| Potassium | 997 | mg/kg | 11 | 36 | 150 | 1 | | 3/15/2011 10:00 | 03/21/2011 13:46 | NAH | EPA 6010C ^ |
| Sodium | 60.4 | mg/kg | 4.0 | 13 | 52 | 1 | | 3/15/2011 10:00 | 03/21/2011 13:46 | NAH | EPA 6010C ^ |
| Mercury | 0.031 | mg/kg | 0.0024 | 0.0080 | 0.0080 | 1 | Y | 3/21/2011 14:25 | 03/22/2011 10:30 | AMA | EPA 7471A ^ |
| **Organic Results** | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | <21 | ug/kg | 21 | 70 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 1,2-Dichlorobenzene | <24 | ug/kg | 24 | 80 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 1,3-Dichlorobenzene | <20 | ug/kg | 20 | 68 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 1,4-Dichlorobenzene | <19 | ug/kg | 19 | 64 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 1-Methylnaphthalene | <25 | ug/kg | 25 | 84 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| 2,4,5-Trichlorophenol | <130 | ug/kg | 130 | 450 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2,4,6-Trichlorophenol | <130 | ug/kg | 130 | 450 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2,4-Dichlorophenol | <120 | ug/kg | 120 | 410 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2,4-Dimethylphenol | <100 | ug/kg | 100 | 330 | 400 | 1 | M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2,4-Dinitrophenol | <700 | ug/kg | 700 | 2300 | 2000 | 1 | M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2,4-Dinitrotoluene | <24 | ug/kg | 24 | 80 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2,6-Dichlorophenol | <140 | ug/kg | 140 | 490 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2,6-Dinitrotoluene | <24 | ug/kg | 24 | 82 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2-Chloronaphthalene | <23 | ug/kg | 23 | 77 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2-Chlorophenol | <340 | ug/kg | 340 | 1100 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2-Methylnaphthalene | <25 | ug/kg | 25 | 84 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2-Methylphenol | <430 | ug/kg | 430 | 1400 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898909 Sample Description: DL2SS-001M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Nitroaniline | <23 | ug/kg | 23 | 79 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 2-Nitrophenol | <280 | ug/kg | 280 | 950 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 3 & 4-Methylphenol | <660 | ug/kg | 660 | 2200 | 2000 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 3,3'-Dichlorobenzidine | <150 | ug/kg | 150 | 500 | 510 | 1 | M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 3-Nitroaniline | <22 | ug/kg | 22 | 73 | 1000 | 1 | M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 4,6-Dinitro-2-methylphenol | <270 | ug/kg | 270 | 910 | 1000 | 1 | M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 4-Bromophenyl-phenyl ether | <25 | ug/kg | 25 | 84 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 4-Chloro-3-methylphenol | <380 | ug/kg | 380 | 1300 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 4-Chloroaniline | <39 | ug/kg | 39 | 130 | 400 | 1 | M,Y | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 4-Chlorophenyl-phenyl ether | <26 | ug/kg | 26 | 88 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 4-Nitroaniline | <30 | ug/kg | 30 | 100 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| 4-Nitrophenol | <400 | ug/kg | 400 | 1300 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Acenaphthene | <24 | ug/kg | 24 | 81 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Acenaphthylene | <24 | ug/kg | 24 | 82 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Acetophenone | <76 | ug/kg | 76 | 250 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Aniline | <31 | ug/kg | 31 | 100 | 400 | 1 | M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| Anthracene | <24 | ug/kg | 24 | 82 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Azobenzene & 1,2-Diphenylhydra | <56 | ug/kg | 56 | 180 | 810 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzidine | <960 | ug/kg | 960 | 3200 | 2000 | 1 | M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzo(a)anthracene | 53 | ug/kg | 25 | 85 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzo(a)pyrene | 46 | ug/kg | 23 | 79 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzo(b)fluoranthene | 86 | ug/kg | 25 | 86 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzo(g,h,i)perylene | 40 | ug/kg | 22 | 74 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzo(k)fluoranthene | 48 | ug/kg | 25 | 86 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzoic acid | 450 | ug/kg | 290 | 990 | 2000 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Benzyl alcohol | <84 | ug/kg | 84 | 280 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Bis(2-chloroethoxy)methane | <23 | ug/kg | 23 | 77 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Bis(2-chloroethyl)ether | <25 | ug/kg | 25 | 85 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Bis(2-chloroisopropyl)ether | <30 | ug/kg | 30 | 100 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898909 Sample Description: DL2SS-001M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 110 | ug/kg | 88 | 290 | 1000 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Butylbenzylphthalate | <74 | ug/kg | 74 | 240 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Carbazole | <28 | ug/kg | 28 | 95 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Chrysene | 74 | ug/kg | 25 | 85 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Di-n-butylphthalate | 120 | ug/kg | 80 | 260 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Di-n-octylphthalate | <60 | ug/kg | 60 | 200 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Dibenzo(a,h)anthracene | <22 | ug/kg | 22 | 76 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Dibenzofuran | <24 | ug/kg | 24 | 82 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Diethylphthalate | <65 | ug/kg | 65 | 220 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Dimethylphthalate | <64 | ug/kg | 64 | 210 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Fluoranthene | 150 | ug/kg | 26 | 87 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Fluorene | <25 | ug/kg | 25 | 86 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Hexachlorobenzene | <28 | ug/kg | 28 | 95 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Hexachlorobutadiene | <63 | ug/kg | 63 | 210 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Hexachlorocyclopentadiene | <53 | ug/kg | 53 | 170 | 400 | 1 | Y | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Hexachloroethane | <33 | ug/kg | 33 | 110 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Indeno(1,2,3-cd)pyrene | 39 | ug/kg | 23 | 76 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Isophorone | <51 | ug/kg | 51 | 170 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| N-Nitroso-di-n-propylamine | <71 | ug/kg | 71 | 230 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| N-Nitrosodimethylamine | <79 | ug/kg | 79 | 260 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| N-Nitrosodiphenylamine & Diphn | <51 | ug/kg | 51 | 160 | 810 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| N-Nitrosopyrrolidine | <57 | ug/kg | 57 | 190 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Naphthalene | <21 | ug/kg | 21 | 72 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Nitrobenzene | <60 | ug/kg | 60 | 200 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Pentachlorophenol | <240 | ug/kg | 240 | 810 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Phenanthrene | 76 | ug/kg | 26 | 89 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Phenol | <160 | ug/kg | 160 | 540 | 510 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Pyrene | 90 | ug/kg | 26 | 87 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |
| Pyridine | <39 | ug/kg | 39 | 130 | 400 | 1 | Q,M | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898909 Sample Description: DL2SS-001M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: 2,4,6-Tribromophenol | 73 | % Recovery | 35 | 125 | 35-125 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| Surr: 2-Fluorobiphenyl | 71 | % Recovery | 45 | 105 | 45-105 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| Surr: 2-Fluorophenol | 57 | % Recovery | 35 | 105 | 35-105 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| Surr: Nitrobenzene-d5 | 64 | % Recovery | 35 | 100 | 35-100 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| Surr: Phenol-d5 | 69 | % Recovery | 40 | 100 | 40-100 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| Surr: Terphenyl-d14 | 73 | % Recovery | 30 | 125 | 30-125 | 1 | | 3/21/2011 10:30 | 03/23/2011 17:40 | RPN | EPA 8270C |
| Aroclor-1016 | <10 | ug/kg | 10 | 35 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1221 | <20 | ug/kg | 20 | 66 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1232 | <27 | ug/kg | 27 | 91 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1242 | <29 | ug/kg | 29 | 97 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1248 | <29 | ug/kg | 29 | 98 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1254 | <23 | ug/kg | 23 | 76 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1260 | <12 | ug/kg | 12 | 38 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1262 | <21 | ug/kg | 21 | 71 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Aroclor-1268 | <28 | ug/kg | 28 | 93 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A ^ |
| Surr: DCBP | 112 | % Recovery | 60 | 125 | 60-125 | 1 | | 3/18/2011 11:00 | 03/21/2011 14:59 | JJY | EPA 8082A |
| Nitroguanidine | <0.060 | mg/kg | 0.060 | 0.21 | 0.25 | 1 | | 3/23/2011 14:30 | 03/28/2011 09:25 | | EPA 8330 |
| 1,2-Dinitrobenzene | 104 | % Recovery | 50 | 150 | 50-150 | 1 | | 3/23/2011 14:30 | 03/28/2011 09:25 | | EPA 8330 |
| 1,3,5-Trinitrobenzene | <0.13 | mg/kg | 0.13 | 0.43 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 1,3-Dinitrobenzene | <0.080 | mg/kg | 0.080 | 0.26 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 2,4,6-Trinitrotoluene | <0.090 | mg/kg | 0.090 | 0.31 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 2,4-Dinitrotoluene | <0.080 | mg/kg | 0.080 | 0.25 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 2,6-Dinitrotoluene | <0.070 | mg/kg | 0.070 | 0.24 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 2-Amino-4,6-dinitrotoluene | <0.050 | mg/kg | 0.050 | 0.18 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 2-Nitrotoluene | <0.090 | mg/kg | 0.090 | 0.28 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 3,5-Dinitroaniline | <0.090 | mg/kg | 0.090 | 0.28 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 3-Nitrotoluene | <0.070 | mg/kg | 0.070 | 0.24 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 4-Amino-2,6-dinitrotoluene | <0.070 | mg/kg | 0.070 | 0.24 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898909 Sample Description: DL2SS-001M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-Nitrotoluene | <0.070 | mg/kg | 0.070 | 0.24 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| HMX | <0.12 | mg/kg | 0.12 | 0.39 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| Nitrobenzene | <0.040 | mg/kg | 0.040 | 0.14 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| Nitroglycerin | <0.50 | mg/kg | 0.50 | 1.8 | 2.0 | 1 | Y | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| PETN | <0.50 | mg/kg | 0.50 | 1.8 | 2.0 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| RDX | <0.14 | mg/kg | 0.14 | 0.46 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| Tetryl | <0.090 | mg/kg | 0.090 | 0.30 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| 1,2-Dinitrobenzene | 107 | % Recovery | 75 | 127 | 75-127 | 1 | | 3/23/2011 13:30 | 03/25/2011 15:03 | | EPA 8330B |
| Soil Homogenization and Prep | COMPLETED | | | | | 1 | | | 03/14/2011 00:00 | DAB | LAB SOP |
| **Sub Lab Results** | | | | | | | | | | | |
| Pesticides | ATTACHED | | | | | 1 | | | 03/31/2011 00:00 | PML | SW8081 |

CT LAB#: 898914 Sample Description: DL2SS-002M-0001-SO Sampled: 3/8/2011 1130

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 99.0 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| Hexavalent Chromium | 4.9 | mg/kg | 2.6 | 8.7 | 10 | 1 | J | 3/21/2011 14:00 | 03/22/2011 13:00 | EJC | EPA 3060A/7196A ^ |
| **Metals Results** | | | | | | | | | | | |
| Aluminum | 12400 | mg/kg | 0.040 | 0.12 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Antimony | 0.46 | mg/kg | 0.081 | 0.27 | 0.55 | 1 | J | 3/15/2011 10:00 | 03/18/2011 14:25 | NAH | EPA 6010C ^ |
| Arsenic | 8.7 | mg/kg | 0.13 | 0.45 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Barium | 115 | mg/kg | 0.0081 | 0.027 | 0.048 | 1 | B | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Beryllium | 0.66 | mg/kg | 0.040 | 0.12 | 0.24 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:08 | NAH | EPA 6010C ^ |
| Cadmium | 0.28 | mg/kg | 0.0061 | 0.021 | 0.042 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Calcium | 11700 | mg/kg | 0.061 | 0.20 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898914 Sample Description: DL2SS-002M-0001-SO Sampled: 3/8/2011 1130

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chromium | 66.7 | mg/kg | 0.019 | 0.064 | 0.25 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Cobalt | 7.2 | mg/kg | 0.015 | 0.049 | 0.099 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Copper | 722 | mg/kg | 0.61 | 2.0 | 3.8 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:08 | NAH | EPA 6010C ^ |
| Iron | 21000 | mg/kg | 3.0 | 10 | 18 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:08 | NAH | EPA 6010C ^ |
| Lead | 36.4 | mg/kg | 0.040 | 0.14 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Magnesium | 1750 | mg/kg | 0.12 | 0.40 | 0.73 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Manganese | 886 | mg/kg | 0.16 | 0.53 | 1.2 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:08 | NAH | EPA 6010C ^ |
| Nickel | 10.8 | mg/kg | 0.018 | 0.062 | 0.12 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Selenium | <0.071 | mg/kg | 0.071 | 0.21 | 0.42 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Silver | <0.017 | mg/kg | 0.017 | 0.057 | 0.22 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Thallium | 0.73 | mg/kg | 0.040 | 0.14 | 0.57 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Vanadium | 15.6 | mg/kg | 0.011 | 0.034 | 0.14 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Zinc | 508 | mg/kg | 0.040 | 0.12 | 0.48 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:40 | NAH | EPA 6010C ^ |
| Potassium | 859 | mg/kg | 11 | 36 | 150 | 1 | | 3/15/2011 10:00 | 03/21/2011 14:02 | NAH | EPA 6010C ^ |
| Sodium | 60.9 | mg/kg | 4.0 | 13 | 53 | 1 | | 3/15/2011 10:00 | 03/21/2011 14:02 | NAH | EPA 6010C ^ |
| Mercury | 0.029 | mg/kg | 0.0024 | 0.0080 | 0.0080 | 1 | | 3/21/2011 14:25 | 03/22/2011 10:41 | AMA | EPA 7471A ^ |
| **Organic Results** | | | | | | | | | | | |
| Soil Homogenization and Prep | COMPLETED | | | | | 1 | | | 03/14/2011 00:00 | DAB | LAB SOP |

CT LAB#: 898915 Sample Description: DL2SS-003M-0001-SO Sampled: 3/8/2011 1110

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 99.2 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| Hexavalent Chromium | <2.6 | mg/kg | 2.6 | 8.7 | 10 | 1 | | 3/21/2011 14:00 | 03/22/2011 13:00 | EJC | EPA 3060A/7196A ^ |
| **Metals Results** | | | | | | | | | | | |
| Aluminum | 13300 | mg/kg | 0.040 | 0.12 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898915 Sample Description: DL2SS-003M-0001-SO Sampled: 3/8/2011 1110

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.73 | mg/kg | 0.081 | 0.27 | 0.54 | 1 | | 3/15/2011 10:00 | 03/18/2011 14:32 | NAH | EPA 6010C ^ |
| Arsenic | 9.3 | mg/kg | 0.13 | 0.45 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Barium | 73.1 | mg/kg | 0.0081 | 0.027 | 0.048 | 1 | B | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Beryllium | 0.47 | mg/kg | 0.040 | 0.12 | 0.24 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:14 | NAH | EPA 6010C ^ |
| Cadmium | 0.17 | mg/kg | 0.0060 | 0.021 | 0.042 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Calcium | 4690 | mg/kg | 0.060 | 0.20 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Chromium | 89.7 | mg/kg | 0.019 | 0.064 | 0.25 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Cobalt | 7.0 | mg/kg | 0.015 | 0.049 | 0.099 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Copper | 159 | mg/kg | 0.060 | 0.20 | 0.38 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Iron | 20500 | mg/kg | 3.0 | 10 | 18 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:14 | NAH | EPA 6010C ^ |
| Lead | 35.8 | mg/kg | 0.040 | 0.14 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Magnesium | 2010 | mg/kg | 0.12 | 0.40 | 0.73 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Manganese | 628 | mg/kg | 0.16 | 0.52 | 1.2 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:14 | NAH | EPA 6010C ^ |
| Nickel | 12.9 | mg/kg | 0.018 | 0.061 | 0.12 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Selenium | <0.071 | mg/kg | 0.071 | 0.21 | 0.42 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Silver | <0.017 | mg/kg | 0.017 | 0.056 | 0.22 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Thallium | 0.60 | mg/kg | 0.040 | 0.14 | 0.56 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Vanadium | 16.9 | mg/kg | 0.011 | 0.034 | 0.14 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Zinc | 128 | mg/kg | 0.040 | 0.12 | 0.48 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:46 | NAH | EPA 6010C ^ |
| Potassium | 731 | mg/kg | 11 | 36 | 150 | 1 | | 3/15/2011 10:00 | 03/21/2011 14:05 | NAH | EPA 6010C ^ |
| Sodium | 42.6 | mg/kg | 4.0 | 13 | 52 | 1 | J | 3/15/2011 10:00 | 03/21/2011 14:05 | NAH | EPA 6010C ^ |
| Mercury | 0.024 | mg/kg | 0.0024 | 0.0080 | 0.0080 | 1 | | 3/21/2011 14:25 | 03/22/2011 10:47 | AMA | EPA 7471A ^ |

**Organic Results**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Soil Homogenization and Prep | COMPLETED | | | | | 1 | | | 03/14/2011 00:00 | DAB | LAB SOP |

CT LAB#: 898916 Sample Description: DL2SS-001M-0002-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898916 Sample Description: DL2SS-001M-0002-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 99.3 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| Hexavalent Chromium | 2.8 | mg/kg | 2.6 | 8.7 | 10 | 1 | J | 3/21/2011 14:00 | 03/22/2011 13:00 | EJC | EPA 3060A/7196A ^ |
| Nitrocellulose | <13 | mg/kg | 13 | 44 | 100 | 1 | | 3/22/2011 09:00 | 03/26/2011 10:13 | RLD | EPA 9056M |
| **Metals Results** | | | | | | | | | | | |
| Aluminum | 12500 | mg/kg | 0.040 | 0.12 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Antimony | 0.59 | mg/kg | 0.081 | 0.27 | 0.54 | 1 | | 3/15/2011 10:00 | 03/18/2011 14:38 | NAH | EPA 6010C ^ |
| Arsenic | 9.2 | mg/kg | 0.13 | 0.45 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Barium | 119 | mg/kg | 0.0081 | 0.027 | 0.048 | 1 | B | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Beryllium | 0.53 | mg/kg | 0.040 | 0.12 | 0.24 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:20 | NAH | EPA 6010C ^ |
| Cadmium | 0.22 | mg/kg | 0.0060 | 0.021 | 0.042 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Calcium | 3550 | mg/kg | 0.060 | 0.20 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Chromium | 69.2 | mg/kg | 0.019 | 0.063 | 0.25 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Cobalt | 10.0 | mg/kg | 0.015 | 0.049 | 0.099 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Copper | 358 | mg/kg | 0.60 | 2.0 | 3.8 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:20 | NAH | EPA 6010C ^ |
| Iron | 20800 | mg/kg | 3.0 | 10 | 18 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:20 | NAH | EPA 6010C ^ |
| Lead | 34.0 | mg/kg | 0.040 | 0.14 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Magnesium | 1610 | mg/kg | 0.12 | 0.40 | 0.73 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Manganese | 1520 | mg/kg | 0.16 | 0.52 | 1.2 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:20 | NAH | EPA 6010C ^ |
| Nickel | 12.8 | mg/kg | 0.018 | 0.061 | 0.12 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Selenium | <0.070 | mg/kg | 0.070 | 0.21 | 0.42 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Silver | <0.017 | mg/kg | 0.017 | 0.056 | 0.22 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Thallium | 1.4 | mg/kg | 0.040 | 0.14 | 0.56 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Vanadium | 17.7 | mg/kg | 0.011 | 0.034 | 0.14 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Zinc | 245 | mg/kg | 0.040 | 0.12 | 0.48 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:53 | NAH | EPA 6010C ^ |
| Potassium | 748 | mg/kg | 11 | 36 | 150 | 1 | | 3/15/2011 10:00 | 03/21/2011 14:13 | NAH | EPA 6010C ^ |
| Sodium | 42.0 | mg/kg | 4.0 | 13 | 52 | 1 | J | 3/15/2011 10:00 | 03/21/2011 14:13 | NAH | EPA 6010C ^ |
| Mercury | 0.023 | mg/kg | 0.0024 | 0.0080 | 0.0080 | 1 | | 3/21/2011 14:25 | 03/22/2011 10:48 | AMA | EPA 7471A ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898916 Sample Description: DL2SS-001M-0002-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Organic Results** | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | <21 | ug/kg | 21 | 69 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 1,2-Dichlorobenzene | <24 | ug/kg | 24 | 79 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 1,3-Dichlorobenzene | <20 | ug/kg | 20 | 67 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 1,4-Dichlorobenzene | <19 | ug/kg | 19 | 63 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 1-Methylnaphthalene | <25 | ug/kg | 25 | 83 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| 2,4,5-Trichlorophenol | <130 | ug/kg | 130 | 440 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2,4,6-Trichlorophenol | <130 | ug/kg | 130 | 440 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2,4-Dichlorophenol | <120 | ug/kg | 120 | 410 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2,4-Dimethylphenol | <99 | ug/kg | 99 | 330 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2,4-Dinitrophenol | <690 | ug/kg | 690 | 2300 | 2000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2,4-Dinitrotoluene | <24 | ug/kg | 24 | 79 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2,6-Dichlorophenol | <140 | ug/kg | 140 | 480 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2,6-Dinitrotoluene | <24 | ug/kg | 24 | 81 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2-Chloronaphthalene | <23 | ug/kg | 23 | 76 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2-Chlorophenol | <340 | ug/kg | 340 | 1100 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2-Methylnaphthalene | <25 | ug/kg | 25 | 83 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2-Methylphenol | <420 | ug/kg | 420 | 1400 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2-Nitroaniline | <23 | ug/kg | 23 | 78 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 2-Nitrophenol | <280 | ug/kg | 280 | 940 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 3 & 4-Methylphenol | <650 | ug/kg | 650 | 2200 | 2000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 3,3'-Dichlorobenzidine | <150 | ug/kg | 150 | 490 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 3-Nitroaniline | <22 | ug/kg | 22 | 72 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 4,6-Dinitro-2-methylphenol | <270 | ug/kg | 270 | 900 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 4-Bromophenyl-phenyl ether | <25 | ug/kg | 25 | 83 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 4-Chloro-3-methylphenol | <380 | ug/kg | 380 | 1300 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 4-Chloroaniline | <39 | ug/kg | 39 | 130 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 4-Chlorophenyl-phenyl ether | <26 | ug/kg | 26 | 87 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898916 Sample Description: DL2SS-001M-0002-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-Nitroaniline | <30 | ug/kg | 30 | 100 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| 4-Nitrophenol | <400 | ug/kg | 400 | 1300 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Acenaphthene | <24 | ug/kg | 24 | 80 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Acenaphthylene | <24 | ug/kg | 24 | 81 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Acetophenone | <75 | ug/kg | 75 | 250 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Aniline | <31 | ug/kg | 31 | 100 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| Anthracene | <24 | ug/kg | 24 | 81 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Azobenzene & 1,2-Diphenylhydra | <55 | ug/kg | 55 | 180 | 800 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzidine | <950 | ug/kg | 950 | 3200 | 2000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzo(a)anthracene | 45 | ug/kg | 25 | 84 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzo(a)pyrene | 49 | ug/kg | 23 | 78 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzo(b)fluoranthene | 87 | ug/kg | 25 | 85 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzo(g,h,i)perylene | 36 | ug/kg | 22 | 73 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzo(k)fluoranthene | 42 | ug/kg | 25 | 85 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzoic acid | <290 | ug/kg | 290 | 980 | 2000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Benzyl alcohol | <83 | ug/kg | 83 | 280 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Bis(2-chloroethoxy)methane | <23 | ug/kg | 23 | 76 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Bis(2-chloroethyl)ether | <25 | ug/kg | 25 | 84 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Bis(2-chloroisopropyl)ether | <30 | ug/kg | 30 | 99 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Bis(2-ethylhexyl)phthalate | <87 | ug/kg | 87 | 290 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Butylbenzylphthalate | <73 | ug/kg | 73 | 240 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Carbazole | <28 | ug/kg | 28 | 94 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Chrysene | 59 | ug/kg | 25 | 84 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Di-n-butylphthalate | <79 | ug/kg | 79 | 260 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Di-n-octylphthalate | <59 | ug/kg | 59 | 200 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Dibenzo(a,h)anthracene | <22 | ug/kg | 22 | 75 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Dibenzofuran | <24 | ug/kg | 24 | 81 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Diethylphthalate | <64 | ug/kg | 64 | 220 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Dimethylphthalate | <63 | ug/kg | 63 | 210 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898916 Sample Description: DL2SS-001M-0002-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | 69 | ug/kg | 26 | 86 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Fluorene | <25 | ug/kg | 25 | 85 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Hexachlorobenzene | <28 | ug/kg | 28 | 94 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Hexachlorobutadiene | <62 | ug/kg | 62 | 210 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Hexachlorocyclopentadiene | <52 | ug/kg | 52 | 170 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Hexachloroethane | <33 | ug/kg | 33 | 110 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Indeno(1,2,3-cd)pyrene | 39 | ug/kg | 23 | 75 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Isophorone | <50 | ug/kg | 50 | 170 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| N-Nitroso-di-n-propylamine | <70 | ug/kg | 70 | 230 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| N-Nitrosodimethylamine | <78 | ug/kg | 78 | 260 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| N-Nitrosodiphenylamine & Diphn | <50 | ug/kg | 50 | 160 | 800 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| N-Nitrosopyrrolidine | <56 | ug/kg | 56 | 190 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Naphthalene | <21 | ug/kg | 21 | 71 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Nitrobenzene | <59 | ug/kg | 59 | 200 | 400 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Pentachlorophenol | <240 | ug/kg | 240 | 800 | 1000 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Phenanthrene | 26 | ug/kg | 26 | 88 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Phenol | <160 | ug/kg | 160 | 530 | 500 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Pyrene | 58 | ug/kg | 26 | 86 | 400 | 1 | J | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Pyridine | <39 | ug/kg | 39 | 130 | 400 | 1 | Q | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C ^ |
| Surr: 2,4,6-Tribromophenol | 56 | % Recovery | 35 | 125 | 35-125 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| Surr: 2-Fluorobiphenyl | 62 | % Recovery | 45 | 105 | 45-105 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| Surr: 2-Fluorophenol | 49 | % Recovery | 35 | 105 | 35-105 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| Surr: Nitrobenzene-d5 | 56 | % Recovery | 35 | 100 | 35-100 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| Surr: Phenol-d5 | 58 | % Recovery | 40 | 100 | 40-100 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| Surr: Terphenyl-d14 | 64 | % Recovery | 30 | 125 | 30-125 | 1 | | 3/21/2011 10:30 | 03/23/2011 18:34 | RPN | EPA 8270C |
| Aroclor-1016 | <10 | ug/kg | 10 | 35 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Aroclor-1221 | <20 | ug/kg | 20 | 66 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Aroclor-1232 | <27 | ug/kg | 27 | 90 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Aroclor-1242 | <29 | ug/kg | 29 | 96 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898916 Sample Description: DL2SS-001M-0002-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1248 | <29 | ug/kg | 29 | 97 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Aroclor-1254 | <23 | ug/kg | 23 | 76 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Aroclor-1260 | <12 | ug/kg | 12 | 38 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Aroclor-1262 | <21 | ug/kg | 21 | 71 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Aroclor-1268 | <28 | ug/kg | 28 | 92 | 100 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A ^ |
| Surr: DCBP | 109 | % Recovery | 60 | 125 | 60-125 | 1 | | 3/18/2011 11:00 | 03/21/2011 15:46 | JJY | EPA 8082A |
| Nitroguanidine | <0.059 | mg/kg | 0.059 | 0.21 | 0.25 | 1 | | 3/23/2011 14:30 | 03/28/2011 10:04 | | EPA 8330 |
| 1,2-Dinitrobenzene | 97 | % Recovery | 50 | 150 | 50-150 | 1 | | 3/23/2011 14:30 | 03/28/2011 10:04 | | EPA 8330 |
| 1,3,5-Trinitrobenzene | <0.13 | mg/kg | 0.13 | 0.43 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 1,3-Dinitrobenzene | <0.079 | mg/kg | 0.079 | 0.26 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 2,4,6-Trinitrotoluene | <0.089 | mg/kg | 0.089 | 0.31 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 2,4-Dinitrotoluene | <0.079 | mg/kg | 0.079 | 0.25 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 2,6-Dinitrotoluene | <0.069 | mg/kg | 0.069 | 0.24 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 2-Amino-4,6-dinitrotoluene | <0.050 | mg/kg | 0.050 | 0.18 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 2-Nitrotoluene | <0.089 | mg/kg | 0.089 | 0.28 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 3,5-Dinitroaniline | <0.089 | mg/kg | 0.089 | 0.28 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 3-Nitrotoluene | <0.069 | mg/kg | 0.069 | 0.24 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 4-Amino-2,6-dinitrotoluene | <0.069 | mg/kg | 0.069 | 0.24 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 4-Nitrotoluene | <0.069 | mg/kg | 0.069 | 0.24 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| HMX | <0.12 | mg/kg | 0.12 | 0.39 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| Nitrobenzene | <0.040 | mg/kg | 0.040 | 0.14 | 0.25 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| Nitroglycerin | <0.50 | mg/kg | 0.50 | 1.8 | 2.0 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| PETN | <0.50 | mg/kg | 0.50 | 1.8 | 2.0 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| RDX | <0.14 | mg/kg | 0.14 | 0.46 | 0.50 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| Tetryl | <0.089 | mg/kg | 0.089 | 0.30 | 0.40 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| 1,2-Dinitrobenzene | 118 | % Recovery | 75 | 127 | 75-127 | 1 | | 3/23/2011 13:30 | 03/25/2011 16:32 | | EPA 8330B |
| Soil Homogenization and Prep | COMPLETED | | | | | 1 | | | 03/14/2011 00:00 | DAB | LAB SOP |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898916 Sample Description: DL2SS-001M-0002-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sub Lab Results** | | | | | | | | | | | |
| Pesticides | ATTACHED | | | | | 1 | | | 03/31/2011 00:00 | PML | SW8081 |

CT LAB#: 898917 Sample Description: DL2SS-004M-0001-SO Sampled: 3/8/2011 0930

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 99.3 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| Hexavalent Chromium | 4.9 | mg/kg | 2.6 | 8.7 | 10 | 1 | J | 3/21/2011 14:00 | 03/22/2011 13:00 | EJC | EPA 3060A/7196A ^ |
| **Metals Results** | | | | | | | | | | | |
| Aluminum | 12300 | mg/kg | 0.040 | 0.12 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Antimony | 0.82 | mg/kg | 0.081 | 0.27 | 0.54 | 1 | | 3/15/2011 10:00 | 03/18/2011 14:45 | NAH | EPA 6010C ^ |
| Arsenic | 8.5 | mg/kg | 0.13 | 0.45 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Barium | 80.3 | mg/kg | 0.0081 | 0.027 | 0.048 | 1 | B | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Beryllium | 0.49 | mg/kg | 0.040 | 0.12 | 0.24 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:26 | NAH | EPA 6010C ^ |
| Cadmium | 0.25 | mg/kg | 0.0060 | 0.021 | 0.042 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Calcium | 5740 | mg/kg | 0.060 | 0.20 | 0.91 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Chromium | 95.4 | mg/kg | 0.019 | 0.063 | 0.25 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Cobalt | 7.3 | mg/kg | 0.015 | 0.049 | 0.099 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Copper | 72.5 | mg/kg | 0.060 | 0.20 | 0.38 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Iron | 18500 | mg/kg | 3.0 | 10 | 18 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:26 | NAH | EPA 6010C ^ |
| Lead | 32.2 | mg/kg | 0.040 | 0.14 | 0.24 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Magnesium | 2040 | mg/kg | 0.12 | 0.40 | 0.73 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Manganese | 748 | mg/kg | 0.16 | 0.52 | 1.2 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:26 | NAH | EPA 6010C ^ |
| Nickel | 14.5 | mg/kg | 0.018 | 0.061 | 0.12 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Selenium | <0.070 | mg/kg | 0.070 | 0.21 | 0.42 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Silver | <0.017 | mg/kg | 0.017 | 0.056 | 0.22 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898917 Sample Description: DL2SS-004M-0001-SO Sampled: 3/8/2011 0930

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | 0.64 | mg/kg | 0.040 | 0.14 | 0.56 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Vanadium | 14.9 | mg/kg | 0.011 | 0.034 | 0.14 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Zinc | 116 | mg/kg | 0.040 | 0.12 | 0.48 | 1 | | 3/15/2011 10:00 | 03/16/2011 23:59 | NAH | EPA 6010C ^ |
| Potassium | 937 | mg/kg | 11 | 36 | 150 | 1 | | 3/15/2011 10:00 | 03/21/2011 14:15 | NAH | EPA 6010C ^ |
| Sodium | 56.6 | mg/kg | 4.0 | 13 | 52 | 1 | | 3/15/2011 10:00 | 03/21/2011 14:15 | NAH | EPA 6010C ^ |
| Mercury | 0.028 | mg/kg | 0.0024 | 0.0080 | 0.0080 | 1 | | 3/21/2011 14:25 | 03/22/2011 10:50 | AMA | EPA 7471A ^ |
| **Organic Results** | | | | | | | | | | | |
| Soil Homogenization and Prep | COMPLETED | | | | | 1 | | | 03/14/2011 00:00 | DAB | LAB SOP |

CT LAB#: 898918 Sample Description: DL2SS-005M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 99.4 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| Hexavalent Chromium | <2.6 | mg/kg | 2.6 | 8.7 | 10 | 1 | | 3/21/2011 14:00 | 03/22/2011 13:00 | EJC | EPA 3060A/7196A ^ |
| **Metals Results** | | | | | | | | | | | |
| Aluminum | 12900 | mg/kg | 0.040 | 0.12 | 0.24 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Antimony | 0.32 | mg/kg | 0.080 | 0.27 | 0.54 | 1 | J | 3/15/2011 10:00 | 03/18/2011 14:51 | NAH | EPA 6010C ^ |
| Arsenic | 9.7 | mg/kg | 0.13 | 0.45 | 0.91 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Barium | 62.4 | mg/kg | 0.0080 | 0.027 | 0.048 | 1 | B | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Beryllium | 0.46 | mg/kg | 0.040 | 0.12 | 0.24 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:32 | NAH | EPA 6010C ^ |
| Cadmium | 0.21 | mg/kg | 0.0060 | 0.021 | 0.042 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Calcium | 1870 | mg/kg | 0.060 | 0.20 | 0.91 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Chromium | 38.2 | mg/kg | 0.019 | 0.063 | 0.25 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Cobalt | 7.5 | mg/kg | 0.015 | 0.049 | 0.099 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Copper | 194 | mg/kg | 0.060 | 0.20 | 0.38 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Iron | 20100 | mg/kg | 3.0 | 10 | 18 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:32 | NAH | EPA 6010C ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898918 Sample Description: DL2SS-005M-0001-SO Sampled: 3/8/2011 1010

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 31.4 | mg/kg | 0.040 | 0.14 | 0.24 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Magnesium | 1900 | mg/kg | 0.12 | 0.40 | 0.72 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Manganese | 782 | mg/kg | 0.16 | 0.52 | 1.2 | 10 | | 3/15/2011 10:00 | 03/16/2011 22:32 | NAH | EPA 6010C ^ |
| Nickel | 12.7 | mg/kg | 0.018 | 0.061 | 0.12 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Selenium | <0.070 | mg/kg | 0.070 | 0.21 | 0.42 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Silver | <0.017 | mg/kg | 0.017 | 0.056 | 0.22 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Thallium | 0.68 | mg/kg | 0.040 | 0.14 | 0.56 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Vanadium | 17.0 | mg/kg | 0.011 | 0.034 | 0.14 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Zinc | 180 | mg/kg | 0.040 | 0.12 | 0.48 | 1 | | 3/15/2011 10:00 | 03/17/2011 00:06 | NAH | EPA 6010C ^ |
| Potassium | 578 | mg/kg | 11 | 36 | 140 | 1 | | 3/15/2011 10:00 | 03/21/2011 14:18 | NAH | EPA 6010C ^ |
| Sodium | 25.0 | mg/kg | 4.0 | 13 | 52 | 1 | J | 3/15/2011 10:00 | 03/21/2011 14:18 | NAH | EPA 6010C ^ |
| Mercury | 0.028 | mg/kg | 0.0024 | 0.0079 | 0.0079 | 1 | | 3/21/2011 14:25 | 03/22/2011 10:52 | AMA | EPA 7471A ^ |
| **Organic Results** | | | | | | | | | | | |
| Soil Homogenization and Prep | COMPLETED | | | | | 1 | | | 03/14/2011 00:00 | DAB | LAB SOP |

CT LAB#: 898919 Sample Description: DL2SS-006-0001-SO Sampled: 3/8/2011 1115

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 78.6 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| **Organic Results** | | | | | | | | | | | |
| 1,1,1-Trichloroethane | <14 | ug/kg | 14 | 45 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 1,1,2,2-Tetrachloroethane | <8.5 | ug/kg | 8.5 | 30 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 1,1,2-Trichloroethane | <11 | ug/kg | 11 | 37 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 1,1-Dichloroethane | <16 | ug/kg | 16 | 52 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 1,1-Dichloroethene | <23 | ug/kg | 23 | 74 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 1,2-Dibromoethane | <14 | ug/kg | 14 | 48 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898919 Sample Description: DL2SS-006-0001-SO Sampled: 3/8/2011 1115

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | <17 | ug/kg | 17 | 55 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 1,2-Dichloropropane | <9.9 | ug/kg | 9.9 | 31 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 2-Butanone | <140 | ug/kg | 140 | 480 | 710 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 2-Hexanone | <96 | ug/kg | 96 | 330 | 710 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 4-Methyl-2-pentanone | <120 | ug/kg | 120 | 380 | 710 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Acetone | <89 | ug/kg | 89 | 300 | 1400 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Benzene | <7.1 | ug/kg | 7.1 | 26 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Bromochloromethane | <11 | ug/kg | 11 | 37 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Bromodichloromethane | <13 | ug/kg | 13 | 43 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Bromoform | <8.5 | ug/kg | 8.5 | 30 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Bromomethane | <43 | ug/kg | 43 | 140 | 140 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Carbon disulfide | <21 | ug/kg | 21 | 72 | 140 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Carbon tetrachloride | <16 | ug/kg | 16 | 52 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Chlorobenzene | <11 | ug/kg | 11 | 35 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Chloroethane | <27 | ug/kg | 27 | 92 | 140 | 1 | Y | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Chloroform | <13 | ug/kg | 13 | 45 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Chloromethane | <35 | ug/kg | 35 | 120 | 140 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| cis-1,2-Dichloroethene | <14 | ug/kg | 14 | 48 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| cis-1,3-Dichloropropene | <14 | ug/kg | 14 | 45 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Dibromochloromethane | <11 | ug/kg | 11 | 37 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Ethylbenzene | <11 | ug/kg | 11 | 35 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| m & p-Xylene | <26 | ug/kg | 26 | 85 | 140 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Methylene chloride | <57 | ug/kg | 57 | 180 | 140 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| o-Xylene | <11 | ug/kg | 11 | 35 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Styrene | <8.5 | ug/kg | 8.5 | 28 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Tetrachloroethene | <11 | ug/kg | 11 | 38 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Toluene | <9.9 | ug/kg | 9.9 | 35 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| trans-1,2-Dichloroethene | <16 | ug/kg | 16 | 54 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| trans-1,3-Dichloropropene | <9.9 | ug/kg | 9.9 | 33 | 140 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898919 Sample Description: DL2SS-006-0001-SO Sampled: 3/8/2011 1115

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | <14 | ug/kg | 14 | 45 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Trichlorofluoromethane | <18 | ug/kg | 18 | 60 | 140 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| Vinyl chloride | <20 | ug/kg | 20 | 67 | 71 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B ^ |
| 1,2 Dichloroethane-d4 | 104 | % Recovery | 72 | 117 | 72-117 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B |
| Bromofluorobenzene | 101 | % Recovery | 85 | 120 | 85-120 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B |
| d8-Toluene | 105 | % Recovery | 85 | 115 | 85-115 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B |
| Dibromofluoromethane | 106 | % Recovery | 77 | 119 | 77-119 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:09 | APG | EPA 8260B |

CT LAB#: 898920 Sample Description: DL2SS-006-0002-SO Sampled: 3/8/2011 1115

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Results** | | | | | | | | | | | |
| Solids, Percent | 77.9 | % | | | | 1 | | | 03/16/2011 17:00 | KMB | EPA 8000C |
| **Organic Results** | | | | | | | | | | | |
| 1,1,1-Trichloroethane | <11 | ug/kg | 11 | 36 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,1,2,2-Tetrachloroethane | <6.7 | ug/kg | 6.7 | 23 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,1,2-Trichloroethane | <8.9 | ug/kg | 8.9 | 29 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,1-Dichloroethane | <12 | ug/kg | 12 | 41 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,1-Dichloroethene | <18 | ug/kg | 18 | 58 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,2-Dibromoethane | <11 | ug/kg | 11 | 38 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,2-Dichloroethane | <13 | ug/kg | 13 | 43 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,2-Dichloropropane | <7.8 | ug/kg | 7.8 | 24 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 2-Butanone | <110 | ug/kg | 110 | 380 | 560 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 2-Hexanone | <76 | ug/kg | 76 | 260 | 560 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 4-Methyl-2-pentanone | <91 | ug/kg | 91 | 300 | 560 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Acetone | <70 | ug/kg | 70 | 230 | 1100 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Benzene | <5.6 | ug/kg | 5.6 | 20 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |

Solid sample results reported on a Dry Weight Basis

CT LAB#: 898920 Sample Description: DL2SS-006-0002-SO Sampled: 3/8/2011 1115

| Analyte | Result | Units | LOD | LOQ | Reporting Limit | Dilution | Qualifier | Prep Date/Time | Analysis Date/Time | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromochloromethane | <8.9 | ug/kg | 8.9 | 29 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Bromodichloromethane | <10 | ug/kg | 10 | 33 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Bromoform | <6.7 | ug/kg | 6.7 | 23 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Bromomethane | <33 | ug/kg | 33 | 110 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Carbon disulfide | <17 | ug/kg | 17 | 57 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Carbon tetrachloride | <12 | ug/kg | 12 | 41 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Chlorobenzene | <8.9 | ug/kg | 8.9 | 28 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Chloroethane | <21 | ug/kg | 21 | 72 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Chloroform | <10 | ug/kg | 10 | 36 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Chloromethane | <28 | ug/kg | 28 | 93 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| cis-1,2-Dichloroethene | <11 | ug/kg | 11 | 38 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| cis-1,3-Dichloropropene | <11 | ug/kg | 11 | 36 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Dibromochloromethane | <8.9 | ug/kg | 8.9 | 29 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Ethylbenzene | <8.9 | ug/kg | 8.9 | 28 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| m & p-Xylene | <20 | ug/kg | 20 | 67 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Methylene chloride | <44 | ug/kg | 44 | 140 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| o-Xylene | <8.9 | ug/kg | 8.9 | 28 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Styrene | <6.7 | ug/kg | 6.7 | 22 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Tetrachloroethene | <8.9 | ug/kg | 8.9 | 30 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Toluene | <7.8 | ug/kg | 7.8 | 28 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| trans-1,2-Dichloroethene | <12 | ug/kg | 12 | 42 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| trans-1,3-Dichloropropene | <7.8 | ug/kg | 7.8 | 26 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Trichloroethene | <11 | ug/kg | 11 | 36 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Trichlorofluoromethane | <14 | ug/kg | 14 | 47 | 110 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| Vinyl chloride | <16 | ug/kg | 16 | 52 | 56 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B ^ |
| 1,2 Dichloroethane-d4 | 104 | % Recovery | 72 | 117 | 72-117 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B |
| Bromofluorobenzene | 103 | % Recovery | 85 | 120 | 85-120 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B |
| d8-Toluene | 107 | % Recovery | 85 | 115 | 85-115 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B |
| Dibromofluoromethane | 107 | % Recovery | 77 | 119 | 77-119 | 1 | | 3/10/2011 08:30 | 03/10/2011 14:48 | APG | EPA 8260B |

Solid sample results reported on a Dry Weight Basis

Notes: ^ Indicates the laboratory is NELAP accredited for this analyte by the indicated matrix and method.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

**This report has been specifically prepared to satisfy project or program requirements.** The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Level of uncertainty measurements only provided upon pre-approved request.

Submitted by: PML r
Project Manager
608-356-2760

**QC Qualifiers**

| Code | Description |
|---|---|
| B | Analyte detected in the associated Method Blank. |
| C | Toxicity present in BOD sample. |
| D | Diluted Out. |
| E | Safe, No Total Coliform detected. |
| F | Unsafe, Total Coliform detected, no E. Coli detected. |
| G | Unsafe, Total Coliform detected and E. Coli detected. |
| H | Holding time exceeded. |
| J | Estimated value. |
| L | Significant peaks were detected outside the chromatographic window. |
| M | Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits. |
| N | Insufficient BOD oxygen depletion. |
| O | Complete BOD oxygen depletion. |
| P | Concentration of analyte differs more than 40% between primary and confirmation analysis. |
| Q | Laboratory Control Sample outside acceptance limits. |
| R | See Narrative at end of report. |
| S | Surrogate standard recovery outside acceptance limits due to apparent matrix effects. |
| T | Sample received with improper preservation or temperature. |
| U | Analyte concentration was below detection limit. |
| V | Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference. |
| W | Sample amount received was below program minimum. |
| X | Analyte exceeded calibration range. |
| Y | Replicate/Duplicate precision outside acceptance limits. |
| Z | Specified calibration criteria was not met. |

**Current CT Laboratories Certifications**

Illinois NELAP ID# 200046

Kansas NELAP ID# E-10368

Kentucky ID# 0023

Pennsylvania NELAP ID# 68-04201

New Jersey NELAP ID# WI001

North Dakota ID# R-171

Wisconsin (WDNR) Chemistry ID# 157066030

Wisconsin (DATCP) Bacteriology ID# 105-289

DoD-ELAP Accreditation Cert # ADE-1453

**GA EPD Stipulation**

| | |
|---|---|
| Accreditor: | IL NELAP |
| Accreditation ID: | 200046 |
| Scope: | Hazardous/Solid Waste<br>Non-potable water |
| Effective: | 11/19/2009 |
| Expires: | 09/30/2010 |

Rev. 3/2006

# Chain of Custody

Page _____ of _____

Company: USACE
Project Contact: Derek Kinder
Telephone: 502-315-6393
Project Name: Group 2 Ore Piles
Project Number: Task Order 10
Project Location: RVAAD
Sampled By: DK, TC, EC

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other _____

CT LABORATORIES
delivering more than data from your environmental analyses
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

**Turnaround Time**
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 5
subject to change without notice.

Folder #: 83966
Company: USACE - LOUISVILLE
Project: RAVENNA
Logged By: JLS PM: PM

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:
Note: Metals include Hg + CrVI

83966
Page 2 of 2

Landfill License Number:

| Collection Date | Collection Time | Grab/ Comp | Sample ID Description | Filt? Y/N | WDNR Well ID # | **Matrix: | VOCs | Explosives | Propellants | Metals | PCP | SVOC | PCB | Pesticides | Total # of Containers | Preservation* | Lab ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fill in Spaces with Bottles per Test | | | | | | | | | | | | | |
| 3/8/11 | 1010 | | DL2ss-001M-0001-SO | | | S | | X | X | X | X | X | X | X | MS/MSD | | 898909 |
| 3/8/11 | 1130 | | DL2ss-002M-0001-SO | | | S | | | | X | | | | | | | 898914 |
| 3/8/11 | 1110 | | DL2ss-003M-0001-SO | | | S | | | | X | | | | | | | 898915 |
| 3/8/11 | 1010 | | DL2ss-001M-0002-SO | | | S | | X | X | X | X | X | X | X | | | 898916 |

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

| Relinquished By: | Date/Time | Relinquished By: | Date/Time |
|---|---|---|---|
| Derek Kinder | 3/8/11 1700 | | |
| **Received by:** | **Date/Time** | **Received for Laboratory by:** | **Date/Time** |
| Fedex | 1700 | | 3/9/11 1154 |

Ice Present (Yes) No
Temperature 1.8°
Cooler # 3734
3/9/11 1130 jls

****Matrix**
S-Soil A-Air Sl-Sludge M-Misc Waste
GW-Groundwater SW-Surface Water
WW-Wastewater DW-Drinking Water

(2)

Rev. 3/2006

# Chain of Custody

Page _____ of _____

Company: USACE
Project Contact: Derek Kinder
Telephone: 502 315 6393
Project Name: Group 2 Ore Piles
Project Number: Task Order 10
Project Location: RVAAP
Sampled By: EC, TC, DK

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other _____

CT LABORATORIES
delivering more than data from your environmental analyses
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

**Turnaround Time**
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

*Lab Use Only*
*Place Header Sticker Here:*

83966

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:
Note: Metals include Hg + Cr VI

83966

Landfill License Number:

| Collection Date | Collection Time | Grab/ Comp | Sample ID Description | Filt? Y/N | WDNR Well ID # | **Matrix: | Explosives | Propellants | Metals | PCP | SVOCs | PCBs | Pesticides | VOCs | Total # of Containers | Preservation* | Lab ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Fill in Spaces with Bottles per Test | | | | | | | | | | | | | | |
| 3/8/11 | 0930 | | DL2SS-004M-0001-SO | | | S | | | X | | | | | | | | 898917 |
| 3/8/11 | 1010 | | DL2SS-005M-0001-SO | | | S | | | X | | | | | | | | 898918 |
| 3/8/11 | 1115 | | DL2SS-006[redacted]-0001-SO | | | S | | | | | | | | X | | ★MS/MSD★ | 898919 |
| 3/8/11 | 1115 | | DL2SS-006[redacted]-0002-SO | | | S | | | | | | | | X | | | 898920 |

Page 20 of 22

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

| Relinquished By: | Date/Time | Relinquished By: | Date/Time |
|---|---|---|---|
| Derek Kinder | 3/8/11 1700 | | |
| Received by: | Date/Time | Received for Laboratory by: | Date/Time |
| Fed ex | 1700 | | 3/9/11 1156 |

Ice Present (Yes) No
Temperature 2.1
Cooler # 3728
3/9/11 1130

****Matrix**
S-Soil A-Air Sl-Sludge M-Misc Waste
GW-Groundwater SW-Surface Water
WW-Wastewater DW-Drinking Water

158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • http://www.microbac.com

**Laboratory Report Number: L11030544**

Client: Patrick Letterer, 1230 Lange Court, Baraboo, WI, 53913

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

| | | |
|---|---|---|
| **Kathy Albertson** | *Team Chemist/Data Specialist* | Kathy.Albertson@microbac.com |
| **Stephanie Mossburg** | *Team Chemist/Data Specialist* | Stephanie.Mossburg@microbac.com |
| **Tony Long** | *Team Chemist/Data Specialist* | Tony.Long@microbac.com |
| **Amanda Fickiesen** | *Client Services Specialist* | Amanda.Fickiesen@microbac.com |
| **Annie Brown** | *Client Services Specialist* | Annie.Brown@microbac.com |

This report was reviewed on March 29, 2011.

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related only to the samples analyzed as received.

This report was certified on March 29, 2011.

David Vandenberg - Managing Director

State of origin: Kansas
Accrediting authority: Department of Health and Environment ID:E-10290
QAPP: DOD Ver 4.1
This report contains a total of 128 pages.

***Look closer. Go further. Do more.***

**Microbac REPORT L11030544**
**PREPARED FOR CT Laboratories**
**WORK ID:**


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# 1.0 Introduction

# LABORATORY REPORT

## L11030544

03/29/11 15:25

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
( 740 ) 373 - 4071

For

Account Name: CT Laboratories
1230 Lange Court

Baraboo, WI 53913
Attention: Patrick Letterer

Project Number: 2694.005
Project: Kansas AAP
Site: PARSONS KANSAS

### Sample Summary

| Client ID | Lab ID | Date Collected | Date Received |
|---|---|---|---|
| 898909 | L11030544-01 | 03/08/2011 10:10 | 03/16/2011 |
| 898916 | L11030544-02 | 03/08/2011 10:10 | 03/16/2011 |

L1_A_PROD_COVER - Modified 02/06/2008
PDF File ID: 1953146
Report generated: 03/29/2011 15:25

Report Number: **L11030544**
Report Date : **March 29, 2011**

Sample Number: **L11030544-01**
Client ID: **898909**
Matrix: **Soil**
Workgroup Number: **WG359406**
Collect Date: **03/08/2011 10:10**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3550B**
Analytical Method: **8081A**
Analyst: **ECL**
Dilution: **1**
Units: **ug/kg**

Instrument: **HP15**
Prep Date: **03/18/2011 08:38**
Cal Date: **02/18/2011 23:19**
Run Date: **03/22/2011 20:35**
File ID: **15G25552.F**
Percent Solid: **98.1**

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| 4,4'-DDD | 72-54-8 | | UQ | 1.78 | 0.355 |
| 4,4'-DDE | 72-55-9 | | UQ | 1.78 | 0.355 |
| 4,4'-DDT | 50-29-3 | | UQ | 1.78 | 0.355 |
| Aldrin | 309-00-2 | | UQ | 1.78 | 0.355 |
| alpha Chlordane | 5103-71-9 | | UQ | 1.78 | 0.355 |
| alpha-BHC | 319-84-6 | | UQ | 1.78 | 0.355 |
| beta-BHC | 319-85-7 | | UQ | 1.78 | 0.355 |
| delta-BHC | 319-86-8 | | UQ | 1.78 | 0.355 |
| Dieldrin | 60-57-1 | | UQ | 1.78 | 0.355 |
| Endosulfan I | 959-98-8 | | UQ | 1.78 | 0.355 |
| Endosulfan II | 33213-65-9 | | UQ | 1.78 | 0.355 |
| Endosulfan sulfate | 1031-07-8 | | UQ | 1.78 | 0.355 |
| Endrin | 72-20-8 | | UQ | 1.78 | 0.355 |
| Endrin aldehyde | 7421-93-4 | | UQ | 1.78 | 0.355 |
| gamma Chlordane | 5103-74-2 | | UQ | 1.78 | 0.355 |
| gamma-BHC (Lindane) | 58-89-9 | | UQ | 1.78 | 0.355 |
| Heptachlor | 76-44-8 | | UQ | 1.78 | 0.355 |
| Heptachlor epoxide | 1024-57-3 | | UQ | 1.78 | 0.355 |
| Methoxychlor | 72-43-5 | | UQ | 1.78 | 0.355 |
| Toxaphene | 8001-35-2 | | UQ | 35.5 | 18.0 |

| Surrogate | % Recovery | Lower | Upper | Qual |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 51.0 | 70 | 125 | * |
| Decachlorobiphenyl | 75.2 | 55 | 130 | |

**UQ Undetected; the analyte was analyzed for, but not detected.**
*** Surrogate or spike compound out of range**

Sample Number: **L11030544-01**
Client ID: **898909**
Matrix: **Soil**
Workgroup Number: **WG359746**
Collect Date: **03/08/2011 10:10**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **D2216-90**
Analytical Method: **D2216-90**
Analyst: **JDH**
Dilution: **1**
Units: **weight %**

Instrument: **BAL013**
Prep Date: **03/24/2011 13:27**
Cal Date:
Run Date: **03/24/2011 13:27**
File ID: **B1.359746-0109**

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| Percent Solids | 10-02-6 | 98.1 | | 1.00 | 1.00 |

Sample Number: **L11030544-02**
Client ID: **898916**
Matrix: **Soil**
Workgroup Number: **WG359406**
Collect Date: **03/08/2011 10:10**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3550B**
Analytical Method: **8081A**
Analyst: **ECL**
Dilution: **1**
Units: **ug/kg**

Instrument: **HP15**
Prep Date: **03/18/2011 08:38**
Cal Date: **02/18/2011 23:19**
Run Date: **03/22/2011 21:03**
File ID: **15G25553.F**
Percent Solid: **97.9**

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| 4,4'-DDD | 72-54-8 | | UQ | 1.82 | 0.365 |
| 4,4'-DDE | 72-55-9 | | UQ | 1.82 | 0.365 |
| 4,4'-DDT | 50-29-3 | | UQ | 1.82 | 0.365 |
| Aldrin | 309-00-2 | | UQ | 1.82 | 0.365 |
| alpha Chlordane | 5103-71-9 | | UQ | 1.82 | 0.365 |

Report Number: **L11030544**
Report Date : **March 29, 2011**

Sample Number: **L11030544-02**
Client ID: **898916**
Matrix: **Soil**
Workgroup Number: **WG359406**
Collect Date: **03/08/2011 10:10**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3550B**
Analytical Method: **8081A**
Analyst: **ECL**
Dilution: **1**
Units: **ug/kg**

Instrument: **HP15**
Prep Date: **03/18/2011 08:38**
Cal Date: **02/18/2011 23:19**
Run Date: **03/22/2011 21:03**
File ID: **15G25553.F**
Percent Solid: **97.9**

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| alpha-BHC | 319-84-6 | | UQ | 1.82 | 0.365 |
| beta-BHC | 319-85-7 | | UQ | 1.82 | 0.365 |
| delta-BHC | 319-86-8 | | UQ | 1.82 | 0.365 |
| Dieldrin | 60-57-1 | | UQ | 1.82 | 0.365 |
| Endosulfan I | 959-98-8 | | UQ | 1.82 | 0.365 |
| Endosulfan II | 33213-65-9 | | UQ | 1.82 | 0.365 |
| Endosulfan sulfate | 1031-07-8 | | UQ | 1.82 | 0.365 |
| Endrin | 72-20-8 | | UQ | 1.82 | 0.365 |
| Endrin aldehyde | 7421-93-4 | | UQ | 1.82 | 0.365 |
| gamma Chlordane | 5103-74-2 | | UQ | 1.82 | 0.365 |
| gamma-BHC (Lindane) | 58-89-9 | | UQ | 1.82 | 0.365 |
| Heptachlor | 76-44-8 | | UQ | 1.82 | 0.365 |
| Heptachlor epoxide | 1024-57-3 | | UQ | 1.82 | 0.365 |
| Methoxychlor | 72-43-5 | | UQ | 1.82 | 0.365 |
| Toxaphene | 8001-35-2 | | UQ | 36.5 | 18.5 |

| Surrogate | % Recovery | Lower | Upper | Qual |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 64.9 | 70 | 125 | * |
| Decachlorobiphenyl | 74.9 | 55 | 130 | |

**UQ** Undetected; the analyte was analyzed for, but not detected.
***** Surrogate or spike compound out of range

Sample Number: **L11030544-02**
Client ID: **898916**
Matrix: **Soil**
Workgroup Number: **WG359746**
Collect Date: **03/08/2011 10:10**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **D2216-90**
Analytical Method: **D2216-90**
Analyst: **JDH**
Dilution: **1**
Units: **weight %**

Instrument: **BAL013**
Prep Date: **03/24/2011 13:27**
Cal Date:
Run Date: **03/24/2011 13:27**
File ID: **B1.359746-0110**

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| Percent Solids | 10-02-6 | 97.9 | | 1.00 | 1.00 |

**Login Number:** L11030544

**Department**: Login

**Chain of Custody:**

**Shipment Conditions**

| COC # | Cooler # | Temperature |
|---|---|---|
| | 0015684 | 2.0 |

**Sample Management:** All samples were received intact.

**Sample Identification**

| Lab ID | Client ID |
|---|---|
| L11030544-01 | 898909 |
| L11030544-02 | 898916 |

**Narrative ID:** 23522
**Approved By:** Stephanie Mossburg

# 2.0 Full Sample Data Package

# 2.1 Semivolatiles Data

# 2.1.1 Pesticide GC Data (8081)

# 2.1.1.1 Summary Data

Microbac Laboratories Inc.
GC PESTICIDES

**Microbac Login No:** L11030544

**METHOD**

**Preparation:** SW- 846 3550B(Soils)/3510C(Waters)/3580A (Waste dilution)

**Analysis:** SW-846 8081

**HOLDING TIMES**

**Sample Preparation:** All holding times were met.

**Sample Analysis:** All holding times were met.

**PREPARATION**

Sample preparation proceeded normally.

**CALIBRATION**

**Initial Calibration:** For all compounds which yielded a %RSD greater than 20 %, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration:** All acceptance criteria were met.

**BATCH QA/QC**

**Method Blank:** The blank yielded a % recovery for the surrogate 2,4,5,6-tetrachloro-m-xylene that was below the acceptance limit. All other acceptance criteria were met.

**Labortory Control Sample:** The LCS and LCS-TOX yielded % recoveries for the surrogate 2,4,5,6-tetrachloro-m-xylene that were below the acceptance limit. All other acceptance criteria were met.

**Matrix Spikes:** The MS/MSD results were not associated with this sample delivery group.

**SAMPLES**

**Surrogates:** Samples 01 and 02 yielded % recoveries for 2,4,5,6-tetrachloro-m-xylene that were below the acceptance limit. All other acceptance criteria were met.

**Endrin/DDT Breakdown:** All acceptance criteria were met.

**Samples:** For all samples which yielded results with an RPD of greater than 40% between the primary and confirmation column the appropriate flag was applied. All acceptance criteria were met.

**Manual Integration Reason Codes**

Microbac laboratory management has identified four general cases with valid reasons supporting the use of manual integration techniques.

**Reason #1: Data System Fails to Select Correct Peak**
In some cases the chromatography system selects and integrates the ”wrong peak”. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

**Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak.**
This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

**Reason #3: Improperly Integrated Isomers and/or coeluting compounds.**
This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

**Reason #4: System Establishes Incorrect Baseline**
There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

**Reason #5: Miscellaneous**
Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: ECL

Approved: 24-MAR-11
Cassie L. Augustine

# LABORATORY REPORT

## L11030544

03/29/11 15:25

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
( 740 ) 373 - 4071

For

Account Name: CT Laboratories
1230 Lange Court

Baraboo, WI 53913
Attention: Patrick Letterer

Project Number: 2694.005
Project: Kansas AAP
Site: PARSONS KANSAS

## Sample Analysis Summary

| Client ID | Lab ID | Method | Dilution | Date Received |
|---|---|---|---|---|
| 898909 | L11030544-01 | 8081A | 1 | 16-MAR-11 |
| 898916 | L11030544-02 | 8081A | 1 | 16-MAR-11 |

Report Number: **L11030544**
Report Date : **March 29, 2011**

| | | | | | |
|---|---|---|---|---|---|
| Sample Number: | L11030544-01 | PrePrep Method: | NONE | Instrument: | HP15 |
| Client ID: | 898909 | Prep Method: | 3550B | Prep Date: | 03/18/2011 08:38 |
| Matrix: | Soil | Analytical Method: | 8081A | Cal Date: | 02/18/2011 23:19 |
| Workgroup Number: | WG359406 | Analyst: | ECL | Run Date: | 03/22/2011 20:35 |
| Collect Date: | 03/08/2011 10:10 | Dilution: | 1 | File ID: | 15G25552.F |
| Sample Tag: | 01 | Units: | ug/kg | Percent Solid: | 98.1 |

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| 4,4'-DDD | 72-54-8 | | UQ | 1.78 | 0.355 |
| 4,4'-DDE | 72-55-9 | | UQ | 1.78 | 0.355 |
| 4,4'-DDT | 50-29-3 | | UQ | 1.78 | 0.355 |
| Aldrin | 309-00-2 | | UQ | 1.78 | 0.355 |
| alpha Chlordane | 5103-71-9 | | UQ | 1.78 | 0.355 |
| alpha-BHC | 319-84-6 | | UQ | 1.78 | 0.355 |
| beta-BHC | 319-85-7 | | UQ | 1.78 | 0.355 |
| delta-BHC | 319-86-8 | | UQ | 1.78 | 0.355 |
| Dieldrin | 60-57-1 | | UQ | 1.78 | 0.355 |
| Endosulfan I | 959-98-8 | | UQ | 1.78 | 0.355 |
| Endosulfan II | 33213-65-9 | | UQ | 1.78 | 0.355 |
| Endosulfan sulfate | 1031-07-8 | | UQ | 1.78 | 0.355 |
| Endrin | 72-20-8 | | UQ | 1.78 | 0.355 |
| Endrin aldehyde | 7421-93-4 | | UQ | 1.78 | 0.355 |
| gamma Chlordane | 5103-74-2 | | UQ | 1.78 | 0.355 |
| gamma-BHC (Lindane) | 58-89-9 | | UQ | 1.78 | 0.355 |
| Heptachlor | 76-44-8 | | UQ | 1.78 | 0.355 |
| Heptachlor epoxide | 1024-57-3 | | UQ | 1.78 | 0.355 |
| Methoxychlor | 72-43-5 | | UQ | 1.78 | 0.355 |
| Toxaphene | 8001-35-2 | | UQ | 35.5 | 18.0 |

| Surrogate | % Recovery | Lower | Upper | Qual |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 51.0 | 70 | 125 | * |
| Decachlorobiphenyl | 75.2 | 55 | 130 | |

UQ Undetected; the analyte was analyzed for, but not detected.
* Surrogate or spike compound out of range

Report Number: **L11030544**
Report Date : **March 29, 2011**

| | | | | | |
|---|---|---|---|---|---|
| Sample Number: | L11030544-02 | PrePrep Method: | NONE | Instrument: | HP15 |
| Client ID: | 898916 | Prep Method: | 3550B | Prep Date: | 03/18/2011 08:38 |
| Matrix: | Soil | Analytical Method: | 8081A | Cal Date: | 02/18/2011 23:19 |
| Workgroup Number: | WG359406 | Analyst: | ECL | Run Date: | 03/22/2011 21:03 |
| Collect Date: | 03/08/2011 10:10 | Dilution: | 1 | File ID: | 15G25553.F |
| Sample Tag: | 01 | Units: | ug/kg | Percent Solid: | 97.9 |

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| 4,4'-DDD | 72-54-8 | | UQ | 1.82 | 0.365 |
| 4,4'-DDE | 72-55-9 | | UQ | 1.82 | 0.365 |
| 4,4'-DDT | 50-29-3 | | UQ | 1.82 | 0.365 |
| Aldrin | 309-00-2 | | UQ | 1.82 | 0.365 |
| alpha Chlordane | 5103-71-9 | | UQ | 1.82 | 0.365 |
| alpha-BHC | 319-84-6 | | UQ | 1.82 | 0.365 |
| beta-BHC | 319-85-7 | | UQ | 1.82 | 0.365 |
| delta-BHC | 319-86-8 | | UQ | 1.82 | 0.365 |
| Dieldrin | 60-57-1 | | UQ | 1.82 | 0.365 |
| Endosulfan I | 959-98-8 | | UQ | 1.82 | 0.365 |
| Endosulfan II | 33213-65-9 | | UQ | 1.82 | 0.365 |
| Endosulfan sulfate | 1031-07-8 | | UQ | 1.82 | 0.365 |
| Endrin | 72-20-8 | | UQ | 1.82 | 0.365 |
| Endrin aldehyde | 7421-93-4 | | UQ | 1.82 | 0.365 |
| gamma Chlordane | 5103-74-2 | | UQ | 1.82 | 0.365 |
| gamma-BHC (Lindane) | 58-89-9 | | UQ | 1.82 | 0.365 |
| Heptachlor | 76-44-8 | | UQ | 1.82 | 0.365 |
| Heptachlor epoxide | 1024-57-3 | | UQ | 1.82 | 0.365 |
| Methoxychlor | 72-43-5 | | UQ | 1.82 | 0.365 |
| Toxaphene | 8001-35-2 | | UQ | 36.5 | 18.5 |

| Surrogate | % Recovery | Lower | Upper | Qual |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 64.9 | 70 | 125 | * |
| Decachlorobiphenyl | 74.9 | 55 | 130 | |

UQ Undetected; the analyte was analyzed for, but not detected.
* Surrogate or spike compound out of range

# 2.1.1.2 QC Summary Data

**Example 8081 Calculations**

**1.0 Calculating the Response Factor (RF) from the initial calibration (ICAL) data:**

$$RF = \frac{As}{Cs}$$

| where: | Example: |
|---|---|
| $A_s$ = Area of the compound being measured in the standard | 10000 |
| $C_s$ = Concentration of the compound being measured (ng/mL) | 100 |
| | RF = 100 |

**2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:***

$$C = \frac{(A_x)(Vf)(D)}{(RF)(Vi)}$$

| where: | Example: |
|---|---|
| $A_x$ = Area of the compound begin measured | 10000 |
| $Vf$ = Final volume of sample extract (mL). (prep log) | 1 |
| $D$ = Dilution factor for sample as a multiplier (10X=10) | 1 |
| $RF$ = Response factor from ICAL calculated above. | 100 |
| $Vi$ = Initial volume of sample (mL). (prep log) | 1000 |
| | C(ug/L) = 0.1 |

**3.0 Calculating the concentration (C) of a compound in soil using data from prep log and quantitation report:***

$$C = \frac{(A_x)(Vf)(D)}{(RF)(Wi)}$$

| where: | Example: |
|---|---|
| $A_x$ = Area of the compound begin measured | 10000 |
| $Vf$ = Final volume of sample extract (mL). (prep log) | 1 |
| $D$ = Dilution factor for sample as a multiplier (10X=10) | 1 |
| $RF$ = Response factor from ICAL calculated above. | 100 |
| $Wi$ = Initial weight of sample (g). | 30 |
| | C(ug/kg) = 3.333333 |

* Concentrations appearing on instrument quantitation reports are on-column results and do not take into account initial volume, final volume and dilution factor.

# Microbac Laboratories Inc.
## Sample Extract Log

Workgroup: WG359333
Analyst: CPD
Spike Analyst: CPD
Method: 3550B
Run Date: 03/18/2011 08:38
SOP: EXP02 Revison 15
Spike Witness: RAH
Surr Solution: STD43926

Hexane Lot #: COA15273
Purified Lab Sand Lot #: COA14882
Na2SO4, Anhydrous,Powder Lot #: COA14768
Sodium Sulfate,Anhydrous,Granular ( Lot #: COA15226
Florisil Disposable Column Lot #: COA15102
94:6 Hexane:Ether Lot #: RGT15873
50:50 Hexane:Ether Lot #: RGT15852

| | SAMPLE # | Type | Reference | pH | Prod | Init Amnt | Surr Amnt | Spike Amnt | Spike Sol | Final Vol | Color |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L11030544-01 | SAMP | | | 8081 | 28.38 g | .2 mL | | | 10 mL | Transparent |
| 2 | L11030544-02 | SAMP | | | 8081 | 27.73 g | .2 mL | | | 10 mL | Transparent |
| 3 | L11030612-09 | RS01 | | | 8081 | 29.93 g | .2 mL | | | 10 mL | Transparent |
| 4 | L11030612-10 | MS01 | L11030612-09 | | 8081 | 27.81 g | .2 mL | .25 mL | STD42746 | 10 mL | Transparent |
| 5 | L11030612-11 | SD01 | L11030612-09 | | 8081 | 30.84 g | .2 mL | .25 mL | STD42746 | 10 mL | Transparent |
| 6 | L11030612-12 | SAMP | | | 8081 | 31.49 g | .2 mL | | | 10 mL | Transparent |
| 7 | L11030612-13 | SAMP | | | 8081 | 27.86 g | .2 mL | | | 10 mL | Colored |
| 8 | L11030612-14 | SAMP | | | 8081 | 27.57 g | .2 mL | | | 10 mL | Transparent |
| 9 | L11030612-17 | SAMP | | | 8081 | 28.45 g | .2 mL | | | 10 mL | Colored |
| 10 | L11030612-18 | SAMP | | | 8081 | 27.3 g | .2 mL | | | 10 mL | Colored |
| 11 | L11030612-19 | SAMP | | | 8081 | 28.76 g | .2 mL | | | 10 mL | Colored |
| 12 | L11030612-20 | SAMP | | | 8081 | 28.71 g | .2 mL | | | 10 mL | Colored |
| 13 | L11030612-21 | RS02 | | | 8081 | 29.48 g | .2 mL | | | 10 mL | Transparent |
| 14 | L11030612-24 | SAMP | | | 8081 | 27.29 g | .2 mL | | | 10 mL | Colored |
| 15 | L11030612-25 | SAMP | | | 8081 | 28.45 g | .2 mL | | | 10 mL | Transparent |
| 16 | L11030612-26 | SAMP | | | 8081 | 27.41 g | .2 mL | | | 10 mL | Colored |
| 17 | L11030612-27 | SAMP | | | 8081 | 27.71 g | .2 mL | | | 10 mL | Colored |
| 18 | L11030612-28 | SAMP | | | 8081 | 28.77 g | .2 mL | | | 10 mL | Colored |
| 19 | L11030612-29 | SAMP | | | 8081 | 28.83 g | .2 mL | | | 10 mL | Colored |
| 20 | L11030612-30 | SAMP | | | 8081 | 28.84 g | .2 mL | | | 10 mL | Transparent |
| 21 | L11030612-31 | SAMP | | | 8081 | 27.35 g | .2 mL | | | 10 mL | Colored |
| 22 | L11030612-32 | SAMP | | | 8081 | 27.3 g | .2 mL | | | 10 mL | Colored |
| 23 | WG359333-01 | REF | L11030612-09 | | 8081 | 29.93 g | .2 mL | | | 10 mL | Transparent |
| 24 | WG359333-02 | BLANK | | | 8081 | 30 g | .2 mL | | | 10 mL | Transparent |
| 25 | WG359333-03 | LCS | | | 8081 | 30 g | .2 mL | .25 mL | STD42746 | 10 mL | Transparent |
| 26 | WG359333-04 | LCS_TOX | | | 8081 | 30 g | .2 mL | .1 mL | STD43919 | 10 mL | Transparent |
| 27 | WG359333-05 | MS | L11030612-09 | | 8081 | 27.81 g | .2 mL | .25 mL | STD42746 | 10 mL | Transparent |
| 28 | WG359333-06 | MSD | L11030612-09 | | 8081 | 30.84 g | .2 mL | .25 mL | STD42746 | 10 mL | Transparent |

| Clean-ups | |
|---|---|
| Florisil | 3620B |

Analyst: [signature]

Reviewer: [signature]

EXTRACT - Modified 10/22/2008
PDF ID: 1949166
Report generated: 03/28/2011 14:34

**Microbac Laboratories Inc.**

Instrument Run Log

Instrument: HP15 Dataset: 021811
Analyst1: ECL Analyst2: NA
Method: 8081 SOP: GCS09 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:

Column 1 ID: RTX-CLP Column 2 ID: RTX-CLP2
Workgroups:

CCV Std: STD43387 LCS STD: STD42746
Internal STD: NA Surrogate STD: STD43926 Calibration STD:

Comments: All samples from file 15G25068 to the end need rerun. The syringe bent and didn't inject.

| Seq. | File ID | Sample Information | Mat | Dil | Reference | Date/Time |
|---|---|---|---|---|---|---|
| 1 | 15G25040.F | WG357038-01 ENDRIN/DDT | 1 | 1 | STD39983 | 02/18/11 14:48 |
| 2 | 15G25040.R | WG357038-01 ENDRIN/DDT | 1 | 1 | STD39983 | 02/18/11 15:16 |
| 3 | 15G25041.F | PEST CCV 20 PPB | 1 | 1 | STD43387 | 02/18/11 15:16 |
| 4 | 15G25041.R | PEST CCV 20 PPB | 1 | 1 | STD43387 | 02/18/11 15:45 |
| 5 | 15G25042.F | WG357035-01 TOX ICAL 2000 PPB | 1 | 1 | STD43915 | 02/18/11 17:39 |
| 6 | 15G25042.R | WG357035-01 TOX ICAL 2000 PPB | 1 | 1 | STD43915 | 02/18/11 18:07 |
| 7 | 15G25043.F | WG357035-02 TOX ICAL 1000 PPB | 1 | 1 | STD43915 | 02/18/11 18:07 |
| 8 | 15G25043.R | WG357035-02 TOX ICAL 1000 PPB | 1 | 1 | STD43915 | 02/18/11 18:36 |
| 9 | 15G25044.F | WG357035-03 TOX ICAL 500 PPB | 1 | 1 | STD43915 | 02/18/11 18:36 |
| 10 | 15G25044.R | WG357035-03 TOX ICAL 500 PPB | 1 | 1 | STD43915 | 02/18/11 19:04 |
| 11 | 15G25045.F | WG357035-04 TOX ICAL 200 PPB | 1 | 1 | STD43915 | 02/18/11 19:04 |
| 12 | 15G25045.R | WG357035-04 TOX ICAL 200 PPB | 1 | 1 | STD43915 | 02/18/11 19:33 |
| 13 | 15G25046.F | WG357035-05 TOX ICAL 100 PPB | 1 | 1 | STD43915 | 02/18/11 19:33 |
| 14 | 15G25046.R | WG357035-05 TOX ICAL 100 PPB | 1 | 1 | STD43915 | 02/18/11 20:01 |
| 15 | 15G25047.F | WG357035-05 TOX ALT 500 PPB | 1 | 1 | STD43915 | 02/18/11 20:01 |
| 16 | 15G25047.R | WG357035-05 TOX ALT 500 PPB | 1 | 1 | STD43915 | 02/18/11 20:29 |
| 17 | 15G25048.F | WG357037-01 PEST ICAL 200 PPB | 1 | 1 | STD43387 | 02/18/11 20:29 |
| 18 | 15G25048.R | WG357037-01 PEST ICAL 200 PPB | 1 | 1 | STD43387 | 02/18/11 20:58 |
| 19 | 15G25049.F | WG357037-02 PEST ICAL 100 PPB | 1 | 1 | STD43387 | 02/18/11 20:58 |
| 20 | 15G25049.R | WG357037-02 PEST ICAL 100 PPB | 1 | 1 | STD43387 | 02/18/11 21:26 |
| 21 | 15G25050.F | WG357037-03 PEST ICAL 20 PPB | 1 | 1 | STD43387 | 02/18/11 21:26 |
| 22 | 15G25050.R | WG357037-03 PEST ICAL 20 PPB | 1 | 1 | STD43387 | 02/18/11 21:54 |
| 23 | 15G25051.F | WG357037-04 PEST ICAL 10 PPB | 1 | 1 | STD43387 | 02/18/11 21:54 |
| 24 | 15G25051.R | WG357037-04 PEST ICAL 10 PPB | 1 | 1 | STD43387 | 02/18/11 22:23 |
| 25 | 15G25052.F | WG357037-05 PEST ICAL 4 PPB | 1 | 1 | STD43387 | 02/18/11 22:23 |
| 26 | 15G25052.R | WG357037-05 PEST ICAL 4 PPB | 1 | 1 | STD43387 | 02/18/11 22:51 |
| 27 | 15G25053.F | WG357037-06 PEST ICAL 1 PPB | 1 | 1 | STD43387 | 02/18/11 22:51 |
| 28 | 15G25053.R | WG357037-06 PEST ICAL 1 PPB | 1 | 1 | STD43387 | 02/18/11 23:19 |
| 29 | 15G25054.F | WG357037-07 PEST ALT 20 PPB | 1 | 1 | STD43387 | 02/18/11 23:19 |
| 30 | 15G25054.R | WG357037-07 PEST ALT 20 PPB | 1 | 1 | STD43387 | 02/18/11 23:48 |
| 31 | 15G25055.F | L11020282-01 10x | 1 | 10 | | 02/18/11 23:48 |
| 32 | 15G25055.R | L11020282-01 10x | 1 | 10 | | 02/19/11 00:16 |
| 33 | 15G25056.F | L11020281-06 10x | 7 | 10 | SOIL | 02/19/11 00:16 |
| 34 | 15G25056.R | L11020281-06 10x | 7 | 10 | SOIL | 02/19/11 00:44 |

Page: 1 Approved: 21-FEB-11

Cassie L. Augustin

Microbac

**Microbac Laboratories Inc.**

Instrument Run Log

Instrument: HP15 Dataset: 021811
Analyst1: ECL Analyst2: NA
Method: 8081 SOP: GCS09 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:

Column 1 ID: RTX-CLP Column 2 ID: RTX-CLP2
Workgroups:

CCV Std: STD43387 LCS STD: STD42746
Internal STD: NA Surrogate STD: STD43926

| Seq. | File ID | Sample Information | Mat | Dil | Reference | Date/Time |
|---|---|---|---|---|---|---|
| 35 | 15G25057.F | L11020281-14 100x | 7 | 100 | SOIL | 02/19/11 00:44 |
| 36 | 15G25057.R | L11020281-14 100x | 7 | 100 | SOIL | 02/19/11 01:13 |
| 37 | 15G25058.F | L11020281-21 100x | 7 | 100 | SOIL | 02/19/11 01:13 |
| 38 | 15G25058.R | L11020281-21 100x | 7 | 100 | SOIL | 02/19/11 01:41 |
| 39 | 15G25059.F | HEXANE | 1 | 1 | | 02/19/11 01:41 |
| 40 | 15G25059.R | HEXANE | 1 | 1 | | 02/19/11 02:09 |
| 41 | 15G25060.F | WG356905-01 BLANK | 1 | 1 | | 02/19/11 02:09 |
| 42 | 15G25060.R | WG356905-01 BLANK | 1 | 1 | | 02/19/11 02:38 |
| 43 | 15G25061.F | WG356905-02 LCS | 1 | 1 | | 02/19/11 02:38 |
| 44 | 15G25061.R | WG356905-02 LCS | 1 | 1 | | 02/19/11 03:06 |
| 45 | 15G25062.F | WG356905-03 LCS DUP | 1 | 1 | | 02/19/11 03:06 |
| 46 | 15G25062.R | WG356905-03 LCS DUP | 1 | 1 | | 02/19/11 03:35 |
| 47 | 15G25063.F | WG356905-04 TOX LCS | 1 | 1 | | 02/19/11 03:35 |
| 48 | 15G25063.R | WG356905-04 TOX LCS | 1 | 1 | | 02/19/11 04:03 |
| 49 | 15G25064.F | WG356906-01 FBLANK | 17 | 1 | | 02/19/11 04:03 |
| 50 | 15G25064.R | WG356906-01 FBLANK | 17 | 1 | | 02/19/11 04:31 |
| 51 | 15G25065.F | WG357038-02 ENDRIN/DDT | 1 | 1 | STD39983 | 02/19/11 04:31 |
| 52 | 15G25065.R | WG357038-02 ENDRIN/DDT | 1 | 1 | STD39983 | 02/19/11 05:00 |
| 53 | 15G25066.F | WG357038-03 PEST CCV 20 PPB | 1 | 1 | STD43387 | 02/19/11 05:00 |
| 54 | 15G25066.R | WG357038-03 PEST CCV 20 PPB | 1 | 1 | STD43387 | 02/19/11 05:28 |
| 55 | 15G25067.F | WG357036-01 TOX CCV 500 PPB | 1 | 1 | STD43915 | 02/19/11 05:28 |
| 56 | 15G25067.R | WG357036-01 TOX CCV 500 PPB | 1 | 1 | STD43915 | 02/19/11 05:56 |
| 57 | 15G25068.F | L11020354-01 | 17 | 1 | | 02/19/11 05:56 |
| 58 | 15G25068.R | L11020354-01 | 17 | 1 | | 02/19/11 06:24 |
| 59 | 15G25069.F | L11020354-02 | 17 | 1 | | 02/19/11 06:24 |
| 60 | 15G25069.R | L11020354-02 | 17 | 1 | | 02/19/11 06:53 |
| 61 | 15G25070.F | L11020378-01 | 17 | 1 | | 02/19/11 06:53 |
| 62 | 15G25070.R | L11020378-01 | 17 | 1 | | 02/19/11 07:21 |
| 63 | 15G25071.F | L11020434-01 | 1 | 1 | | 02/19/11 07:21 |
| 64 | 15G25071.R | L11020434-01 | 1 | 1 | | 02/19/11 07:49 |
| 65 | 15G25072.F | L11020447-05 | 1 | 1 | | 02/19/11 07:49 |
| 66 | 15G25072.R | L11020447-05 | 1 | 1 | | 02/19/11 08:18 |
| 67 | 15G25073.F | WG356521-02 BLANK | 7 | 1 | SOIL | 02/19/11 08:18 |
| 68 | 15G25073.R | WG356521-02 BLANK | 7 | 1 | SOIL | 02/19/11 08:46 |
| 69 | 15G25074.F | WG356521-03 LCS | 7 | 1 | SOIL | 02/19/11 08:46 |
| 70 | 15G25074.R | WG356521-03 LCS | 7 | 1 | SOIL | 02/19/11 09:14 |
| 71 | 15G25075.F | WG356521-04 TOX LCS | 7 | 1 | SOIL | 02/19/11 09:14 |

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**Microbac Laboratories Inc.**

Instrument Run Log

Instrument: HP15 Dataset: 021811
Analyst1: ECL Analyst2: NA
Method: 8081 SOP: GCS09 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:

Column 1 ID: RTX-CLP Column 2 ID: RTX-CLP2

Workgroups:

CCV Std: STD43387 LCS STD: STD42746
Internal STD: NA Surrogate STD: STD43926

| Seq. | File ID | Sample Information | Mat | Dil | Reference | Date/Time |
|---|---|---|---|---|---|---|
| 72 | 15G25075.R | WG356521-04 TOX LCS | 7 | 1 | SOIL | 02/19/11 09:42 |

**Comments**

| Seq. | Rerun | Dil. | Reason | Analytes |
|---|---|---|---|---|
| 3 | | | | |
| | PEST CCV 20 PPB: Standard failed high. Needs recalibrated. | | | |

Page: 3 Approved: 21-FEB-11

**Microbac Laboratories Inc.**

Instrument Run Log

Instrument: HP15 Dataset: 032211
Analyst1: ECL Analyst2: NA
Method: 8081 SOP: GCS09 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:

Column 1 ID: RTX-CLP Column 2 ID: RTX-CLP2
Workgroups:

CCV Std: STD43387 LCS STD: STD42746
Internal STD: NA Surrogate STD: STD43926 Calibration STD

Comments: The L11030612 samples were diluted due to the viscosity and appearance of the extracts.

| Seq. | File ID | Sample Information | Mat | Dil | Reference | Date/Time |
|---|---|---|---|---|---|---|
| 1 | 15G25534.F | WG359603-01 ENDRIN/DDT | 1 | 1 | STD39983 | 03/22/11 11:22 |
| 2 | 15G25534.R | WG359603-01 ENDRIN/DDT | 1 | 1 | STD39983 | 03/22/11 11:50 |
| 3 | 15G25535.F | WG359603-02 PEST CCV 20 PPB | 1 | 1 | STD43387 | 03/22/11 11:50 |
| 4 | 15G25535.R | WG359603-02 PEST CCV 20 PPB | 1 | 1 | STD43387 | 03/22/11 12:18 |
| 5 | 15G25536.F | WG359604-01 TOX CCV 500 PPB | 1 | 1 | STD43915 | 03/22/11 13:00 |
| 6 | 15G25536.R | WG359604-01 TOX CCV 500 PPB | 1 | 1 | STD43915 | 03/22/11 13:28 |
| 7 | 15G25537.F | AR1660 500 PPB | 1 | 1 | STD43286 | 03/22/11 13:28 |
| 8 | 15G25537.R | AR1660 500 PPB | 1 | 1 | STD43286 | 03/22/11 13:57 |
| 9 | 15G25538.F | WG359465-01 BLANK | 2 | 1 | | 03/22/11 13:57 |
| 10 | 15G25538.R | WG359465-01 BLANK | 2 | 1 | | 03/22/11 14:25 |
| 11 | 15G25539.F | WG359465-02 LCS | 2 | 1 | | 03/22/11 14:25 |
| 12 | 15G25539.R | WG359465-02 LCS | 2 | 1 | | 03/22/11 14:54 |
| 13 | 15G25540.F | WG359465-03 LCS DUP | 2 | 1 | | 03/22/11 14:54 |
| 14 | 15G25540.R | WG359465-03 LCS DUP | 2 | 1 | | 03/22/11 15:22 |
| 15 | 15G25541.F | L11030330-01 RE | 2 | 1 | | 03/22/11 15:22 |
| 16 | 15G25541.R | L11030330-01 RE | 2 | 1 | | 03/22/11 15:51 |
| 17 | 15G25542.F | WG359491-01 BLANK | 2 | 1 | | 03/22/11 15:51 |
| 18 | 15G25542.R | WG359491-01 BLANK | 2 | 1 | | 03/22/11 16:19 |
| 19 | 15G25543.F | WG359491-02 LCS | 2 | 1 | | 03/22/11 16:19 |
| 20 | 15G25543.R | WG359491-02 LCS | 2 | 1 | | 03/22/11 16:48 |
| 21 | 15G25544.F | WG359491-03 LCS DUP | 2 | 1 | | 03/22/11 16:48 |
| 22 | 15G25544.R | WG359491-03 LCS DUP | 2 | 1 | | 03/22/11 17:16 |
| 23 | 15G25545.F | L11030653-03 | 2 | 1 | | 03/22/11 17:16 |
| 24 | 15G25545.R | L11030653-03 | 2 | 1 | | 03/22/11 17:45 |
| 25 | 15G25546.F | L11030653-06 | 2 | 1 | | 03/22/11 17:45 |
| 26 | 15G25546.R | L11030653-06 | 2 | 1 | | 03/22/11 18:13 |
| 27 | 15G25547.F | WG359603-03 PEST CCV 10 PPB | 1 | 1 | STD43387 | 03/22/11 18:13 |
| 28 | 15G25547.R | WG359603-03 PEST CCV 10 PPB | 1 | 1 | STD43387 | 03/22/11 18:41 |
| 29 | 15G25548.F | WG359604-02 TOX CCV 200 PPB | 1 | 1 | STD43915 | 03/22/11 18:41 |
| 30 | 15G25548.R | WG359604-02 TOX CCV 200 PPB | 1 | 1 | STD43915 | 03/22/11 19:10 |
| 31 | 15G25549.F | WG359333-02 BLANK | 7 | 1 | SOIL | 03/22/11 19:10 |
| 32 | 15G25549.R | WG359333-02 BLANK | 7 | 1 | SOIL | 03/22/11 19:38 |
| 33 | 15G25550.F | WG359333-03 LCS | 7 | 1 | SOIL | 03/22/11 19:38 |
| 34 | 15G25550.R | WG359333-03 LCS | 7 | 1 | SOIL | 03/22/11 20:06 |

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**Microbac Laboratories Inc.**

Instrument Run Log

Instrument: HP15 Dataset: 032211
Analyst1: ECL Analyst2: NA
Method: 8081 SOP: GCS09 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:

Column 1 ID: RTX-CLP Column 2 ID: RTX-CLP2
Workgroups:

CCV Std: STD43387 LCS STD: STD42746
Internal STD: NA Surrogate STD: STD43926

| Seq. | File ID | Sample Information | Mat | Dil | Reference | Date/Time |
|---|---|---|---|---|---|---|
| 35 | 15G25551.F | WG359333-04 TOX LCS | 7 | 1 | SOIL | 03/22/11 20:06 |
| 36 | 15G25551.R | WG359333-04 TOX LCS | 7 | 1 | SOIL | 03/22/11 20:35 |
| 37 | 15G25552.F | L11030544-01 | 7 | 1 | SOIL | 03/22/11 20:35 |
| 38 | 15G25552.R | L11030544-01 | 7 | 1 | SOIL | 03/22/11 21:03 |
| 39 | 15G25553.F | L11030544-02 | 7 | 1 | SOIL | 03/22/11 21:03 |
| 40 | 15G25553.R | L11030544-02 | 7 | 1 | SOIL | 03/22/11 21:31 |
| 41 | 15G25554.F | L11030612-09 REF | 7 | 1 | SOIL | 03/22/11 21:31 |
| 42 | 15G25554.R | L11030612-09 REF | 7 | 1 | SOIL | 03/22/11 22:00 |
| 43 | 15G25555.F | L11030612-10 MS | 7 | 1 | SOIL | 03/22/11 22:00 |
| 44 | 15G25555.R | L11030612-10 MS | 7 | 1 | SOIL | 03/22/11 22:28 |
| 45 | 15G25556.F | L11030612-11 MSD | 7 | 1 | SOIL | 03/22/11 22:28 |
| 46 | 15G25556.R | L11030612-11 MSD | 7 | 1 | SOIL | 03/22/11 22:56 |
| 47 | 15G25557.F | L11030612-12 | 7 | 1 | SOIL | 03/22/11 22:56 |
| 48 | 15G25557.R | L11030612-12 | 7 | 1 | SOIL | 03/22/11 23:25 |
| 49 | 15G25558.F | L11030612-14 | 7 | 1 | SOIL | 03/22/11 23:25 |
| 50 | 15G25558.R | L11030612-14 | 7 | 1 | SOIL | 03/22/11 23:54 |
| 51 | 15G25559.F | WG359603-04 ENDRIN/DDT | 1 | 1 | STD39983 | 03/22/11 23:54 |
| 52 | 15G25559.R | WG359603-04 ENDRIN/DDT | 1 | 1 | STD39983 | 03/23/11 00:22 |
| 53 | 15G25560.F | WG359603-05 PEST CCV 20 PPB | 1 | 1 | STD43387 | 03/23/11 00:22 |
| 54 | 15G25560.R | WG359603-05 PEST CCV 20 PPB | 1 | 1 | STD43387 | 03/23/11 00:50 |
| 55 | 15G25561.F | WG359604-03 TOX CCV 500 PPB | 1 | 1 | STD43915 | 03/23/11 00:50 |
| 56 | 15G25561.R | WG359604-03 TOX CCV 500 PPB | 1 | 1 | STD43915 | 03/23/11 01:19 |
| 57 | 15G25562.F | L11030612-19 | 7 | 1 | SOIL | 03/23/11 01:19 |
| 58 | 15G25562.R | L11030612-19 | 7 | 1 | SOIL | 03/23/11 01:47 |
| 59 | 15G25563.F | L11030612-21 | 7 | 1 | SOIL | 03/23/11 01:47 |
| 60 | 15G25563.R | L11030612-21 | 7 | 1 | SOIL | 03/23/11 02:15 |
| 61 | 15G25564.F | L11030612-25 | 7 | 1 | SOIL | 03/23/11 02:15 |
| 62 | 15G25564.R | L11030612-25 | 7 | 1 | SOIL | 03/23/11 02:44 |
| 63 | 15G25565.F | L11030612-28 | 7 | 1 | SOIL | 03/23/11 02:44 |
| 64 | 15G25565.R | L11030612-28 | 7 | 1 | SOIL | 03/23/11 03:12 |
| 65 | 15G25566.F | L11030612-30 | 7 | 1 | SOIL | 03/23/11 03:12 |
| 66 | 15G25566.R | L11030612-30 | 7 | 1 | SOIL | 03/23/11 03:40 |
| 67 | 15G25567.F | L11030612-26 5x | 7 | 5 | SOIL | 03/23/11 03:40 |
| 68 | 15G25567.R | L11030612-26 5x | 7 | 5 | SOIL | 03/23/11 04:09 |
| 69 | 15G25568.F | L11030612-27 5x | 7 | 5 | SOIL | 03/23/11 04:09 |
| 70 | 15G25568.R | L11030612-27 5x | 7 | 5 | SOIL | 03/23/11 04:37 |
| 71 | 15G25569.F | L11030612-29 5x | 7 | 5 | SOIL | 03/23/11 04:37 |

Page: 2 Approved: 24-MAR-11

Cassie L. Augustein

**Microbac Laboratories Inc.**

Instrument Run Log

Instrument: HP15 Dataset: 032211
Analyst1: ECL Analyst2: NA
Method: 8081 SOP: GCS09 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:

Column 1 ID: RTX-CLP Column 2 ID: RTX-CLP2
Workgroups:

CCV Std: STD43387 LCS STD: STD42746
Internal STD: NA Surrogate STD: STD43926

| Seq. | File ID | Sample Information | Mat | Dil | Reference | Date/Time |
|---|---|---|---|---|---|---|
| 72 | 15G25569.R | L11030612-29 5x | 7 | 5 | SOIL | 03/23/11 05:05 |
| 73 | 15G25570.F | L11030612-31 5x | 7 | 5 | SOIL | 03/23/11 05:05 |
| 74 | 15G25570.R | L11030612-31 5x | 7 | 5 | SOIL | 03/23/11 05:34 |
| 75 | 15G25571.F | L11030612-32 5x | 7 | 5 | SOIL | 03/23/11 05:34 |
| 76 | 15G25571.R | L11030612-32 5x | 7 | 5 | SOIL | 03/23/11 06:02 |
| 77 | 15G25572.F | WG359603-06 PEST CCV 10 PPB | 1 | 1 | STD43387 | 03/23/11 06:02 |
| 78 | 15G25572.R | WG359603-06 PEST CCV 10 PPB | 1 | 1 | STD43387 | 03/23/11 06:30 |
| 79 | 15G25573.F | WG359604-04 TOX CCV 200 PPB | 1 | 1 | STD43915 | 03/23/11 06:30 |
| 80 | 15G25573.R | WG359604-04 TOX CCV 200 PPB | 1 | 1 | STD43915 | 03/23/11 06:59 |
| 81 | 15G25574.F | L11030612-24 10x | 7 | 10 | SOIL | 03/23/11 06:59 |
| 82 | 15G25574.R | L11030612-24 10x | 7 | 10 | SOIL | 03/23/11 07:27 |
| 83 | 15G25575.F | L11030612-18 10x | 7 | 10 | SOIL | 03/23/11 07:27 |
| 84 | 15G25575.R | L11030612-18 10x | 7 | 10 | SOIL | 03/23/11 07:56 |
| 85 | 15G25576.F | L11030612-20 10x | 7 | 10 | SOIL | 03/23/11 07:56 |
| 86 | 15G25576.R | L11030612-20 10x | 7 | 10 | SOIL | 03/23/11 08:24 |
| 87 | 15G25577.F | L11030612-13 20x | 7 | 20 | SOIL | 03/23/11 08:24 |
| 88 | 15G25577.R | L11030612-13 20x | 7 | 20 | SOIL | 03/23/11 08:52 |
| 89 | 15G25578.F | L11030612-17 20x | 7 | 20 | SOIL | 03/23/11 08:52 |
| 90 | 15G25578.R | L11030612-17 20x | 7 | 20 | SOIL | 03/23/11 09:21 |
| 91 | 15G25579.F | HEXANE | 1 | 1 | | 03/23/11 09:21 |
| 92 | 15G25579.R | HEXANE | 1 | 1 | | 03/23/11 09:49 |
| 93 | 15G25580.F | HEXANE | 1 | 1 | | 03/23/11 09:49 |
| 94 | 15G25580.R | HEXANE | 1 | 1 | | 03/23/11 10:18 |
| 95 | 15G25581.F | WG359603-07 ENDRIN/DDT | 1 | 1 | STD39983 | 03/23/11 10:18 |
| 96 | 15G25581.R | WG359603-07 ENDRIN/DDT | 1 | 1 | STD39983 | 03/23/11 10:46 |
| 97 | 15G25582.F | WG359603-08 PEST CCV 20 PPB | 1 | 1 | STD43387 | 03/23/11 10:46 |
| 98 | 15G25582.R | WG359603-08 PEST CCV 20 PPB | 1 | 1 | STD43387 | 03/23/11 11:14 |
| 99 | 15G25583.F | WG359604-05 TOX CCV 500 PPB | 1 | 1 | STD43915 | 03/23/11 11:14 |
| 100 | 15G25583.R | WG359604-05 TOX CCV 500 PPB | 1 | 1 | STD43915 | 03/23/11 11:43 |

**Comments**

| Seq. | Rerun | Dil. | Reason | Analytes |
|---|---|---|---|---|
| 37 | | | | |
| | L11030544-01: T-M-X surrogate failed low, no re-extract required. | | | |
| 39 | | | | |
| | L11030544-02: T-M-X surrogate failed low, no re-extract required. | | | |

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Microbac Laboratories Inc.

Data Checklist

Date: 18-FEB-2011
Analyst: ECL
Analyst: NA
Method: 8081
Instrument: HP15
Curve Workgroup: NA
Runlog ID: 39114
Analytical Workgroups: L11020282, L11020281

| | |
|---|---|
| ANALYTICAL | |
| System Performance Check | NA |
| DFTPP (MS) | NA |
| Endrin/DDT breakdown (8081/MS) | X |
| Pentachlorophenol/benzidine tailing (MS) | NA |
| Eluent check (IC)/system pressure (HPLC) | NA |
| Window standard (FID) | NA |
| Initial Calibration | X |
| Average RF | X |
| Linear regression or higher order curve | NA |
| Alternate source standard (ICV) % Difference | X |
| Continuing Calibration (CCV) | X |
| % D/% Drift | X |
| Minimum response factors (MS) | NA |
| Continuing calibration blank (CCB) (IC) | NA |
| Special standards | NA |
| Blanks | X |
| TCL hits | X |
| Surrogate recoveries | X |
| LCS/LCSD (Laboratory Control Sample) | X |
| Recoveries | X |
| Surrogate recoveries | X |
| MS/MSD/Sample duplicates | NA |
| Recoveries | NA |
| %RPD | NA |
| Samples | X |
| TCL hits | X |
| Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC) | X |
| Surrogate recoveries | X |
| Internal standard areas (MS) | NA |
| Library searches (MS) | NA |
| Calculations & correct factors | X |
| Compounds above calibration range | X |
| Reruns | X |
| Manual integrations | X |
| Project/client specific requirements | X |
| | |
| REPORTING | |
| Upload batch form | X |
| KOBRA workgroup data/forms/bench sheets | X |
| Case narratives | NA |
| Check for completeness | X |
| Primary Reviewer | ECL |
| | |
| SUPERVISORY/SECONDARY REVIEW | |
| Check for compliance with method and project specific requirements | X |
| Check the completeness/accuracy of reported information | X |
| Data qualifiers | X |
| Secondary Reviewer | CAA |

Primary Reviewer:
19-FEB-2011

Secondary Reviewer:
21-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-21-2011 12:56:04

Microbac Laboratories Inc.

Data Checklist

Date: 22-MAR-2011
Analyst: ECL
Analyst: NA
Method: 8081
Instrument: HP15
Curve Workgroup: NA
Runlog ID: 39631
Analytical Workgroups: L11030330, L11030653, L11030544, L11030612

| | |
|---|---|
| ANALYTICAL | |
| System Performance Check | NA |
| DFTPP (MS) | NA |
| Endrin/DDT breakdown (8081/MS) | X |
| Pentachlorophenol/benzidine tailing (MS) | NA |
| Eluent check (IC)/system pressure (HPLC) | NA |
| Window standard (FID) | NA |
| Initial Calibration | NA |
| Average RF | NA |
| Linear regression or higher order curve | NA |
| Alternate source standard (ICV) % Difference | NA |
| Continuing Calibration (CCV) | X |
| % D/% Drift | X |
| Minimum response factors (MS) | NA |
| Continuing calibration blank (CCB) (IC) | NA |
| Special standards | X |
| Blanks | X |
| TCL hits | X |
| Surrogate recoveries | X |
| LCS/LCSD (Laboratory Control Sample) | X |
| Recoveries | X |
| Surrogate recoveries | X |
| MS/MSD/Sample duplicates | X |
| Recoveries | X |
| %RPD | X |
| Samples | X |
| TCL hits | X |
| Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC) | X |
| Surrogate recoveries | X |
| Internal standard areas (MS) | NA |
| Library searches (MS) | NA |
| Calculations & correct factors | X |
| Compounds above calibration range | NA |
| Reruns | NA |
| Manual integrations | X |
| Project/client specific requirements | X |
| | |
| REPORTING | |
| Upload batch form | X |
| KOBRA workgroup data/forms/bench sheets | X |
| Case narratives | X |
| Check for completeness | X |
| Primary Reviewer | ECL |
| | |
| SUPERVISORY/SECONDARY REVIEW | |
| Check for compliance with method and project specific requirements | X |
| Check the completeness/accuracy of reported information | X |
| Data qualifiers | X |
| Secondary Reviewer | CAA |

Primary Reviewer:
24-MAR-2011

Secondary Reviewer:
24-MAR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: MAR-24-2011 10:35:26

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8081A AAB#: WG359406

Login Number: L11030544

| Client ID | ID | Date Collected | TCLP Date | Time Held | Max Hold | Q | Extract Date | Time Held | Max Hold | Q | Run Date | Time Held | Max Hold | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 898909 | 01 | 03/08/11 | | | | | 03/18/11 | 9.9 | 14 | | 03/22/11 | 4.5 | 40 | |
| 898916 | 02 | 03/08/11 | | | | | 03/18/11 | 9.9 | 14 | | 03/22/11 | 4.5 | 40 | |

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1951876
Report generated 03/24/2011 13:47

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L11030544
Instrument Id: HP15
Workgroup (AAB#): WG359406

Method: 8081
CAL ID: HP15-18-FEB-11
Matrix: Soil

| Sample Number | Dilution | Tag | 1 | 2 |
|---|---|---|---|---|
| L11030544-01 | 1.00 | 01 | 51.0 | 75.2 |
| L11030544-02 | 1.00 | 01 | 64.9 | 74.9 |
| WG359333-02 | 1.00 | 01 | 59.6 | 74.5 |
| WG359333-02 | 1.00 | 02 | 63.1 | 69.2 |
| WG359333-03 | 1.00 | 01 | 65.1 | 82.0 |
| WG359333-03 | 1.00 | 02 | 69.7 | 75.7 |
| WG359333-04 | 1.00 | 03 | 66.6 | 83.1 |

| Surrogates | Surrogate Limits | | |
|---|---|---|---|
| 1 - 2,4,5,6-Tetrachloro-m-xylene | 70 | - | 125 |
| 2 - Decachlorobiphenyl | 55 | - | 130 |

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

SURROGATES - Modified 03/06/2008
PDF File ID: 1951864
Report generated: 03/24/2011 13:48

Microbac Laboratories Inc.

## METHOD BLANK SUMMARY

Login Number: L11030544 Work Group: WG359406
Blank File ID: 15G25549.F Blank Sample ID: WG359333-02
Prep Date: 03/18/11 08:38 Instrument ID: HP15
Analyzed Date: 03/22/11 19:10 Method: 8081A
Analyst: ECL

This Method Blank Applies To The Following Samples:

| Client ID | Lab Sample ID | Lab File ID | Time Analyzed | TAG |
|---|---|---|---|---|
| LCS | WG359333-03 | 15G25550.F | 03/22/11 19:38 | 01 |
| LCS_TOX | WG359333-04 | 15G25551.F | 03/22/11 20:06 | 03 |
| LCS | WG359333-03 | 15G25550.R | 03/22/11 20:06 | 02 |
| 898909 | L11030544-01 | 15G25552.F | 03/22/11 20:35 | 01 |
| 898916 | L11030544-02 | 15G25553.F | 03/22/11 21:03 | 01 |

Report Name: BLANK_SUMMARY
PDF File ID: 1951877
Report generated 03/24/2011 13:47

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11030544 Prep Date:03/18/11 08:38 Sample ID:WG359333-02
Instrument ID:HP15 Run Date:03/22/11 19:10 Prep Method:3550B
File ID:15G25549.F Analyst:ECL Method:8081A
Workgroup (AAB#):WG359406 Matrix:Soil Units:ug/kg
Contract #: Cal ID: HP15-18-FEB-11

| Analytes | LOD | LOQ | Concentration | Dilution | Qualifier |
|---|---|---|---|---|---|
| 4,4'-DDD | 0.330 | 1.65 | 0.330 | 1 | U |
| 4,4'-DDE | 0.330 | 1.65 | 0.330 | 1 | U |
| 4,4'-DDT | 0.330 | 1.65 | 0.330 | 1 | U |
| Aldrin | 0.330 | 1.65 | 0.330 | 1 | U |
| alpha Chlordane | 0.330 | 1.65 | 0.330 | 1 | U |
| alpha-BHC | 0.330 | 1.65 | 0.330 | 1 | U |
| beta-BHC | 0.330 | 1.65 | 0.330 | 1 | U |
| delta-BHC | 0.330 | 1.65 | 0.330 | 1 | U |
| Dieldrin | 0.330 | 1.65 | 0.330 | 1 | U |
| Endosulfan I | 0.330 | 1.65 | 0.330 | 1 | U |
| Endosulfan II | 0.330 | 1.65 | 0.330 | 1 | U |
| Endosulfan sulfate | 0.330 | 1.65 | 0.330 | 1 | U |
| Endrin | 0.330 | 1.65 | 0.330 | 1 | U |
| Endrin aldehyde | 0.330 | 1.65 | 0.330 | 1 | U |
| gamma Chlordane | 0.330 | 1.65 | 0.330 | 1 | U |
| gamma-BHC (Lindane) | 0.330 | 1.65 | 0.330 | 1 | U |
| Heptachlor | 0.330 | 1.65 | 0.330 | 1 | U |
| Heptachlor epoxide | 0.330 | 1.65 | 0.330 | 1 | U |
| Methoxychlor | 0.330 | 1.65 | 0.330 | 1 | U |
| Toxaphene | 16.7 | 33.0 | 16.7 | 1 | U |

| Surrogates | % Recovery | Surrogate Limits | | | Qualifier |
|---|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 59.6 | 70 | - | 125 | FAIL |
| Decachlorobiphenyl | 74.5 | 55 | - | 130 | PASS |

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1951878
24-MAR-2011 13:47

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11030544 Run Date: 03/22/2011 Sample ID: WG359333-03
Instrument ID: HP15 Run Time: 19:38 Prep Method: 3550B
File ID: 15G25550.F Analyst: ECL Method: 8081A
Workgroup (AAB#): WG359406 Matrix: Soil Units: ug/kg
QC Key: DOD4 Lot#: STD42746 Cal ID: HP15-18-FEB-11

| Analytes | Expected | Found | % Rec | LCS Limits | Q |
|---|---|---|---|---|---|
| 4,4'-DDD | 16.7 | 15.4 | 92.2 | 30 - 135 | |
| 4,4'-DDE | 16.7 | 15.7 | 94.2 | 70 - 125 | |
| 4,4'-DDT | 16.7 | 17.0 | 102 | 45 - 140 | |
| Aldrin | 16.7 | 13.2 | 79.4 | 45 - 140 | |
| alpha Chlordane | 16.7 | 14.5 | 87.1 | 65 - 120 | |
| alpha-BHC | 16.7 | 13.8 | 82.9 | 60 - 125 | |
| beta-BHC | 16.7 | 13.8 | 82.6 | 60 - 125 | |
| delta-BHC | 16.7 | 14.8 | 88.5 | 55 - 130 | |
| Dieldrin | 16.7 | 16.2 | 97.1 | 65 - 125 | |
| Endosulfan I | 16.7 | 14.6 | 87.4 | 15 - 135 | |
| Endosulfan II | 16.7 | 14.6 | 87.7 | 35 - 140 | |
| Endosulfan sulfate | 16.7 | 14.8 | 88.7 | 60 - 135 | |
| Endrin | 16.7 | 15.9 | 95.6 | 60 - 135 | |
| Endrin aldehyde | 16.7 | 13.0 | 78.1 | 35 - 145 | |
| gamma Chlordane | 16.7 | 14.3 | 86.1 | 65 - 125 | |
| gamma-BHC (Lindane) | 16.7 | 14.9 | 89.6 | 60 - 125 | |
| Heptachlor | 16.7 | 12.5 | 75.2 | 50 - 140 | |
| Heptachlor epoxide | 16.7 | 12.4 | 74.5 | 65 - 130 | |
| Methoxychlor | 16.7 | 16.1 | 96.7 | 55 - 145 | |

| Surrogates | % Recovery | Surrogate Limits | Qualifier |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 65.1 | 70 - 125 | FAIL |
| Decachlorobiphenyl | 82.0 | 55 - 130 | PASS |

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 1951863
Report generated: 03/24/2011 13:47

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11030544 Run Date: 03/22/2011 Sample ID: WG359333-04
Instrument ID: HP15 Run Time: 20:06 Prep Method: 3550B
File ID: 15G25551.F Analyst: ECL Method: 8081A
Workgroup (AAB#): WG359406 Matrix: Soil Units: ug/kg
QC Key: DOD4 Lot#: STD42746 Cal ID: HP15-18-FEB-11

| Analytes | Expected | Found | % Rec | LCS Limits | Q |
|---|---|---|---|---|---|
| Toxaphene | 66.7 | 51.7 | 77.5 | 25 - 138 | |

| Surrogates | % Recovery | Surrogate Limits | Qualifier |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 66.6 | 70 - 125 | FAIL |
| Decachlorobiphenyl | 83.1 | 55 - 130 | PASS |

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 1951863
Report generated: 03/24/2011 13:47

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number:L11030544 Instrument ID:HP15

Analytical Method:8081A Initial Calibration Date:18-FEB-11 20:29

ICAL Workgroup:WG357035 Column ID:F

| Analyte | | AVG RF | % RSD | LINEAR (R) | QUAD ($R^2$) |
|---|---|---|---|---|---|
| Toxaphene-1 | | 1234000 | 8.49 | | |
| Toxaphene-2 | | 1799000 | 11.8 | | |
| Toxaphene-3 | | 3339000 | 3.29 | | |
| Toxaphene-4 | | 1483000 | 7.20 | | |
| Toxaphene-5 | | 1393000 | 5.96 | | |

R = Correlation coefficient; 0.995 minimum

$R^2$ = Coefficient of determination; 0.99 minimum

INT_CAL - Modified 03/06/2008

PDF File ID: 1951880

Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number:L11030544 Instrument ID:HP15

Analytical Method:8081A Initial Calibration Date:18-FEB-11 23:19

ICAL Workgroup:WG357037 Column ID:F

| Analyte | | AVG RF | % RSD | LINEAR (R) | QUAD ($R^2$) |
|---|---|---|---|---|---|
| 4,4'-DDD | | 116500000 | 3.48 | | |
| 4,4'-DDE | | 142500000 | 3.58 | | |
| 4,4'-DDT | | 117600000 | 1.77 | | |
| Aldrin | | 154800000 | 4.40 | | |
| Dieldrin | | 134200000 | 6.24 | | |
| Endosulfan I | | 137800000 | 9.12 | | |
| Endosulfan II | | 123200000 | 7.96 | | |
| Endosulfan Sulfate | | 106600000 | 7.19 | | |
| Endrin | | 133900000 | 4.59 | | |
| Endrin Aldehyde | | 98270000 | 10.6 | | |
| Heptachlor | | 172300000 | 7.89 | | |
| Heptachlor Epoxide | | 155600000 | 8.64 | | |
| Methoxychlor | | 57090000 | 6.10 | | |
| alpha-BHC | | 192600000 | 7.31 | | |
| alpha-Chlordane | | 151400000 | 3.81 | | |
| beta-BHC | | 78620000 | 1.20 | | |
| delta-BHC | | 179500000 | 8.08 | | |
| gamma-BHC | | 178800000 | 4.63 | | |
| gamma-Chlordane | | 161700000 | 1.69 | | |

R = Correlation coefficient; 0.995 minimum

$R^2$ = Coefficient of determination; 0.99 minimum

INT_CAL - Modified 03/06/2008

PDF File ID: 1951880

Report generated 03/24/2011 13:48

**Microbac Laboratories Inc.**

**INITIAL CALIBRATION DATA**

**Login Number:** L11030544 **Instrument ID:** HP15

**Analytical Method:** 8081A **Initial Calibration Date:** 18-FEB-11 20:29

**Column ID:** F

| Analyte | WG357035-01 | | | WG357035-02 | | | WG357035-03 | | |
|---|---|---|---|---|---|---|---|---|---|
| | CONC | RESP | RF | CONC | RESP | RF | CONC | RESP | RF |
| Toxaphene-1 | 2000 | 2649535620 | 1325000 | 1000 | 1262225300 | 1262000 | 500 | 644588697 | 1289000 |
| Toxaphene-2 | 2000 | 3808203820 | 1904000 | 1000 | 1890827410 | 1891000 | 500 | 966427204 | 1933000 |
| Toxaphene-3 | 2000 | 6825382010 | 3413000 | 1000 | 3448119230 | 3448000 | 500 | 1672072080 | 3344000 |
| Toxaphene-4 | 2000 | 3211627030 | 1606000 | 1000 | 1550556650 | 1551000 | 500 | 768921419 | 1538000 |
| Toxaphene-5 | 2000 | 3019075480 | 1510000 | 1000 | 1458088470 | 1458000 | 500 | 712470994 | 1425000 |

INT_CAL - Modified 03/06/2008
PDF File ID: 1951880
Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number:L11030544 Instrument ID:HP15

Analytical Method:8081A Initial Calibration Date:18-FEB-11 20:29

Column ID:F

| Analyte | WG357035-04 | | | WG357035-05 | | |
|---|---|---|---|---|---|---|
| | CONC | RESP | RF | CONC | RESP | RF |
| Toxaphene-1 | 200 | 247380784 | 1237000 | 100 | 126137608 | 1261000 |
| | | | | 500 | 514561426 | 1029000 |
| Toxaphene-2 | 200 | 368100093 | 1841000 | 500 | 684706629 | 1369000 |
| | | | | 100 | 185643158 | 1856000 |
| Toxaphene-3 | 200 | 661724856 | 3309000 | 500 | 1568815230 | 3138000 |
| | | | | 100 | 337982007 | 3380000 |
| Toxaphene-4 | 200 | 289048981 | 1445000 | 500 | 651827342 | 1304000 |
| | | | | 100 | 145563416 | 1456000 |
| Toxaphene-5 | 200 | 263306367 | 1317000 | 100 | 131438995 | 1314000 |
| | | | | 500 | 666343361 | 1333000 |

INT_CAL - Modified 03/06/2008
PDF File ID: 1951880
Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number:L11030544 Instrument ID:HP15

Analytical Method:8081A Initial Calibration Date:18-FEB-11 23:19

Column ID:F

| Analyte | WG357037-01 | | | WG357037-02 | | | WG357037-03 | | |
|---|---|---|---|---|---|---|---|---|---|
| | CONC | RESP | RF | CONC | RESP | RF | CONC | RESP | RF |
| 4,4'-DDD | 200 | 22488372600 | 112400000 | 100 | 11813743200 | 118100000 | 20.0 | 2425968600 | 121300000 |
| 4,4'-DDE | 200 | 28109776900 | 140500000 | 100 | 14678702000 | 146800000 | 20.0 | 2956932360 | 147800000 |
| 4,4'-DDT | 200 | 22980065600 | 114900000 | 100 | 11773325600 | 117700000 | 20.0 | 2359022570 | 118000000 |
| Aldrin | 200 | 28746493100 | 143700000 | 100 | 15147226900 | 151500000 | 20.0 | 3208900870 | 160400000 |
| Dieldrin | 200 | 23760028100 | 118800000 | 100 | 13517154000 | 135200000 | 20.0 | 2814178860 | 140700000 |
| Endosulfan I | 200 | 23295424500 | 116500000 | 100 | 12956385800 | 129600000 | 20.0 | 2814714510 | 140700000 |
| Endosulfan II | 200 | 21397200800 | 107000000 | 100 | 11649856500 | 116500000 | 20.0 | 2483154370 | 124200000 |
| Endosulfan Sulfate | 200 | 19354805600 | 96770000 | 100 | 10032727000 | 100300000 | 20.0 | 2112560960 | 105600000 |
| Endrin | 200 | 24619077400 | 123100000 | 100 | 13034927300 | 130300000 | 20.0 | 2770080590 | 138500000 |
| Endrin Aldehyde | 200 | 16964281300 | 84820000 | 100 | 8884290090 | 88840000 | 20.0 | 1934398140 | 96720000 |
| Heptachlor | 200 | 30095481900 | 150500000 | 100 | 16095643300 | 161000000 | 20.0 | 3536396140 | 176800000 |
| Heptachlor Epoxide | 200 | 26954103600 | 134800000 | 100 | 14426322700 | 144300000 | 20.0 | 3171221850 | 158600000 |
| Methoxychlor | 200 | 10297639100 | 51490000 | 100 | 5433906280 | 54340000 | 20.0 | 1151300260 | 57570000 |
| alpha-BHC | 200 | 41293366400 | 206500000 | 100 | 20560058800 | 205600000 | 20.0 | 3969372330 | 198500000 |
| alpha-Chlordane | 200 | 28277541100 | 141400000 | 100 | 15027136900 | 150300000 | 20.0 | 3044984670 | 152200000 |
| beta-BHC | 200 | 15528442400 | 77640000 | 100 | 7744879830 | 77450000 | 20.0 | 1568081790 | 78400000 |
| delta-BHC | 200 | 38127712600 | 190600000 | 100 | 19263757500 | 192600000 | 20.0 | 3744816710 | 187200000 |
| gamma-BHC | 200 | 37067965000 | 185300000 | 100 | 18565379200 | 185700000 | 20.0 | 3646032760 | 182300000 |
| gamma-Chlordane | 200 | 31405998900 | 157000000 | 100 | 16066389500 | 160700000 | 20.0 | 3246902560 | 162300000 |

INT_CAL - Modified 03/06/2008
PDF File ID: 1951880
Report generated 03/24/2011 13:48

**Microbac Laboratories Inc.**

**INITIAL CALIBRATION DATA**

**Login Number:** L11030544 **Instrument ID:** HP15

**Analytical Method:** 8081A **Initial Calibration Date:** 18-FEB-11 23:19

**Column ID:** F

| Analyte | WG357037-04 | | | WG357037-05 | | | WG357037-06 | | |
|---|---|---|---|---|---|---|---|---|---|
| | CONC | RESP | RF | CONC | RESP | RF | CONC | RESP | RF |
| 4,4'-DDD | 10.0 | 1199986710 | 120000000 | 4.00 | 464767266 | 116200000 | 1.00 | 111224952 | 111200000 |
| 4,4'-DDE | 10.0 | 1453440680 | 145300000 | 4.00 | 561358026 | 140300000 | 1.00 | 134356628 | 134400000 |
| 4,4'-DDT | 10.0 | 1204521340 | 120500000 | 4.00 | 476218048 | 119100000 | 1.00 | 115619876 | 115600000 |
| Aldrin | 10.0 | 1629475630 | 162900000 | 4.00 | 622303628 | 155600000 | 1.00 | 154741189 | 154700000 |
| Dieldrin | 10.0 | 1312679490 | 131300000 | 4.00 | 558661321 | 139700000 | 1.00 | 139807884 | 139800000 |
| Endosulfan I | 10.0 | 1433421930 | 143300000 | 4.00 | 583127638 | 145800000 | 1.00 | 150605772 | 150600000 |
| Endosulfan II | 10.0 | 1273882330 | 127400000 | 4.00 | 530664912 | 132700000 | 1.00 | 131234624 | 131200000 |
| Endosulfan Sulfate | 10.0 | 1077068280 | 107700000 | 4.00 | 443496255 | 110900000 | 1.00 | 118327721 | 118300000 |
| Endrin | 10.0 | 1390876410 | 139100000 | 4.00 | 548359194 | 137100000 | 1.00 | 135154249 | 135200000 |
| Endrin Aldehyde | 10.0 | 1011076380 | 101100000 | 4.00 | 419910178 | 105000000 | 1.00 | 113137232 | 113100000 |
| Heptachlor | 10.0 | 1798485500 | 179800000 | 4.00 | 717785708 | 179400000 | 1.00 | 186123123 | 186100000 |
| Heptachlor Epoxide | 10.0 | 1636379760 | 163600000 | 4.00 | 646164126 | 161500000 | 1.00 | 170856368 | 170900000 |
| Methoxychlor | 10.0 | 594938183 | 59490000 | 4.00 | 241728480 | 60430000 | 1.00 | 59214694.0 | 59210000 |
| alpha-BHC | 10.0 | 1928568370 | 192900000 | 4.00 | 724289288 | 181100000 | 1.00 | 171078073 | 171100000 |
| alpha-Chlordane | 10.0 | 1517693460 | 151800000 | 4.00 | 614912751 | 153700000 | 1.00 | 159044484 | 159000000 |
| beta-BHC | 10.0 | 791026419 | 79100000 | 4.00 | 318880724 | 79720000 | 1.00 | 79420315.0 | 79420000 |
| delta-BHC | 10.0 | 1823535850 | 182400000 | 4.00 | 673948585 | 168500000 | 1.00 | 155718921 | 155700000 |
| gamma-BHC | 10.0 | 1815436890 | 181500000 | 4.00 | 693647566 | 173400000 | 1.00 | 164496532 | 164500000 |
| gamma-Chlordane | 10.0 | 1627219760 | 162700000 | 4.00 | 647999104 | 162000000 | 1.00 | 165313433 | 165300000 |

**INT_CAL - Modified 03/06/2008**
**PDF File ID: 1951880**
**Report generated 03/24/2011 13:48**

Microbac Laboratories Inc.

ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L11030544 Run Date: 02/18/2011 Sample ID: WG357035-06

Instrument ID: HP15 Run Time: 20:01 Method: 8081A

File ID: 15G25047.F Analyst: ECL QC Key: DOD4

ICal Workgroup: WG357035 Cal ID: HP15 - 18-FEB-11

| Analyte | | Expected | Found | Units | RF | %D | UCL | Q |
|---|---|---|---|---|---|---|---|---|
| Toxaphene | | 500 | 427 | ug/L | 1630000 | 14.6 | 20 | |

* Exceeds %D Limit

ALT - Modified 09/06/2007

Version 1.5 PDF File ID: 1951881

Report generated 03/25/2011 08:29

Microbac Laboratories Inc.

ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L11030544 Run Date: 02/18/2011 Sample ID: WG357037-07

Instrument ID: HP15 Run Time: 23:48 Method: 8081A

File ID: 15G25054.R Analyst: ECL QC Key: DOD4

ICal Workgroup: WG357037 Cal ID: HP15 - 18-FEB-11

| Analyte | | Expected | Found | Units | RF | %D | UCL | Q |
|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | | 20.0 | 19.9 | ug/L | 87300000 | 0.400 | 20 | |
| 4,4'-DDE | | 20.0 | 20.2 | ug/L | 109000000 | 0.800 | 20 | |
| 4,4'-DDT | | 20.0 | 19.9 | ug/L | 87600000 | 0.700 | 20 | |
| Aldrin | | 20.0 | 20.0 | ug/L | 124000000 | 0.100 | 20 | |
| alpha-Chlordane | | 20.0 | 19.4 | ug/L | 110000000 | 3.20 | 20 | |
| alpha-BHC | | 20.0 | 20.6 | ug/L | 144000000 | 2.80 | 20 | |
| beta-BHC | | 20.0 | 19.8 | ug/L | 59100000 | 0.800 | 20 | |
| delta-BHC | | 20.0 | 19.9 | ug/L | 137000000 | 0.600 | 20 | |
| Dieldrin | | 20.0 | 19.6 | ug/L | 109000000 | 2.10 | 20 | |
| Endosulfan I | | 20.0 | 20.7 | ug/L | 97100000 | 3.50 | 20 | |
| Endosulfan II | | 20.0 | 19.3 | ug/L | 91300000 | 3.30 | 20 | |
| Endosulfan Sulfate | | 20.0 | 19.4 | ug/L | 80700000 | 3.20 | 20 | |
| Endrin | | 20.0 | 20.4 | ug/L | 94200000 | 1.80 | 20 | |
| Endrin Aldehyde | | 20.0 | 19.6 | ug/L | 68200000 | 2.00 | 20 | |
| gamma-Chlordane | | 20.0 | 19.7 | ug/L | 115000000 | 1.70 | 20 | |
| gamma-BHC | | 20.0 | 19.9 | ug/L | 134000000 | 0.600 | 20 | |
| Heptachlor | | 20.0 | 20.0 | ug/L | 128000000 | 0 | 20 | |
| Heptachlor Epoxide | | 20.0 | 20.3 | ug/L | 105000000 | 1.50 | 20 | |
| Methoxychlor | | 20.0 | 19.6 | ug/L | 41400000 | 2.20 | 20 | |

* Exceeds %D Limit

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1951881
Report generated 03/25/2011 08:29

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11030544 Run Date: 03/22/2011 Sample ID: WG359603-03

Instrument ID: HP15 Run Time: 18:13 Method: 8081A

File ID: 15G25547.F Analyst: ECL QC Key: DOD4

Workgroup (AAB#): WG359406 Cal ID: HP15 - 18-FEB-11

Matrix: SOIL

| Analyte | | Expected | Found | UNITS | RF | %D | UCL | Q |
|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | | 10.0 | 9.99 | ug/L | 116000000 | 0.0510 | 20 | |
| 4,4'-DDE | | 10.0 | 10.1 | ug/L | 144000000 | 1.27 | 20 | |
| 4,4'-DDT | | 10.0 | 10.5 | ug/L | 124000000 | 5.29 | 20 | |
| Aldrin | | 10.0 | 10.2 | ug/L | 157000000 | 1.57 | 20 | |
| alpha-Chlordane | | 10.0 | 9.99 | ug/L | 151000000 | 0.0570 | 20 | |
| alpha-BHC | | 10.0 | 9.77 | ug/L | 188000000 | 2.35 | 20 | |
| beta-BHC | | 10.0 | 9.78 | ug/L | 76900000 | 2.20 | 20 | |
| delta-BHC | | 10.0 | 9.72 | ug/L | 174000000 | 2.82 | 20 | |
| Dieldrin | | 10.0 | 10.9 | ug/L | 146000000 | 8.68 | 20 | |
| Endosulfan I | | 10.0 | 10.4 | ug/L | 143000000 | 3.68 | 20 | |
| Endosulfan II | | 10.0 | 10.6 | ug/L | 130000000 | 5.89 | 20 | |
| Endosulfan Sulfate | | 10.0 | 10.1 | ug/L | 107000000 | 0.733 | 20 | |
| Endrin | | 10.0 | 10.2 | ug/L | 136000000 | 1.59 | 20 | |
| Endrin Aldehyde | | 10.0 | 10.1 | ug/L | 98900000 | 0.609 | 20 | |
| gamma-Chlordane | | 10.0 | 9.84 | ug/L | 159000000 | 1.56 | 20 | |
| gamma-BHC | | 10.0 | 9.75 | ug/L | 174000000 | 2.52 | 20 | |
| Heptachlor | | 10.0 | 10.2 | ug/L | 175000000 | 1.68 | 20 | |
| Heptachlor Epoxide | | 10.0 | 10.2 | ug/L | 159000000 | 2.07 | 20 | |
| Methoxychlor | | 10.0 | 10.7 | ug/L | 61200000 | 7.26 | 20 | |
| Toxaphene | | NA | | ug/L | | | 20 | |

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 1951882

Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11030544 Run Date: 03/22/2011 Sample ID: WG359604-02

Instrument ID: HP15 Run Time: 18:41 Method: 8081A

File ID: 15G25548.F Analyst: ECL QC Key: DOD4

Workgroup (AAB#): WG359406 Cal ID: HP15 - 18-FEB-11

Matrix: SOIL

| Analyte | | Expected | Found | UNITS | RF | %D | UCL | Q |
|---|---|---|---|---|---|---|---|---|
| Toxaphene | | 200 | 209 | ug/L | 1990000 | 4.28 | 20 | |

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 1951882

Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11030544 Run Date: 03/23/2011 Sample ID: WG359603-05

Instrument ID: HP15 Run Time: 00:22 Method: 8081A

File ID: 15G25560.F Analyst: ECL QC Key: DOD4

Workgroup (AAB#): WG359406 Cal ID: HP15 - 18-FEB-11

Matrix: SOIL

| Analyte | | Expected | Found | UNITS | RF | %D | UCL | Q |
|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | | 20.0 | 23.0 | ug/L | 134000000 | 15.1 | 20 | |
| 4,4'-DDE | | 20.0 | 23.5 | ug/L | 167000000 | 17.3 | 20 | |
| 4,4'-DDT | | 20.0 | 23.8 | ug/L | 140000000 | 19.2 | 20 | |
| Aldrin | | 20.0 | 22.5 | ug/L | 174000000 | 12.6 | 20 | |
| alpha-Chlordane | | 20.0 | 22.1 | ug/L | 167000000 | 10.6 | 20 | |
| alpha-BHC | | 20.0 | 21.6 | ug/L | 208000000 | 8.17 | 20 | |
| beta-BHC | | 20.0 | 21.0 | ug/L | 82400000 | 4.86 | 20 | |
| delta-BHC | | 20.0 | 21.7 | ug/L | 195000000 | 8.56 | 20 | |
| Dieldrin | | 20.0 | 22.1 | ug/L | 149000000 | 10.7 | 20 | |
| Endosulfan I | | 20.0 | 22.8 | ug/L | 157000000 | 13.9 | 20 | |
| Endosulfan II | | 20.0 | 23.2 | ug/L | 143000000 | 15.9 | 20 | |
| Endosulfan Sulfate | | 20.0 | 22.3 | ug/L | 119000000 | 11.4 | 20 | |
| Endrin | | 20.0 | 23.0 | ug/L | 154000000 | 15.2 | 20 | |
| Endrin Aldehyde | | 20.0 | 22.4 | ug/L | 110000000 | 12.1 | 20 | |
| gamma-Chlordane | | 20.0 | 22.1 | ug/L | 179000000 | 10.7 | 20 | |
| gamma-BHC | | 20.0 | 21.7 | ug/L | 194000000 | 8.69 | 20 | |
| Heptachlor | | 20.0 | 22.1 | ug/L | 191000000 | 10.7 | 20 | |
| Heptachlor Epoxide | | 20.0 | 22.3 | ug/L | 174000000 | 11.5 | 20 | |
| Methoxychlor | | 20.0 | 23.4 | ug/L | 66900000 | 17.1 | 20 | |
| Toxaphene | | NA | | ug/L | | | 20 | |

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 1951882

Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11030544 Run Date: 03/23/2011 Sample ID: WG359604-03

Instrument ID: HP15 Run Time: 00:50 Method: 8081A

File ID: 15G25561.F Analyst: ECL QC Key: DOD4

Workgroup (AAB#): WG359406 Cal ID: HP15 - 18-FEB-11

Matrix: SOIL

| Analyte | | Expected | Found | UNITS | RF | %D | UCL | Q |
|---|---|---|---|---|---|---|---|---|
| Toxaphene | | 500 | 580 | ug/L | 2220000 | 16.0 | 20 | |

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 1951882

Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

ENDRIN/4,4'-DDT BREAKDOWN (BRKDWN)

Login Number: L11030544 Run Date: 03/22/2011 Sample ID: WG359603-01
Instrument ID: HP15 Run Time: 11:22 Method: 8081
File ID: 15G25534.F Analyst: ECL Column ID: FRONT

| DDT BREAKDOWN | |
|---|---|
| Analyte | Response |
| 4,4'-DDD | 0 |
| 4,4'-DDE | 100916008 |
| 4,4'-DDT | 6376983995 |
| DDT % BREAKDOWN: | 1.56 |

| ENDRIN BREAKDOWN | |
|---|---|
| Analyte | Response |
| ENDRIN | 6893557395 |
| ENDRIN ALDEHYDE | 0 |
| ENDRIN KETONE | 121108608 |
| ENDRIN % BREAKDOWN: | 1.73 |

* Exceeds 15% Criteria

Report Name: BRKDWN
PDF File ID: 1951879
Report generated 03/24/2011 13:48

Microbac Laboratories Inc.

ENDRIN/4,4'-DDT BREAKDOWN (BRKDWN)

Login Number: L11030544 Run Date: 03/22/2011 Sample ID: WG359603-04
Instrument ID: HP15 Run Time: 23:54 Method: 8081
File ID: 15G25559.F Analyst: ECL Column ID: FRONT

| DDT BREAKDOWN | |
|---|---|
| Analyte | Response |
| 4,4'-DDD | 0 |
| 4,4'-DDE | 100940551 |
| 4,4'-DDT | 6228070520 |
| DDT % BREAKDOWN: | 1.59 |

| ENDRIN BREAKDOWN | |
|---|---|
| Analyte | Response |
| ENDRIN | 6924047962 |
| ENDRIN ALDEHYDE | 0 |
| ENDRIN KETONE | 94321371 |
| ENDRIN % BREAKDOWN: | 1.34 |

* Exceeds 15% Criteria

Report Name: BRKDWN
PDF File ID: 1951879
Report generated 03/24/2011 13:48

# 2.1.1.3 Sample Data

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25552.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 20:35 (#1); 22 Mar 2011 21:03 (#2)
Operator : ECL
Sample : L11030544-01
Misc : 7,1 SOIL
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:01:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

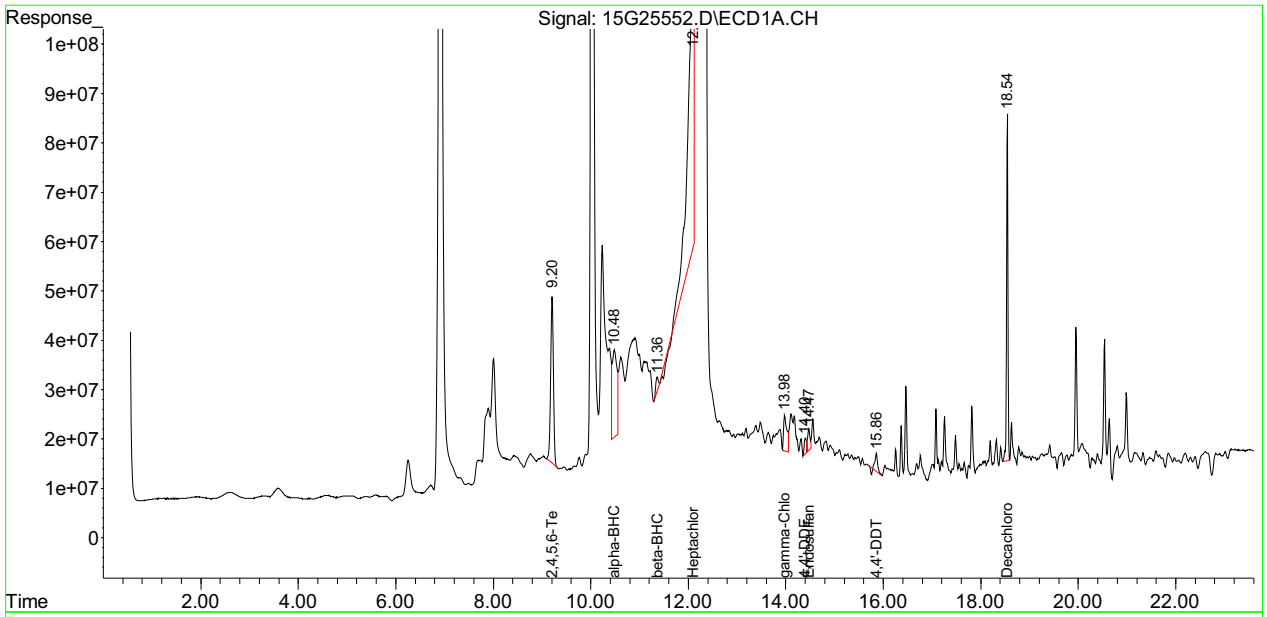
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L | |
|---|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.21 | 9.14 | 1324.9E6 | 972.6E6 | 10.203 | 10.077 | |
| | Spiked Amount 20.000 | Range 29 - 133 | | Recovery = | | 51.02% | 50.39% | |
| 22) S | Decachlorobiphen | 18.54 | 18.86 | 1336.8E6 | 900.0E6 | 15.032 | 14.056 | |
| | Spiked Amount 20.000 | Range 30 - 173 | | Recovery = | | 75.16% | 70.28% | |
| | Target Compounds | | | | | | | |
| 2) | alpha-BHC | 10.48 | 0.00 | 1190.4E6 | 0 | 6.181 | N.D. | # |
| 3) | gamma-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 4) | beta-BHC | 11.36f | 0.00 | 109.5E6 | 0 | 1.393 | N.D. | # |
| 5) | Heptachlor | 12.10 | 0.00 | 5364.2E6 | 0 | 31.137 | N.D. | # |
| 6) | delta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 7) | Aldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 8) | Heptachlor Epoxi | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 9) | gamma-Chlordane | 13.98 | 0.00 | 346.9E6 | 0 | 2.146 | N.D. | # |
| 10) | alpha-Chlordane | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 11) | Endosulfan I | 14.47f | 0.00 | 145.4E6 | 0 | 1.055 | N.D. | # |
| 12) | 4,4'-DDE | 14.40f | 14.64 | 97640339 | 94143469 | 0.685 | 0.873 | # |
| 13) | Dieldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 14) | Endrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 15) | 4,4'-DDD | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 16) | Endosulfan II | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 17) | 4,4'-DDT | 15.86 | 0.00 | 118.3E6 | 0 | 1.006 | N.D. | # |
| 18) | Endrin Aldehyde | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 19) | Endosulfan Sulfa | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 20) | Methoxychlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 21) | Endrin Ketone | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25552.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 20:35 (#1); 22 Mar 2011 21:03 (#2)
Operator : ECL
Sample : L11030544-01
Misc : 7,1 SOIL
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:01:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

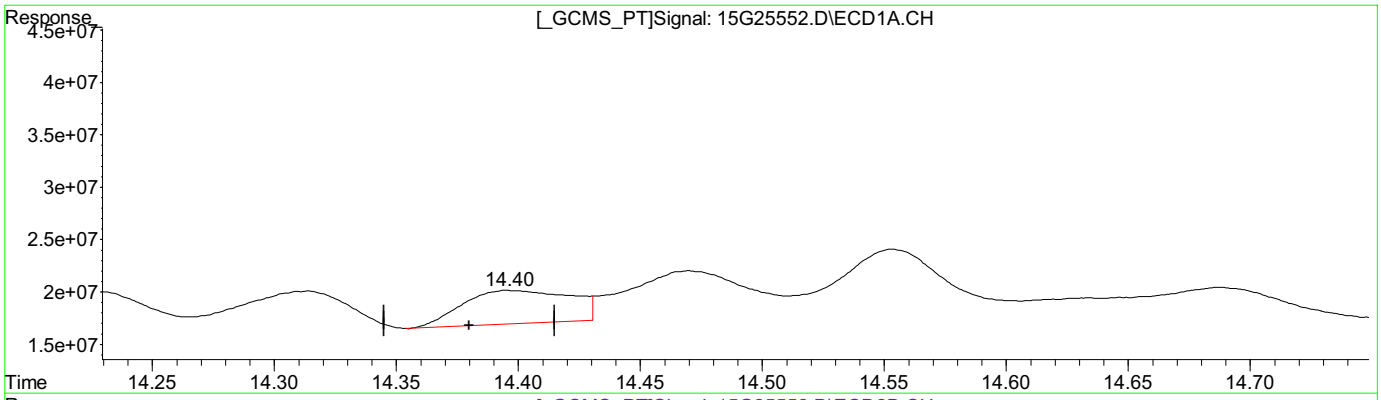
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

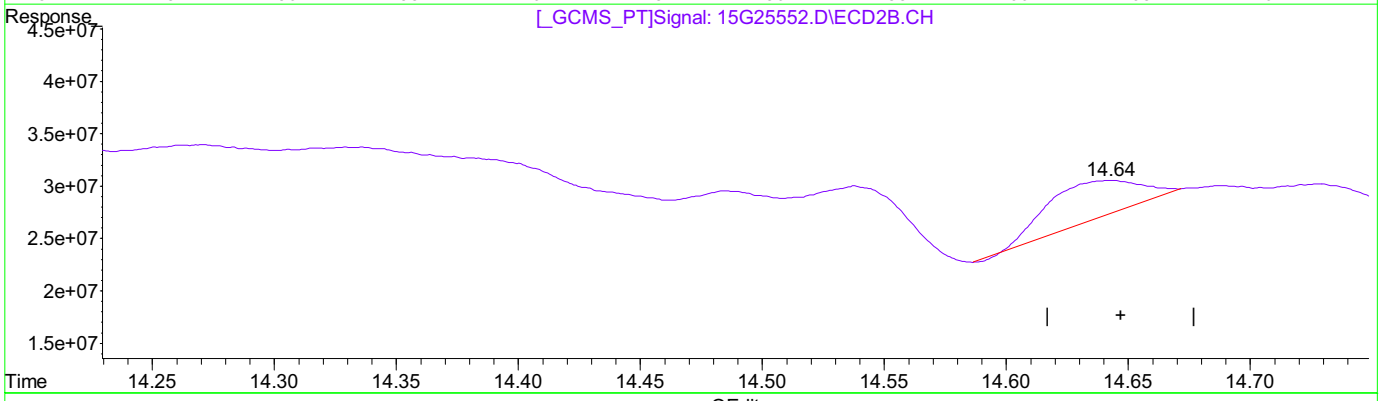


Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25552.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Mar 2011  20:35 (#1); 22 Mar 2011  21:03 (#2)
Operator : ECL
Sample : L11030544-01
Misc : 7,1 SOIL
ALS Vial : 19  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:01:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION  February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(12) 4,4'-DDE

14.40min 0.685UG/L

response 97640339

(12) 4,4'-DDE #2

14.64min 0.873UG/L

response 94143469

(+) = Expected Retention Time

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25553.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 21:03 (#1); 22 Mar 2011 21:31 (#2)
Operator : ECL
Sample : L11030544-02
Misc : 7,1 SOIL
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:01:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

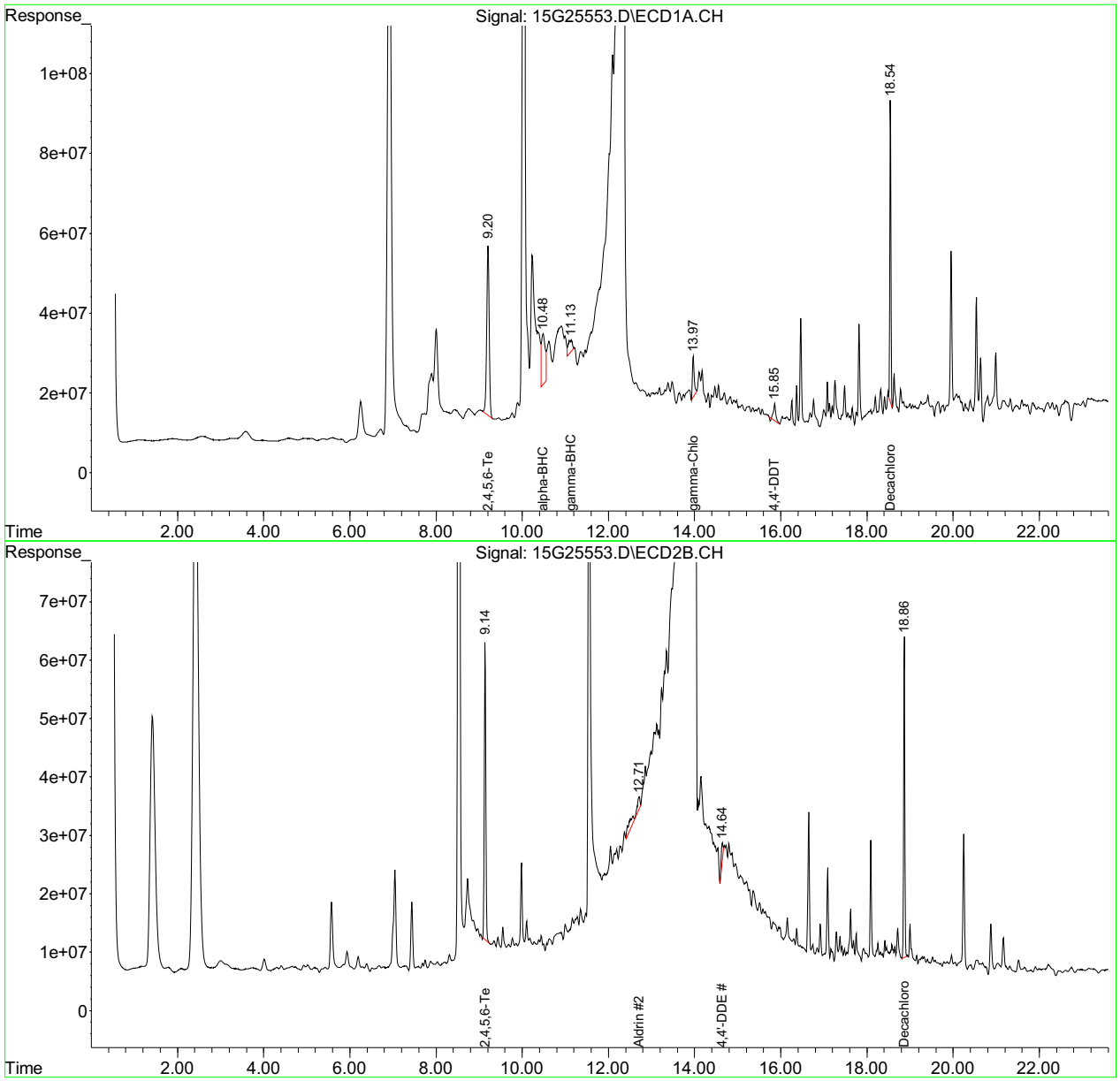
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L | |
|---|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | | |
| 1) | S 2,4,5,6-Tetrachl | 9.20 | 9.14 | 1685.4E6 | 1249.7E6 | 12.979 | 12.948 | |
| | Spiked Amount 20.000 | Range 29 - 133 | | Recovery = | | 64.89% | 64.74% | |
| 22) | S Decachlorobiphen | 18.54 | 18.86 | 1332.3E6 | 985.1E6 | 14.981 | 15.383 | |
| | Spiked Amount 20.000 | Range 30 - 173 | | Recovery = | | 74.91% | 76.92% | |
| | Target Compounds | | | | | | | |
| 2) | alpha-BHC | 10.48 | 0.00 | 769.6E6 | 0 | 3.996 | N.D. | # |
| 3) | gamma-BHC | 11.13f | 0.00 | 203.8E6 | 0 | 1.140 | N.D. | # |
| 4) | beta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 5) | Heptachlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 6) | delta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 7) | Aldrin | 0.00 | 12.71f | 0 | 225.5E6 | N.D. | 1.810 | # |
| 8) | Heptachlor Epoxi | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 9) | gamma-Chlordane | 13.96f | 0.00 | 291.4E6 | 0 | 1.802 | N.D. | # |
| 10) | alpha-Chlordane | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 11) | Endosulfan I | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 12) | 4,4'-DDE | 0.00 | 14.64 | 0 | 76902312 | N.D. | 0.713 | # |
| 13) | Dieldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 14) | Endrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 15) | 4,4'-DDD | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 16) | Endosulfan II | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 17) | 4,4'-DDT | 15.86 | 0.00 | 152.1E6 | 0 | 1.293 | N.D. | # |
| 18) | Endrin Aldehyde | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 19) | Endosulfan Sulfa | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 20) | Methoxychlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 21) | Endrin Ketone | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25553.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 21:03 (#1); 22 Mar 2011 21:31 (#2)
Operator : ECL
Sample : L11030544-02
Misc : 7,1 SOIL
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:01:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



# 2.1.1.4 Standards Data

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 17:39 (#1); 18 Feb 2011 18:07 (#2)
Operator : ECL
Sample : WG357035-01 TOX ICAL 2000 PPB
Misc : 1,1 STD43915
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:45:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:45:00 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

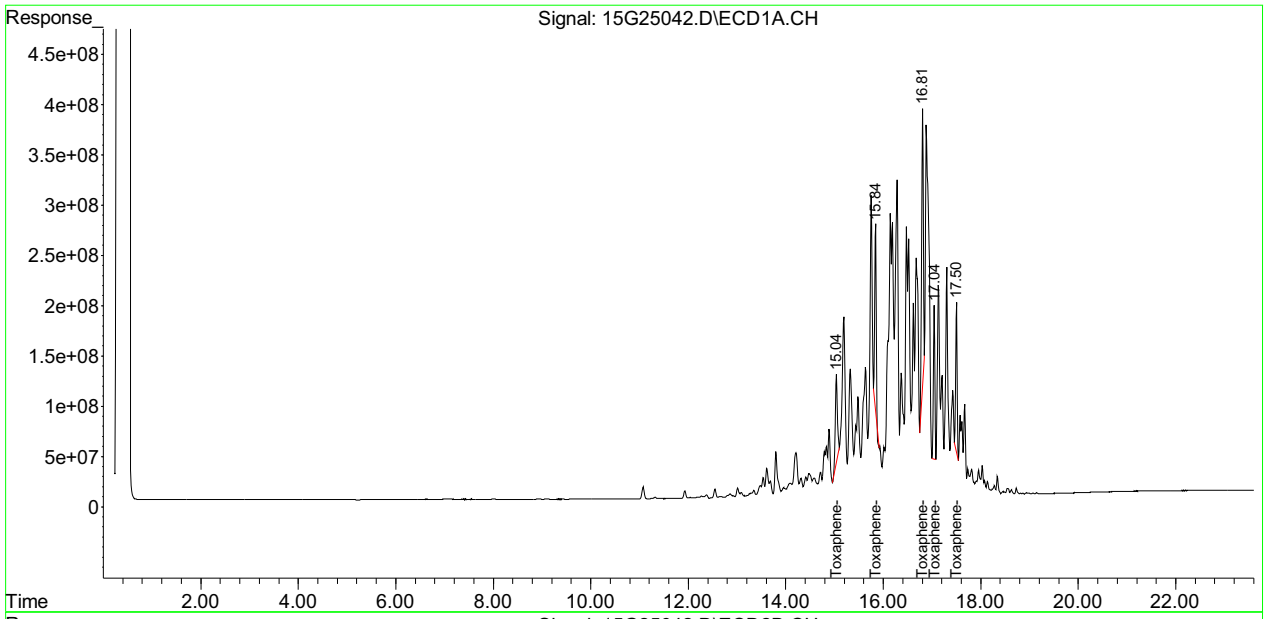
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | Target Compounds | | | | | | |
| 1) | L1 Toxaphene-1 | 15.04 | 14.88 | 2649.5E6 | 2054.8E6 | 2148.602 | 1951.591 |
| 2) | L1 Toxaphene-2 | 15.84 | 15.94 | 3808.2E6 | 6404.3E6 | 2071.008 | 1992.766 |
| 3) | L1 Toxaphene-3 | 16.81 | 16.73 | 6825.4E6 | 1988.7E6 | 2079.119m | 2044.988 |
| 4) | L1 Toxaphene-4 | 17.04 | 17.07 | 3211.6E6 | 4523.6E6 | 2171.403 | 2031.588 |
| 5) | L1 Toxaphene-5 | 17.50 | 17.58 | 3019.1E6 | 1762.8E6 | 2179.577 | 2081.032 |
| | Sum Toxaphene-1 | | | 19513.8E6 | 16734.2E6 | 10649.710 | 10101.964 |
| Average | Toxaphene-1 | | | | | 2129.942 | 2020.393 |

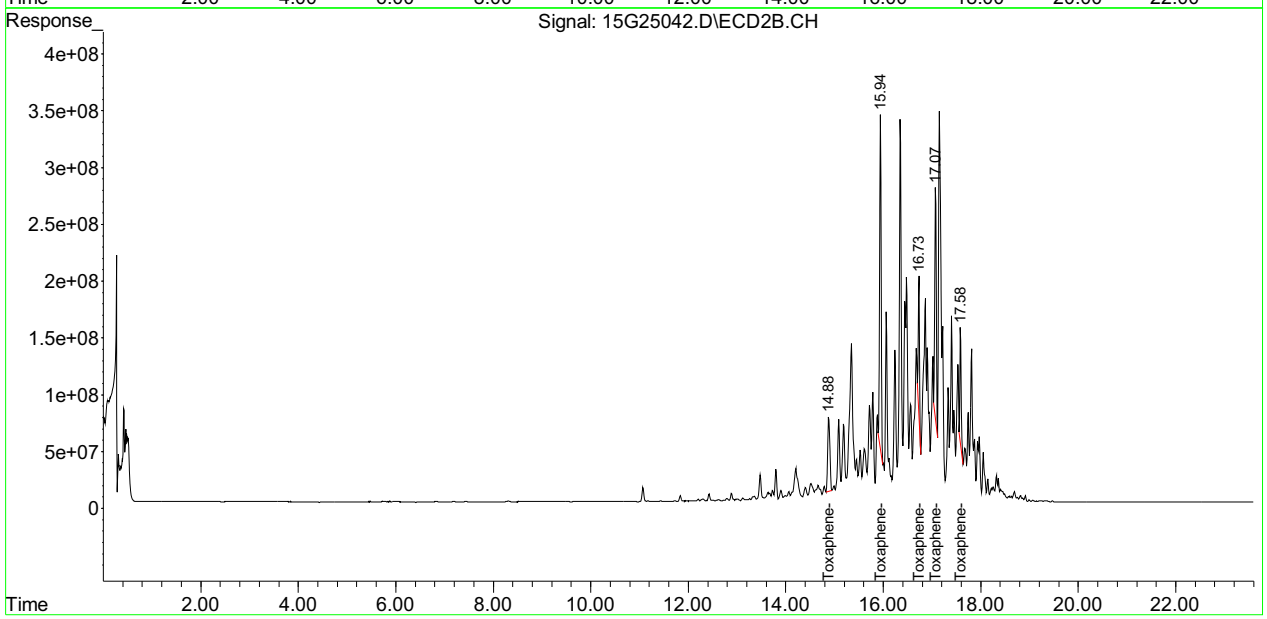
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 17:39 (#1); 18 Feb 2011 18:07 (#2)
Operator : ECL
Sample : WG357035-01 TOX ICAL 2000 PPB
Misc : 1,1 STD43915
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:45:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:45:00 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

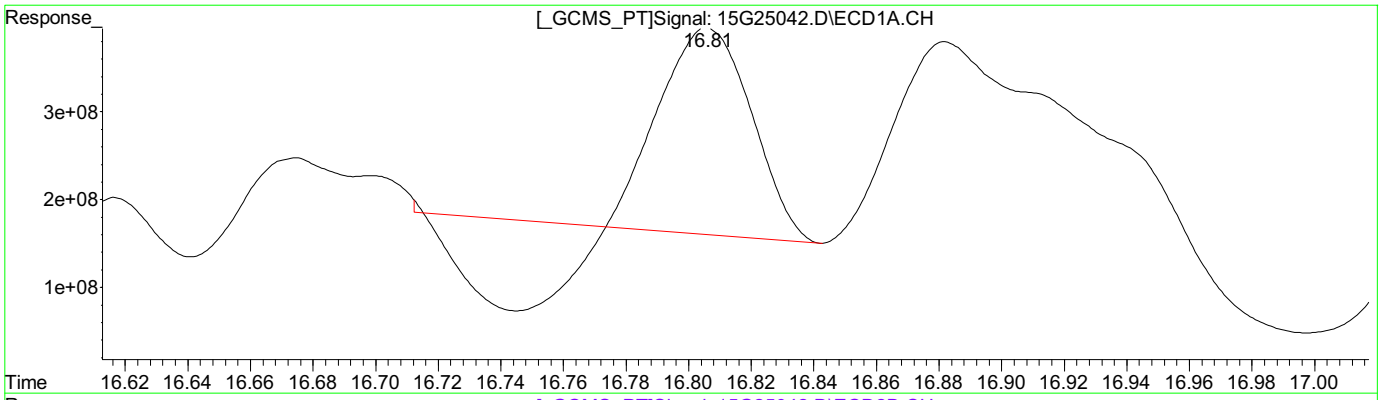


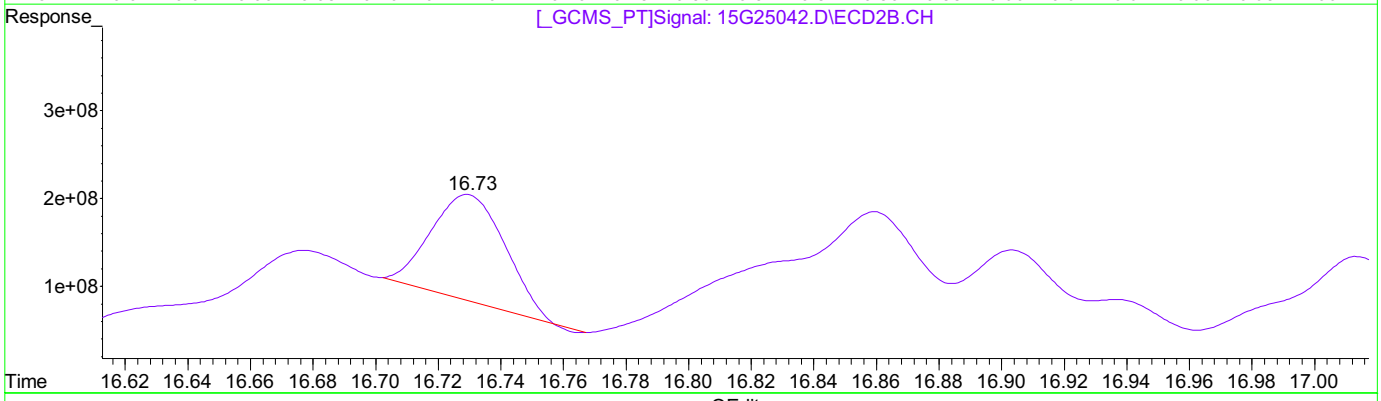



Data Path : C:\MSDChem\1\DATA\021811\
Data File : 15G25042.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 18 Feb 2011  17:39 (#1); 18 Feb 2011  18:07 (#2)
Operator : ECL
Sample : WG357035-01 TOX ICAL 2000 PPB
Misc : 1,1 STD43915
ALS Vial : 3  Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:45:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15  CALIBRATION 8081 TOX  February 18, 2011
QLast Update : Sat Feb 19 10:45:00 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(3) Toxaphene-3 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.81 | 2908516681 | 885.98 |
| 17.04 | 3211627031 | 2171.40 |
| 17.50 | 3019075484 | 2179.58 |

(3) Toxaphene-3 #2 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.73 | 1988673787 | 2044.99 |
| 17.07 | 4523621514 | 2031.59 |
| 17.58 | 1762775633 | 2081.03 |

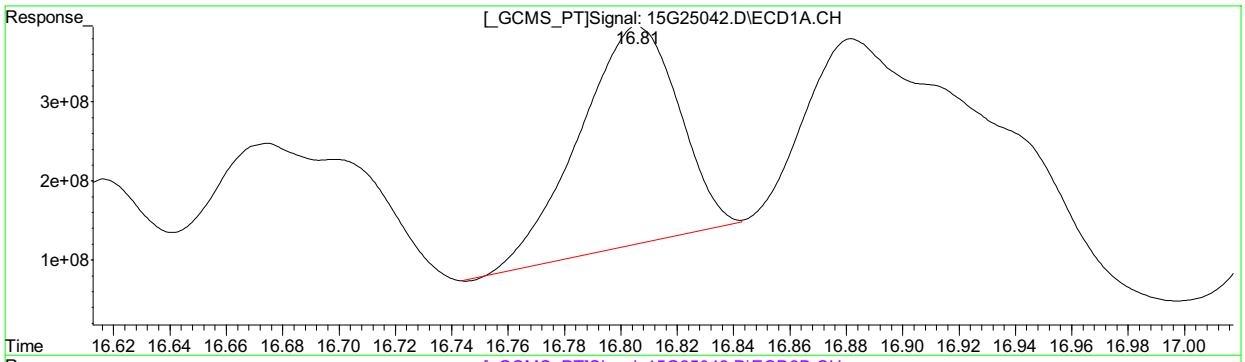
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\021811\
Data File : 15G25042.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 18 Feb 2011  17:39 (#1); 18 Feb 2011  18:07 (#2)
Operator : ECL
Sample : WG357035-01 TOX ICAL 2000 PPB
Misc : 1,1 STD43915
ALS Vial : 3  Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:45:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15  CALIBRATION 8081 TOX  February 18, 2011
QLast Update : Sat Feb 19 10:45:00 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(3) Toxaphene-3 #2 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.81 | 6825382007 | 2079.12 |
| 17.04 | 3211627031 | 2171.40 |
| 17.50 | 3019075484 | 2179.58 |

(3) Toxaphene-3 #2 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.73 | 1988673787 | 2044.99 |
| 17.07 | 4523621514 | 2031.59 |
| 17.58 | 1762775633 | 2081.03 |

(+) = Expected Retention Time



| Approved: February 19, 2011 | Supervisor: February 21, 2011 |
|---|---|
| Reason #4: System Establishes Incorrect Baseline | |
| Eric C. Turner | Cassie L. Augenstein |

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 18:07 (#1); 18 Feb 2011 18:36 (#2)
Operator : ECL
Sample : WG357035-02 TOX ICAL 1000 PPB
Misc : 1,1 STD43915
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:45:02 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:45:00 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

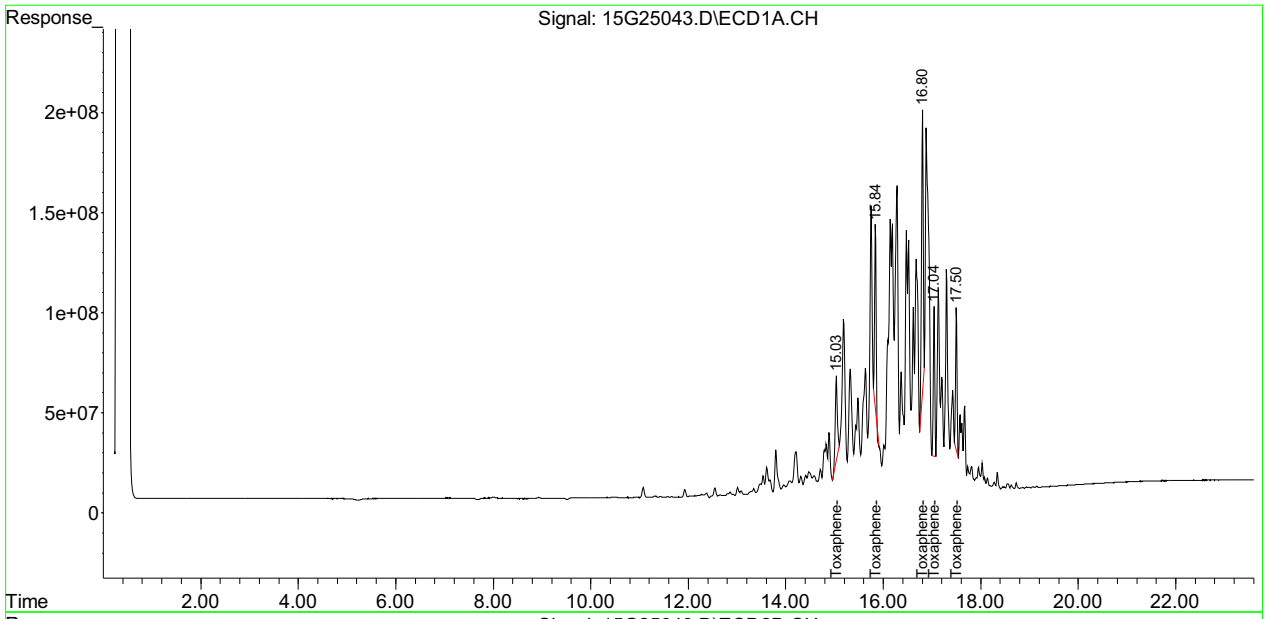
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | Target Compounds | | | | | | |
| 1) | L1 Toxaphene-1 | 15.04 | 14.88 | 1262.2E6 | 1053.0E6 | 1023.583 | 1000.119 |
| 2) | L1 Toxaphene-2 | 15.84 | 15.94 | 1890.8E6 | 3293.4E6 | 1028.285 | 1024.772 |
| 3) | L1 Toxaphene-3 | 16.80 | 16.73 | 3448.1E6 | 1017.1E6 | 1050.351 | 1045.907 |
| 4) | L1 Toxaphene-4 | 17.04 | 17.07 | 1550.6E6 | 2249.5E6 | 1048.342 | 1010.283 |
| 5) | L1 Toxaphene-5 | 17.50 | 17.58 | 1458.1E6 | 882.0E6 | 1052.646 | 1041.207 |
| | Sum Toxaphene-1 | | | 9609.8E6 | 8495.0E6 | 5203.207 | 5122.289 |
| Average | Toxaphene-1 | | | | | 1040.641 | 1024.458 |

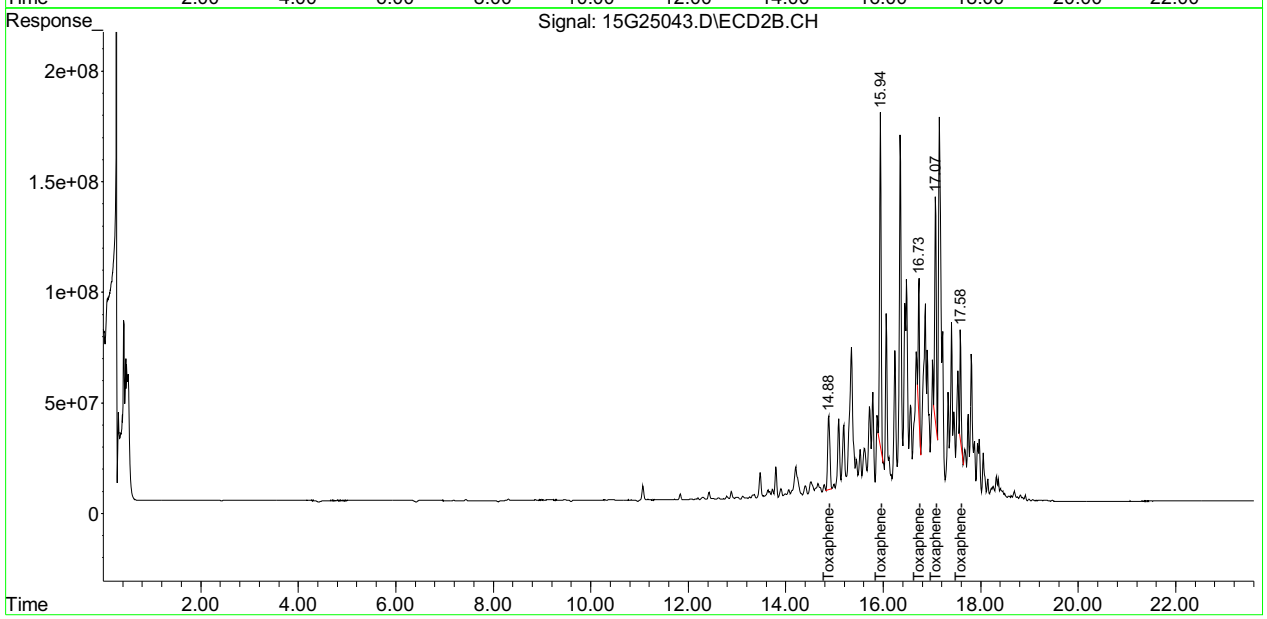
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 18:07 (#1); 18 Feb 2011 18:36 (#2)
Operator : ECL
Sample : WG357035-02 TOX ICAL 1000 PPB
Misc : 1,1 STD43915
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:45:02 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:45:00 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 18:36 (#1); 18 Feb 2011 19:04 (#2)
Operator : ECL
Sample : WG357035-03 TOX ICAL 500 PPB
Misc : 1,1 STD43915
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:44:36 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

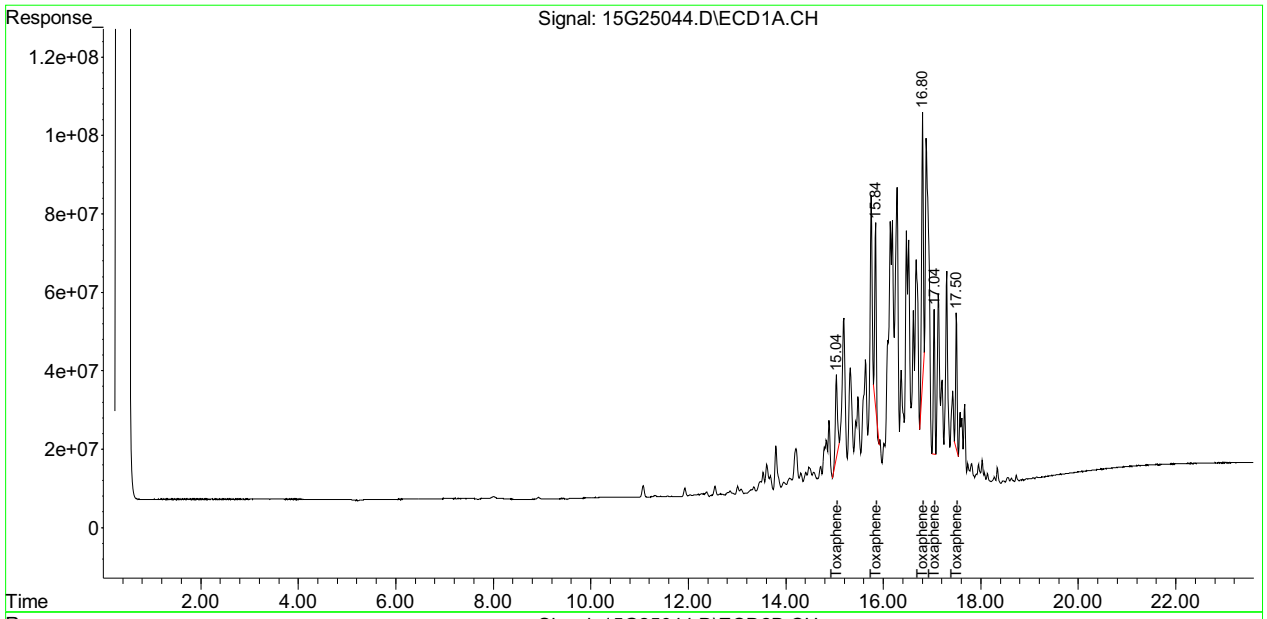
| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) L1 Toxaphene-1 | 15.04 | 14.88 | 644.6E6 | 548.6E6 | 535.929 | 542.269 |
| 2) L1 Toxaphene-2 | 15.84 | 15.94 | 966.4E6 | 1692.2E6 | 543.633 | 544.099 |
| 3) L1 Toxaphene-3 | 16.80 | 16.73 | 1672.1E6 | 513.2E6 | 522.828 | 549.395 |
| 4) L1 Toxaphene-4 | 17.04 | 17.07 | 768.9E6 | 1154.0E6 | 530.792 | 535.204 |
| 5) L1 Toxaphene-5 | 17.50 | 17.58 | 712.5E6 | 445.6E6 | 518.131 | 545.528 |
| Sum Toxaphene-1 | | | 4764.5E6 | 4353.5E6 | 2651.313 | 2716.495 |
| Average Toxaphene-1 | | | | | 530.263 | 543.299 |

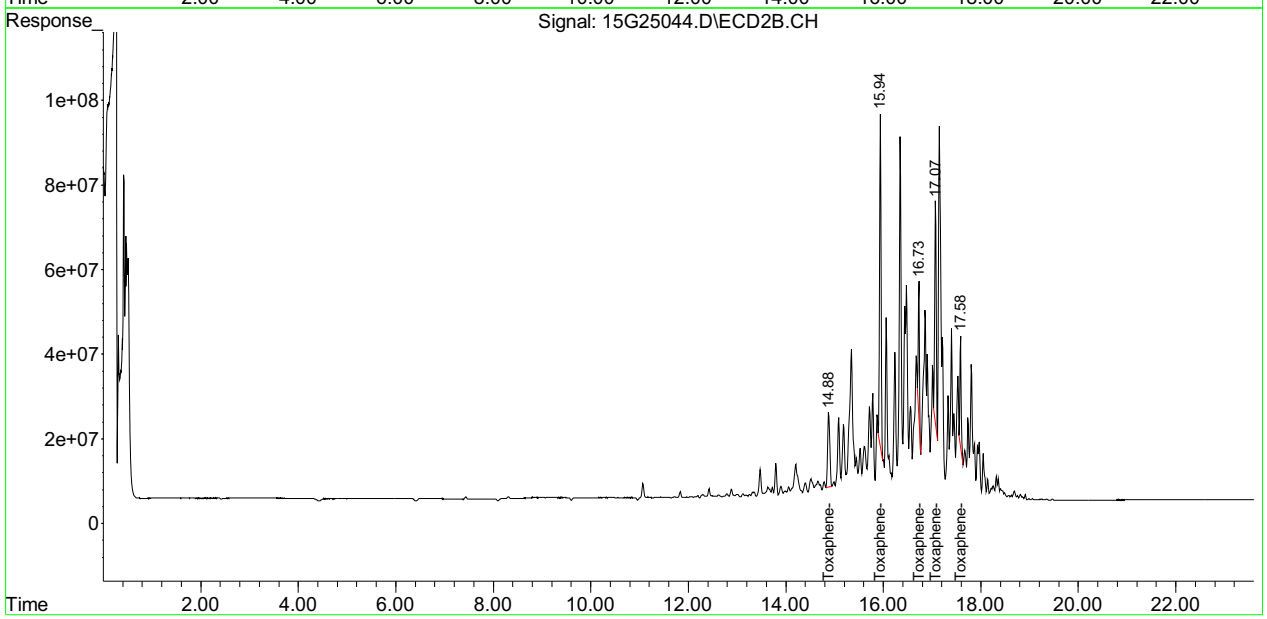
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 18:36 (#1); 18 Feb 2011 19:04 (#2)
Operator : ECL
Sample : WG357035-03 TOX ICAL 500 PPB
Misc : 1,1 STD43915
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:44:36 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25045.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 19:04 (#1); 18 Feb 2011 19:33 (#2)
Operator : ECL
Sample : WG357035-04 TOX ICAL 200 PPB
Misc : 1,1 STD43915
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:44:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:44:36 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

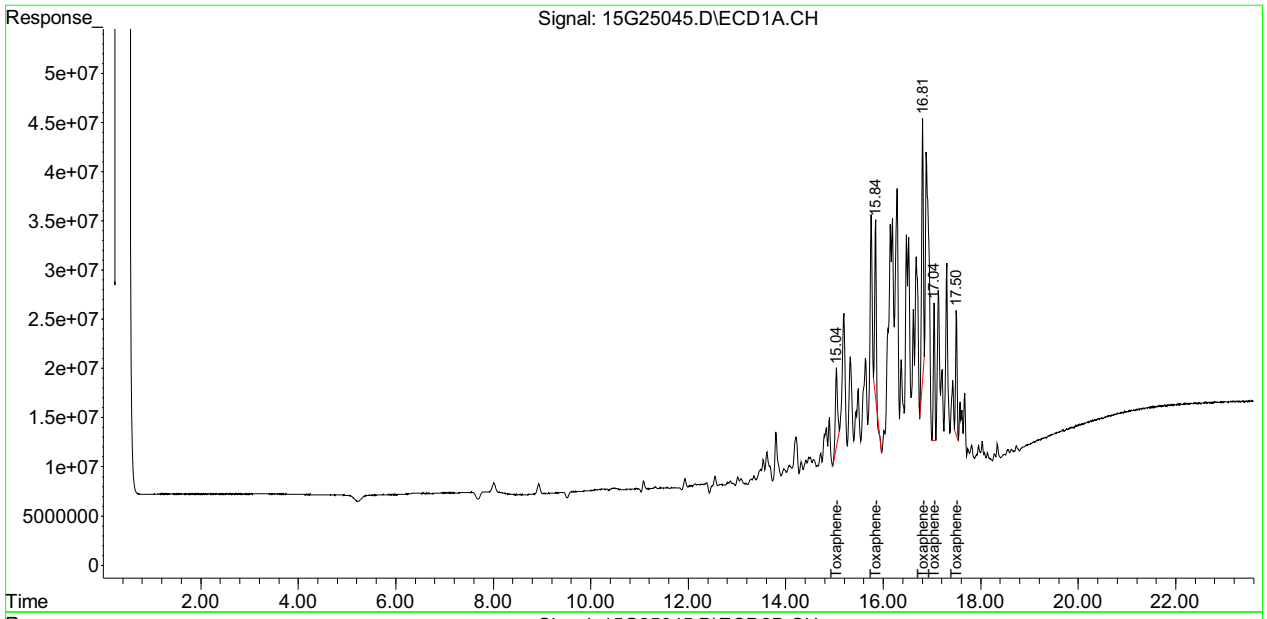
| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) L1 Toxaphene-1 | 15.04 | 14.88 | 247.4E6 | 223.3E6 | 205.679 | 220.698 |
| 2) L1 Toxaphene-2 | 15.84 | 15.94 | 368.1E6 | 662.2E6 | 207.063 | 212.916 |
| 3) L1 Toxaphene-3 | 16.81 | 16.73 | 661.7E6 | 198.7E6 | 206.910 | 212.730 |
| 4) L1 Toxaphene-4 | 17.04 | 17.07 | 289.0E6 | 467.9E6 | 199.533 | 216.991 |
| 5) L1 Toxaphene-5 | 17.50 | 17.58 | 263.3E6 | 171.5E6 | 191.485 | 209.964 |
| Sum Toxaphene-1 | | | 1829.6E6 | 1723.5E6 | 1010.669 | 1073.300 |
| Average Toxaphene-1 | | | | | 202.134 | 214.660 |

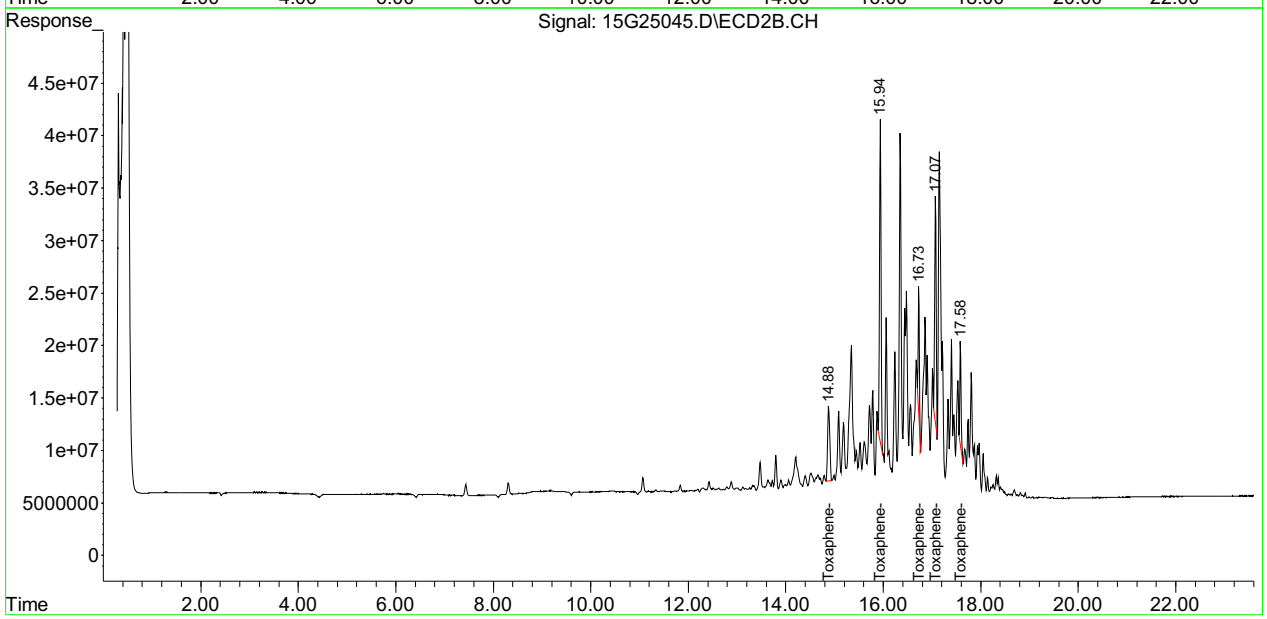
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25045.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 19:04 (#1); 18 Feb 2011 19:33 (#2)
Operator : ECL
Sample : WG357035-04 TOX ICAL 200 PPB
Misc : 1,1 STD43915
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:44:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:44:36 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25046.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 19:33 (#1); 18 Feb 2011 20:01 (#2)
Operator : ECL
Sample : WG357035-05 TOX ICAL 100 PPB
Misc : 1,1 STD43915
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:43:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:43:46 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

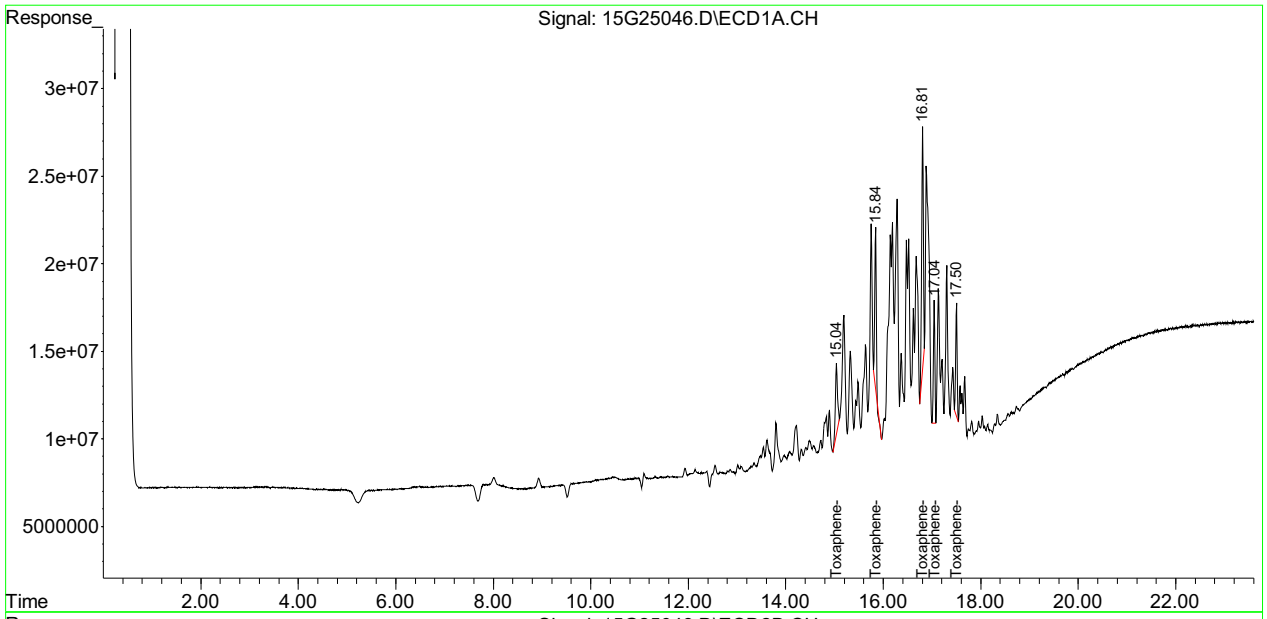
| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) L1 Toxaphene-1 | 15.04 | 14.87 | 126.1E6 | 117.3E6 | 111.370 | 127.008 |
| 2) L1 Toxaphene-2 | 15.84 | 15.94 | 185.6E6 | 338.7E6 | 108.561 | 117.258 |
| 3) L1 Toxaphene-3 | 16.81 | 16.73 | 338.0E6 | 100.3E6 | 110.717 | 116.695 |
| 4) L1 Toxaphene-4 | 17.04 | 17.07 | 145.6E6 | 233.9E6 | 103.619 | 117.243 |
| 5) L1 Toxaphene-5 | 17.50 | 17.58 | 131.4E6 | 88236450 | 96.164 | 117.069 |
| Sum Toxaphene-1 | | | 926.8E6 | 878.5E6 | 530.431 | 595.273 |
| Average Toxaphene-1 | | | | | 106.086 | 119.055 |

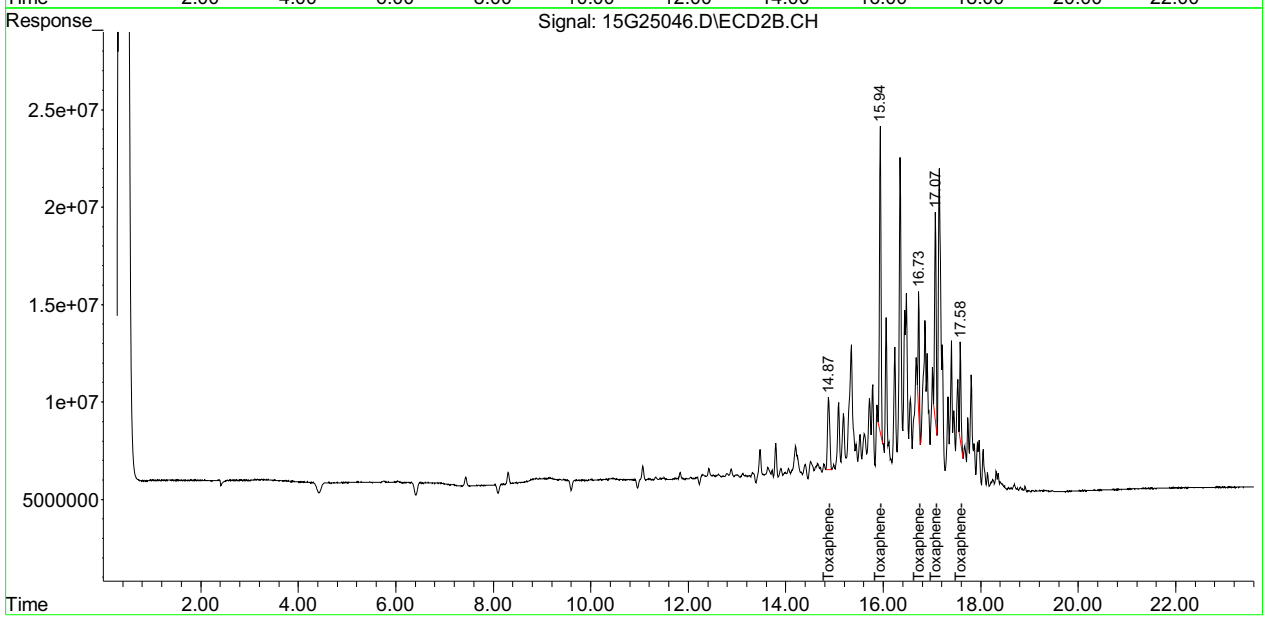
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25046.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 19:33 (#1); 18 Feb 2011 20:01 (#2)
Operator : ECL
Sample : WG357035-05 TOX ICAL 100 PPB
Misc : 1,1 STD43915
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:43:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:43:46 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25047.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 20:01 (#1); 18 Feb 2011 20:29 (#2)
Operator : ECL
Sample : WG357035-05 TOX ALT 500 PPB
Misc : 1,1 STD43915
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:46:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:45:34 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

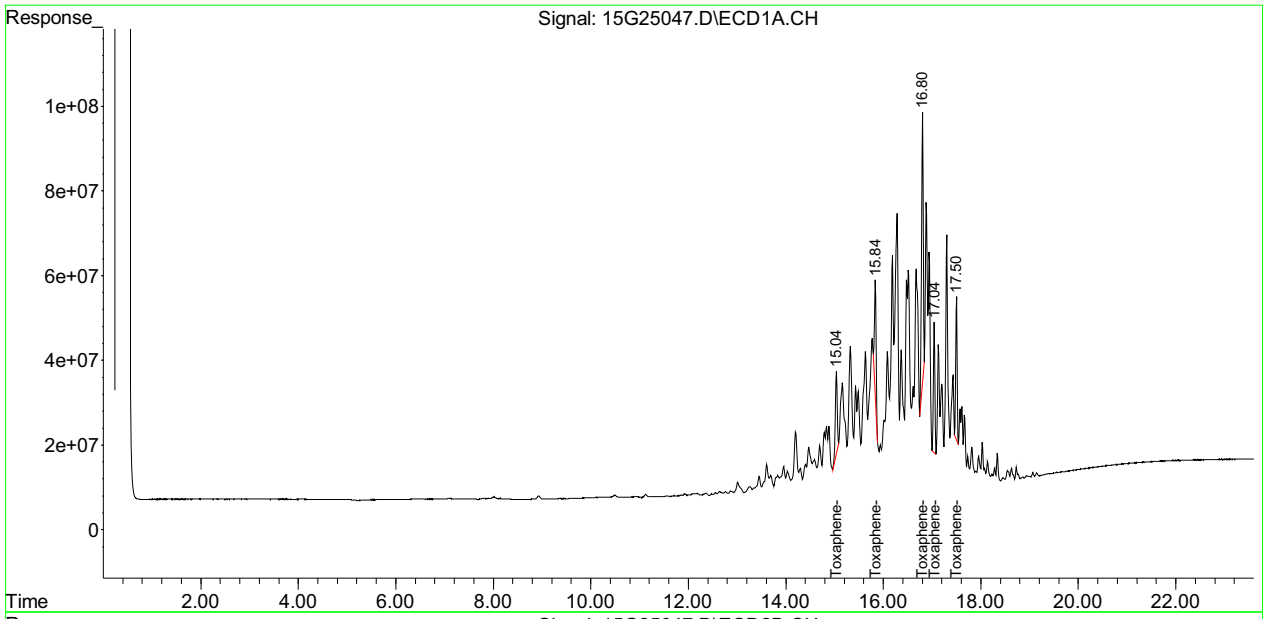
| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) L1 Toxaphene-1 | 15.04 | 14.88 | 514.6E6 | 525.3E6 | 403.612 | 480.488 |
| 2) L1 Toxaphene-2 | 15.84 | 15.94 | 684.7E6 | 1545.3E6 | 363.251 | 466.064 # |
| 3) L1 Toxaphene-3 | 16.80 | 16.73 | 1568.8E6 | 200.5E6 | 464.328 | 199.101 # |
| 4) L1 Toxaphene-4 | 17.04 | 17.07 | 651.8E6 | 1045.3E6 | 429.111 | 454.596 |
| 5) L1 Toxaphene-5 | 17.50 | 17.58 | 666.3E6 | 505.8E6 | 474.368 | 575.489 |
| Sum Toxaphene-1 | | | 4086.3E6 | 3822.3E6 | 2134.669 | 2175.739 |
| Average Toxaphene-1 | | | | | 426.934 | 435.148 |

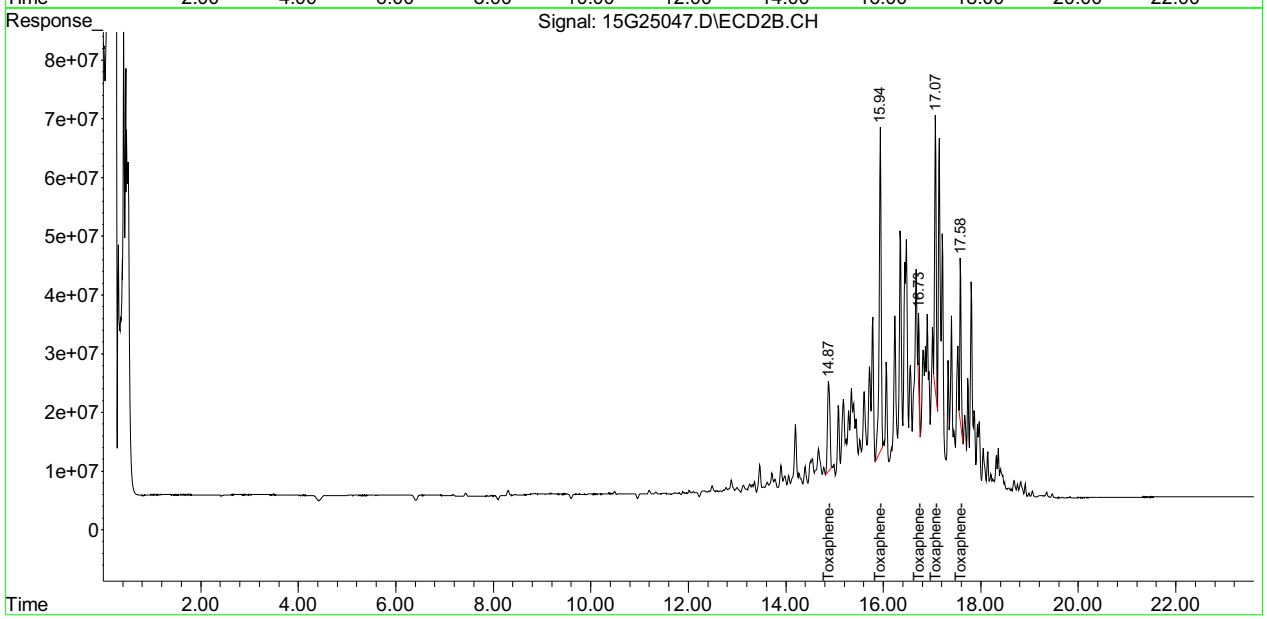
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25047.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 20:01 (#1); 18 Feb 2011 20:29 (#2)
Operator : ECL
Sample : WG357035-05 TOX ALT 500 PPB
Misc : 1,1 STD43915
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Feb 19 10:46:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Sat Feb 19 10:45:34 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25048.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 20:29 (#1); 18 Feb 2011 20:58 (#2)
Operator : ECL
Sample : WG357037-01 PEST ICAL 200 PPB
Misc : 1,1 STD43387
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:04 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

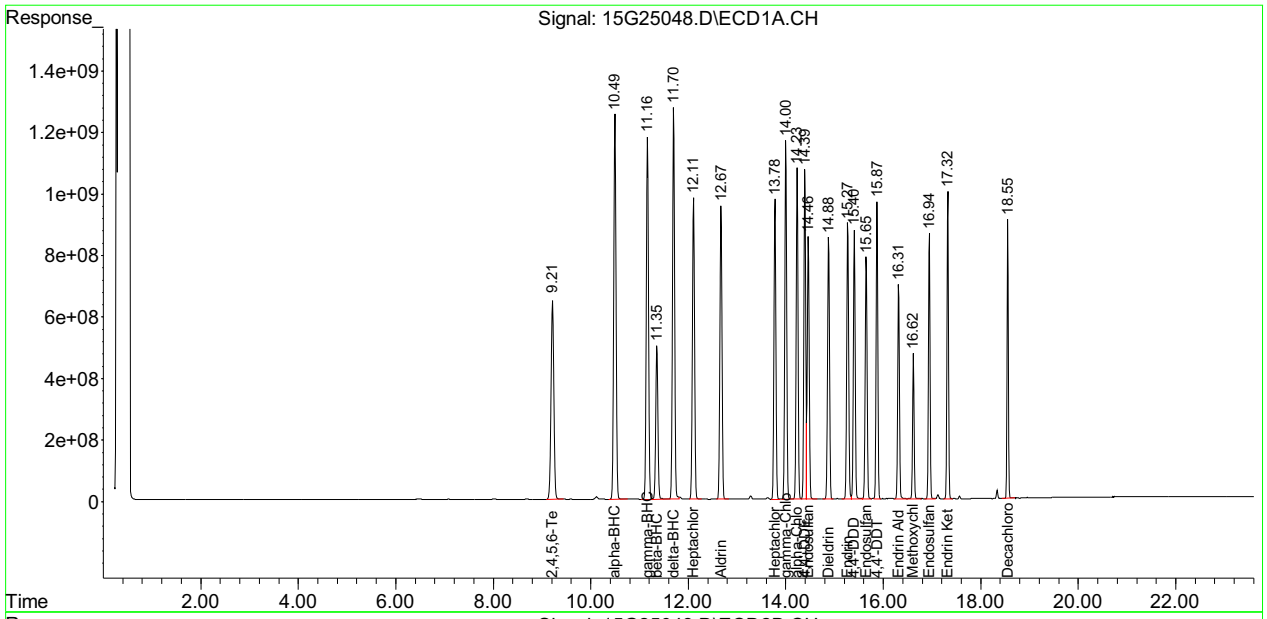
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.21 | 9.13 | 25842.3E6 | 18174.4E6 | 199.017 | 188.848 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 995.08%# | 944.24%# |
| 22) S | Decachlorobiphen | 18.55 | 18.86 | 16424.3E6 | 11680.5E6 | 184.689 | 182.412 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 923.44%# | 912.06%# |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.49 | 10.49 | 41293.4E6 | 28102.0E6 | 214.410 | 200.897 |
| 3) | gamma-BHC | 11.16 | 11.23 | 37068.0E6 | 27238.1E6 | 207.325 | 201.419 |
| 4) | beta-BHC | 11.35 | 11.41 | 15528.4E6 | 11464.1E6 | 197.505 | 192.852 |
| 5) | Heptachlor | 12.11 | 12.08 | 30095.5E6 | 21822.7E6 | 174.691 | 170.404 |
| 6) | delta-BHC | 11.70 | 11.98 | 38127.7E6 | 28050.2E6 | 212.396 | 203.813 |
| 7) | Aldrin | 12.67 | 12.69 | 28746.5E6 | 22310.7E6 | 185.678 | 179.082 |
| 8) | Heptachlor Epoxi | 13.78 | 13.74 | 26954.1E6 | 18308.4E6 | 173.221 | 176.810 |
| 9) | gamma-Chlordane | 14.00 | 14.08 | 31406.0E6 | 22454.0E6 | 194.249 | 191.316 |
| 10) | alpha-Chlordane | 14.23 | 14.34 | 28277.5E6 | 21285.7E6 | 186.763 | 186.909 |
| 11) | Endosulfan I | 14.46 | 14.43 | 23295.4E6 | 16013.9E6 | 169.112 | 170.731 |
| 12) | 4,4'-DDE | 14.39 | 14.65 | 28109.8E6 | 20562.0E6 | 197.210 | 190.672 |
| 13) | Dieldrin | 14.88 | 14.91 | 23760.0E6 | 20220.4E6 | 177.001 | 182.178 |
| 14) | Endrin | 15.27 | 15.43 | 24619.1E6 | 16658.6E6 | 183.889 | 179.867 |
| 15) | 4,4'-DDD | 15.40 | 15.64 | 22488.4E6 | 16633.4E6 | 192.952 | 189.758 |
| 16) | Endosulfan II | 15.65 | 15.80 | 21397.2E6 | 16605.6E6 | 173.742 | 175.817 |
| 17) | 4,4'-DDT | 15.87 | 16.15 | 22980.1E6 | 17180.4E6 | 195.378 | 194.755 |
| 18) | Endrin Aldehyde | 16.31 | 16.33 | 16964.3E6 | 11821.2E6 | 172.633 | 169.769 |
| 19) | Endosulfan Sulfa | 16.94 | 16.74 | 19354.8E6 | 14840.6E6 | 181.554 | 177.963 |
| 20) | Methoxychlor | 16.62 | 17.13 | 10297.6E6 | 7537.6E6 | 180.379 | 178.256 |
| 21) | Endrin Ketone | 17.32 | 17.45 | 21452.2E6 | 15847.1E6 | 182.181 | 183.547 |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25048.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 20:29 (#1); 18 Feb 2011 20:58 (#2)
Operator : ECL
Sample : WG357037-01 PEST ICAL 200 PPB
Misc : 1,1 STD43387
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:04 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25049.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 20:58 (#1); 18 Feb 2011 21:26 (#2)
Operator : ECL
Sample : WG357037-02 PEST ICAL 100 PPB
Misc : 1,1 STD43387
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.21 | 9.13 | 12962.8E6 | 9237.6E6 | 99.829 | 95.962 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 499.14%# | 479.81%# |
| 22) S | Decachlorobiphen | 18.55 | 18.86 | 8253.9E6 | 5757.0E6 | 92.815 | 89.906 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 464.07%# | 449.53%# |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.49 | 10.49 | 20560.1E6 | 14515.9E6 | 106.755 | 103.761 |
| 3) | gamma-BHC | 11.16 | 11.23 | 18565.4E6 | 13721.5E6 | 103.838 | 101.444 |
| 4) | beta-BHC | 11.35 | 11.41 | 7744.9E6 | 5729.1E6 | 98.506 | 96.316 |
| 5) | Heptachlor | 12.10 | 12.08 | 16095.6E6 | 11642.6E6 | 93.428 | 90.912 |
| 6) | delta-BHC | 11.70 | 11.98 | 19263.8E6 | 14043.5E6 | 107.311 | 102.040 |
| 7) | Aldrin | 12.67 | 12.69 | 15147.2E6 | 11889.7E6 | 97.838 | 95.436 |
| 8) | Heptachlor Epoxi | 13.77 | 13.74 | 14426.3E6 | 10023.4E6 | 92.711 | 96.799 |
| 9) | gamma-Chlordane | 14.00 | 14.08 | 16066.4E6 | 11440.8E6 | 99.372 | 97.479 |
| 10) | alpha-Chlordane | 14.23 | 14.34 | 15027.1E6 | 10885.4E6 | 99.249 | 95.584 |
| 11) | Endosulfan I | 14.46 | 14.43 | 12956.4E6 | 8583.8E6 | 94.056 | 91.515 |
| 12) | 4,4'-DDE | 14.39 | 14.65 | 14678.7E6 | 10699.6E6 | 102.982 | 99.218 |
| 13) | Dieldrin | 14.88 | 14.91 | 13517.2E6 | 10627.0E6 | 100.696 | 95.745 |
| 14) | Endrin | 15.27 | 15.43 | 13034.9E6 | 8769.3E6 | 97.363 | 94.684 |
| 15) | 4,4'-DDD | 15.40 | 15.64 | 11813.7E6 | 8616.0E6 | 101.363 | 98.293 |
| 16) | Endosulfan II | 15.65 | 15.80 | 11649.9E6 | 8679.6E6 | 94.595 | 91.898 |
| 17) | 4,4'-DDT | 15.87 | 16.15 | 11773.3E6 | 8772.0E6 | 100.098 | 99.439 |
| 18) | Endrin Aldehyde | 16.31 | 16.33 | 8884.3E6 | 6199.2E6 | 90.409 | 89.030 |
| 19) | Endosulfan Sulfa | 16.94 | 16.74 | 10032.7E6 | 7643.3E6 | 94.110 | 91.655 |
| 20) | Methoxychlor | 16.61 | 17.13 | 5433.9E6 | 3826.3E6 | 95.183 | 90.489 |
| 21) | Endrin Ketone | 17.32 | 17.45 | 11157.7E6 | 8146.8E6 | 94.756 | 94.359 |

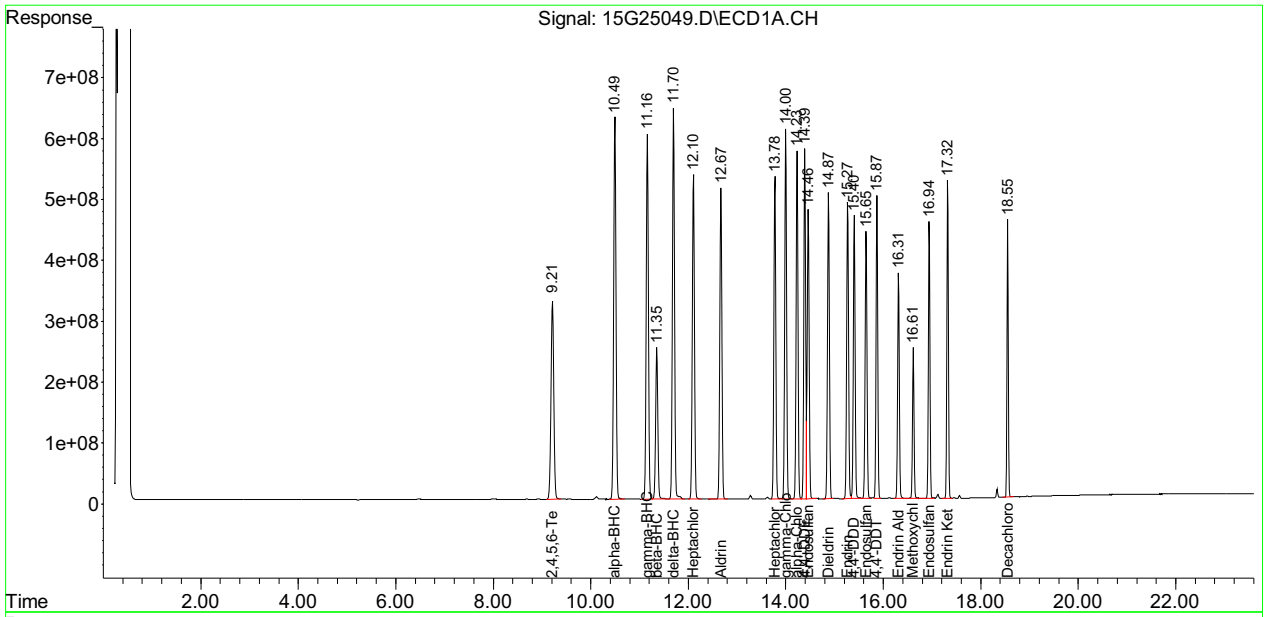
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

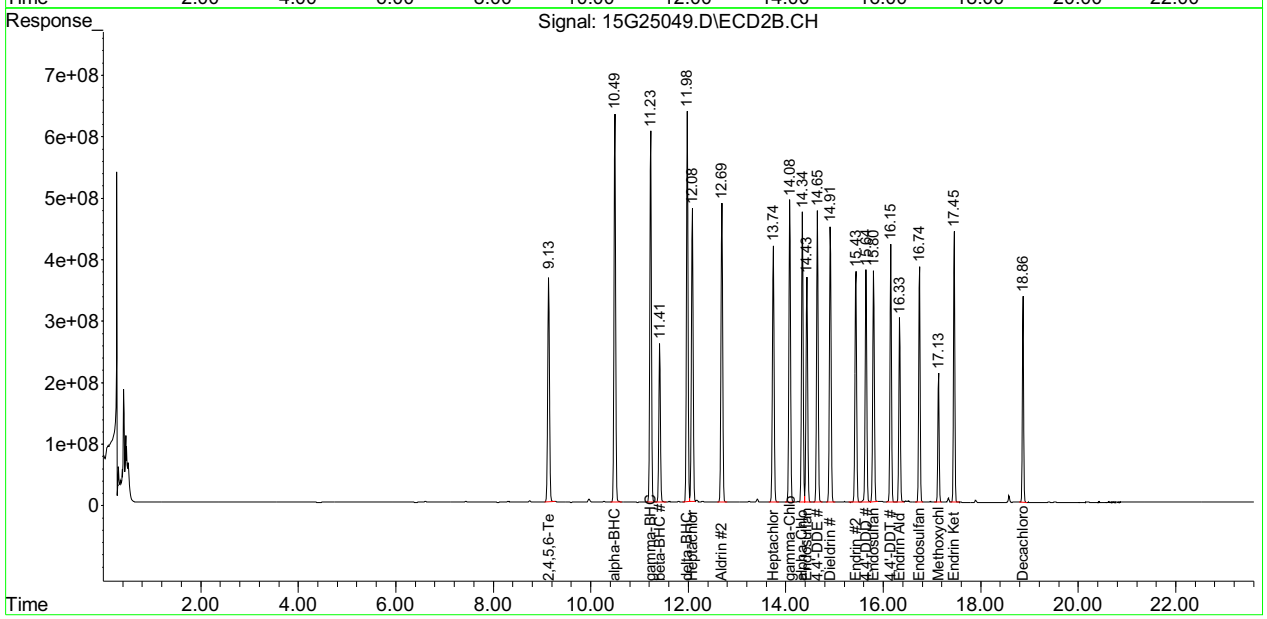


Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25049.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 20:58 (#1); 18 Feb 2011 21:26 (#2)
Operator : ECL
Sample : WG357037-02 PEST ICAL 100 PPB
Misc : 1,1 STD43387
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25050.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 21:26 (#1); 18 Feb 2011 21:54 (#2)
Operator : ECL
Sample : WG357037-03 PEST ICAL 20 PPB
Misc : 1,1 STD43387
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:42 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.22 | 9.13 | 2622.8E6 | 1922.2E6 | 20.199 | 19.962 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 101.00% | 99.81% |
| 22) S | Decachlorobiphen | 18.55 | 18.87 | 1710.1E6 | 1221.9E6 | 19.230 | 19.083 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 96.15% | 95.41% |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.49 | 10.49 | 3969.4E6 | 2914.1E6 | 20.610 | 20.822 |
| 3) | gamma-BHC | 11.16 | 11.23 | 3646.0E6 | 2759.8E6 | 20.393 | 20.403 |
| 4) | beta-BHC | 11.35 | 11.41 | 1568.1E6 | 1184.0E6 | 19.944 | 19.897 |
| 5) | Heptachlor | 12.11 | 12.08 | 3536.4E6 | 2626.6E6 | 20.527 | 20.510 |
| 6) | delta-BHC | 11.70 | 11.98 | 3744.8E6 | 2824.3E6 | 20.861 | 20.521 |
| 7) | Aldrin | 12.67 | 12.69 | 3208.9E6 | 2599.6E6 | 20.727 | 20.866 |
| 8) | Heptachlor Epoxi | 13.78 | 13.74 | 3171.2E6 | 2133.9E6 | 20.380 | 20.607 |
| 9) | gamma-Chlordane | 14.00 | 14.08 | 3246.9E6 | 2369.3E6 | 20.082 | 20.187 |
| 10) | alpha-Chlordane | 14.23 | 14.34 | 3045.0E6 | 2272.0E6 | 20.111 | 19.950 |
| 11) | Endosulfan I | 14.46 | 14.43 | 2814.7E6 | 1926.3E6 | 20.433 | 20.537 |
| 12) | 4,4'-DDE | 14.39 | 14.65 | 2956.9E6 | 2243.2E6 | 20.745 | 20.802 |
| 13) | Dieldrin | 14.88 | 14.91 | 2814.2E6 | 2291.9E6 | 20.964 | 20.649 |
| 14) | Endrin | 15.27 | 15.44 | 2770.1E6 | 1919.4E6 | 20.691 | 20.724 |
| 15) | 4,4'-DDD | 15.41 | 15.64 | 2426.0E6 | 1823.7E6 | 20.815 | 20.805 |
| 16) | Endosulfan II | 15.65 | 15.80 | 2483.2E6 | 1910.3E6 | 20.163 | 20.226 |
| 17) | 4,4'-DDT | 15.87 | 16.15 | 2359.0E6 | 1816.6E6 | 20.057 | 20.592 |
| 18) | Endrin Aldehyde | 16.31 | 16.33 | 1934.4E6 | 1402.0E6 | 19.685 | 20.134 |
| 19) | Endosulfan Sulfa | 16.94 | 16.74 | 2112.6E6 | 1665.0E6 | 19.816 | 19.966 |
| 20) | Methoxychlor | 16.62 | 17.13 | 1151.3E6 | 837.3E6 | 20.167 | 19.801 |
| 21) | Endrin Ketone | 17.32 | 17.45 | 2347.8E6 | 1739.9E6 | 19.939 | 20.152 |

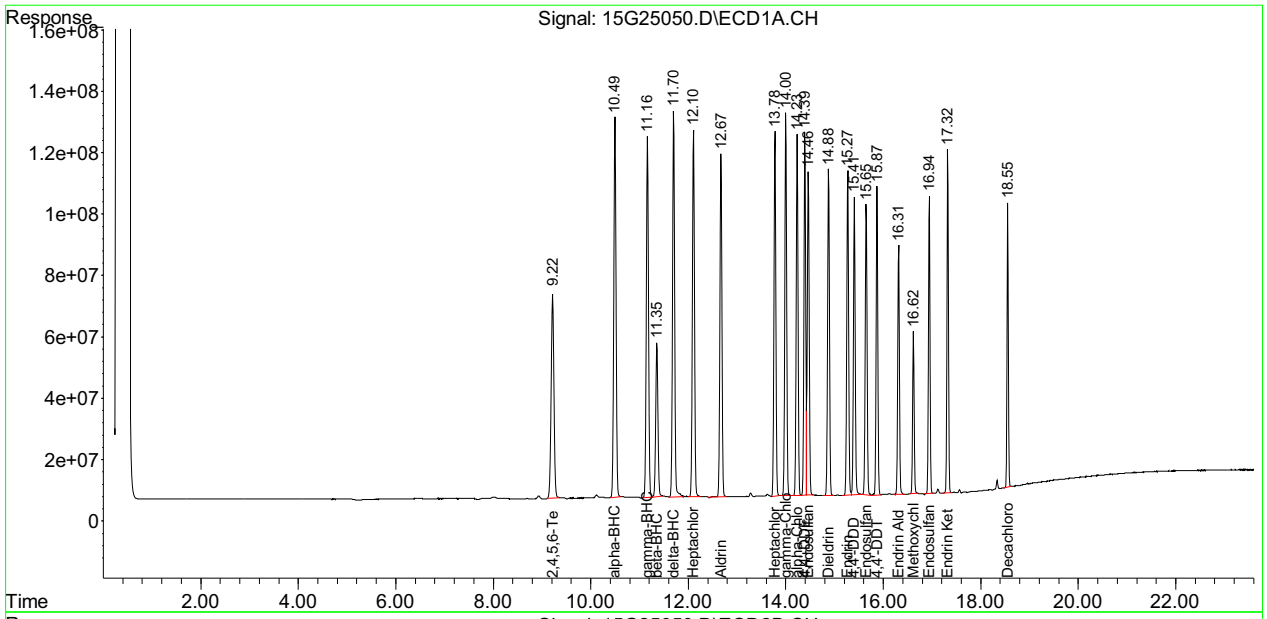
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25050.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 21:26 (#1); 18 Feb 2011 21:54 (#2)
Operator : ECL
Sample : WG357037-03 PEST ICAL 20 PPB
Misc : 1,1 STD43387
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:42 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25051.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 21:54 (#1); 18 Feb 2011 22:23 (#2)
Operator : ECL
Sample : WG357037-04 PEST ICAL 10 PPB
Misc : 1,1 STD43387
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:54 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.22 | 9.13 | 1319.5E6 | 987.2E6 | 10.162 | 10.246 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 50.81% | 51.23% |
| 22) S | Decachlorobiphen | 18.55 | 18.87 | 895.3E6 | 643.7E6 | 10.067 | 10.053 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 50.33% | 50.27% |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.50 | 10.49 | 1928.6E6 | 1459.4E6 | 10.014 | 10.421 |
| 3) | gamma-BHC | 11.16 | 11.23 | 1815.4E6 | 1388.3E6 | 10.154 | 10.262 |
| 4) | beta-BHC | 11.36 | 11.41 | 791.0E6 | 610.7E6 | 10.061 | 10.256 |
| 5) | Heptachlor | 12.11 | 12.08 | 1798.5E6 | 1362.1E6 | 10.439 | 10.636 |
| 6) | delta-BHC | 11.70 | 11.98 | 1823.5E6 | 1410.2E6 | 10.158 | 10.246 |
| 7) | Aldrin | 12.67 | 12.69 | 1629.5E6 | 1326.1E6 | 10.525 | 10.645 |
| 8) | Heptachlor Epoxi | 13.78 | 13.74 | 1636.4E6 | 1098.1E6 | 10.516 | 10.605 |
| 9) | gamma-Chlordane | 14.00 | 14.08 | 1627.2E6 | 1204.6E6 | 10.065 | 10.264 |
| 10) | alpha-Chlordane | 14.23 | 14.34 | 1517.7E6 | 1164.1E6 | 10.024 | 10.222 |
| 11) | Endosulfan I | 14.46 | 14.43 | 1433.4E6 | 970.7E6 | 10.406 | 10.349 |
| 12) | 4,4'-DDE | 14.39 | 14.65 | 1453.4E6 | 1124.1E6 | 10.197 | 10.424 |
| 13) | Dieldrin | 14.88 | 14.91 | 1312.7E6 | 1164.6E6 | 9.779 | 10.492 |
| 14) | Endrin | 15.27 | 15.44 | 1390.9E6 | 960.9E6 | 10.389 | 10.375 |
| 15) | 4,4'-DDD | 15.41 | 15.65 | 1200.0E6 | 909.0E6 | 10.296 | 10.370 |
| 16) | Endosulfan II | 15.65 | 15.80 | 1273.9E6 | 985.5E6 | 10.344 | 10.434 |
| 17) | 4,4'-DDT | 15.87 | 16.15 | 1204.5E6 | 912.4E6 | 10.241 | 10.343 |
| 18) | Endrin Aldehyde | 16.31 | 16.33 | 1011.1E6 | 721.3E6 | 10.289 | 10.359 |
| 19) | Endosulfan Sulfa | 16.94 | 16.74 | 1077.1E6 | 860.5E6 | 10.103 | 10.319 |
| 20) | Methoxychlor | 16.62 | 17.13 | 594.9E6 | 437.3E6 | 10.421 | 10.343 |
| 21) | Endrin Ketone | 17.32 | 17.45 | 1200.6E6 | 891.7E6 | 10.196 | 10.328 |

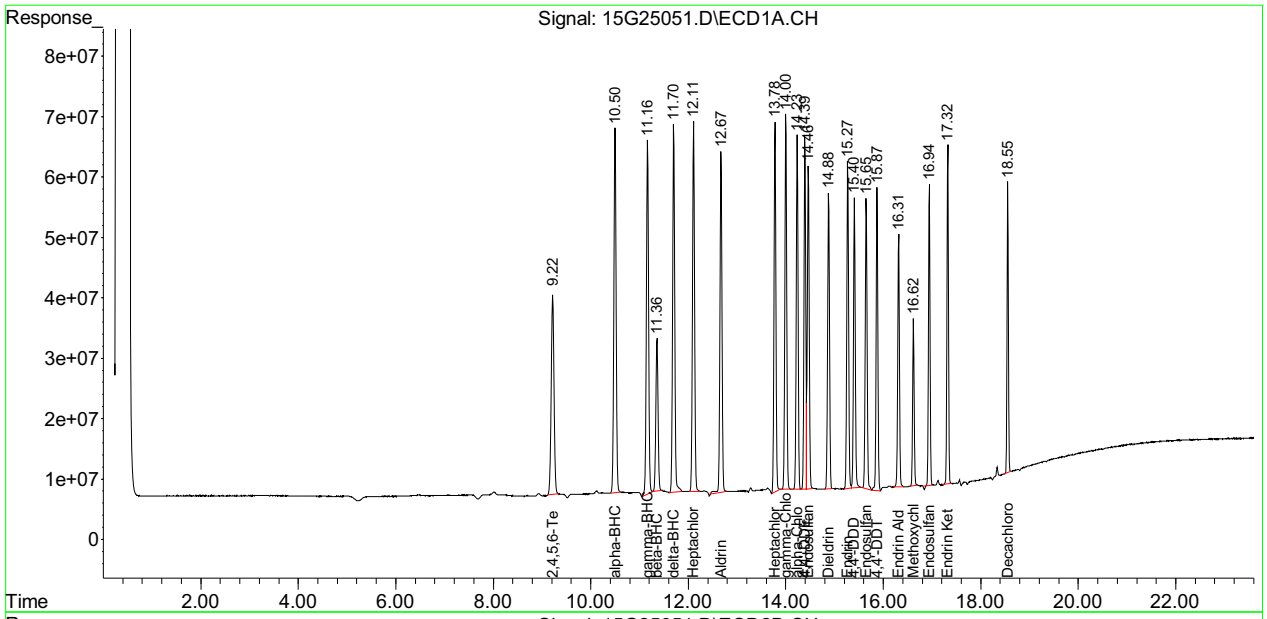
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25051.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 21:54 (#1); 18 Feb 2011 22:23 (#2)
Operator : ECL
Sample : WG357037-04 PEST ICAL 10 PPB
Misc : 1,1 STD43387
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:51:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:51:54 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 22:23 (#1); 18 Feb 2011 22:51 (#2)
Operator : ECL
Sample : WG357037-05 PEST ICAL 4 PPB
Misc : 1,1 STD43387
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:52:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:52:08 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

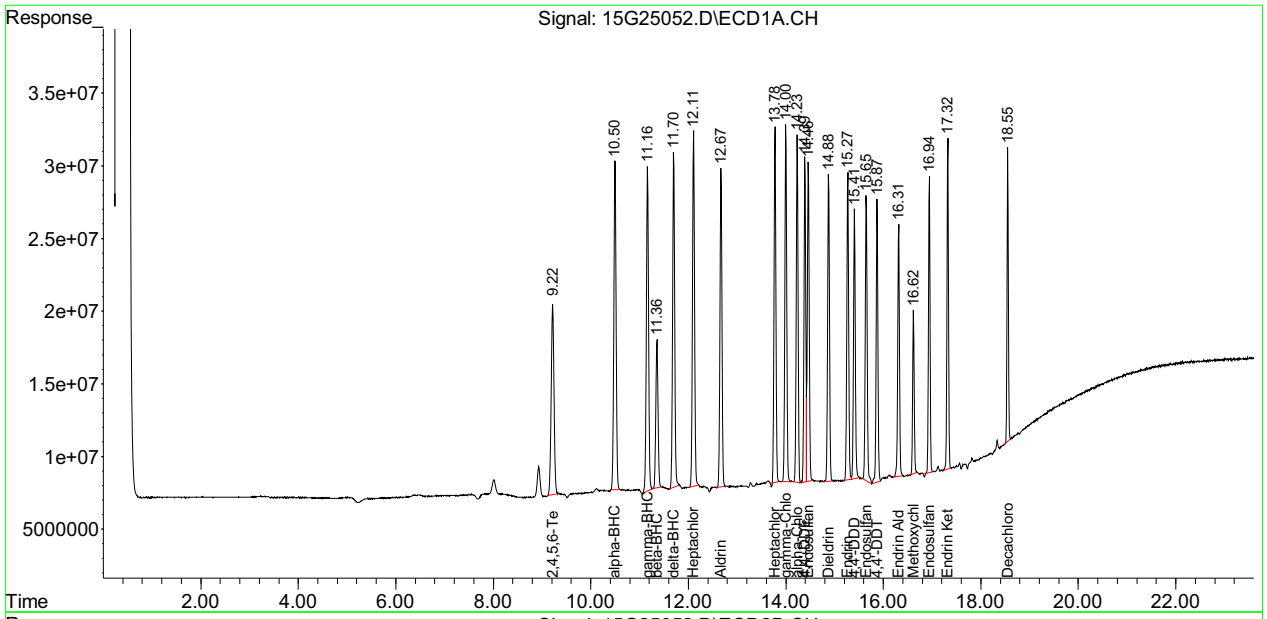
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.22 | 9.13 | 519.7E6 | 393.8E6 | 4.002 | 4.081 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 20.01%# | 20.41%# |
| 22) S | Decachlorobiphen | 18.55 | 18.86 | 377.3E6 | 271.1E6 | 4.243 | 4.233 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 21.22%# | 21.16%# |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.50 | 10.49 | 724.3E6 | 542.9E6 | 3.761 | 3.873 |
| 3) | gamma-BHC | 11.16 | 11.23 | 693.6E6 | 527.6E6 | 3.880 | 3.899 |
| 4) | beta-BHC | 11.36 | 11.41 | 318.9E6 | 242.7E6 | 4.056 | 4.076 |
| 5) | Heptachlor | 12.11 | 12.08 | 717.8E6 | 538.9E6 | 4.166 | 4.208 |
| 6) | delta-BHC | 11.70 | 11.98 | 673.9E6 | 533.3E6 | 3.754 | 3.875 |
| 7) | Aldrin | 12.67 | 12.69 | 622.3E6 | 509.2E6 | 4.020 | 4.087 |
| 8) | Heptachlor Epoxi | 13.78 | 13.74 | 646.2E6 | 415.1E6 | 4.153 | 4.008 |
| 9) | gamma-Chlordane | 14.00 | 14.08 | 648.0E6 | 473.0E6 | 4.008 | 4.030 |
| 10) | alpha-Chlordane | 14.23 | 14.34 | 614.9E6 | 464.4E6 | 4.061 | 4.078 |
| 11) | Endosulfan I | 14.46 | 14.43 | 583.1E6 | 394.3E6 | 4.233 | 4.203 |
| 12) | 4,4'-DDE | 14.39 | 14.65 | 561.4E6 | 429.0E6 | 3.938 | 3.978 |
| 13) | Dieldrin | 14.88 | 14.91 | 558.7E6 | 453.3E6 | 4.162 | 4.084 |
| 14) | Endrin | 15.27 | 15.43 | 548.4E6 | 379.1E6 | 4.096 | 4.094 |
| 15) | 4,4'-DDD | 15.41 | 15.64 | 464.8E6 | 351.9E6 | 3.988 | 4.014 |
| 16) | Endosulfan II | 15.65 | 15.80 | 530.7E6 | 395.4E6 | 4.309 | 4.187 |
| 17) | 4,4'-DDT | 15.87 | 16.15 | 476.2E6 | 348.1E6 | 4.049 | 3.946 |
| 18) | Endrin Aldehyde | 16.31 | 16.33 | 419.9E6 | 300.7E6 | 4.273 | 4.318 |
| 19) | Endosulfan Sulfa | 16.94 | 16.74 | 443.5E6 | 348.1E6 | 4.160 | 4.174 |
| 20) | Methoxychlor | 16.62 | 17.13 | 241.7E6 | 179.3E6 | 4.234 | 4.241 |
| 21) | Endrin Ketone | 17.32 | 17.45 | 489.3E6 | 355.3E6 | 4.155 | 4.115 |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 22:23 (#1); 18 Feb 2011 22:51 (#2)
Operator : ECL
Sample : WG357037-05 PEST ICAL 4 PPB
Misc : 1,1 STD43387
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:52:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:52:08 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25053.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 22:51 (#1); 18 Feb 2011 23:19 (#2)
Operator : ECL
Sample : WG357037-06 PEST ICAL 1 PPB
Misc : 1,1 STD43387
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:50:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:50:48 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

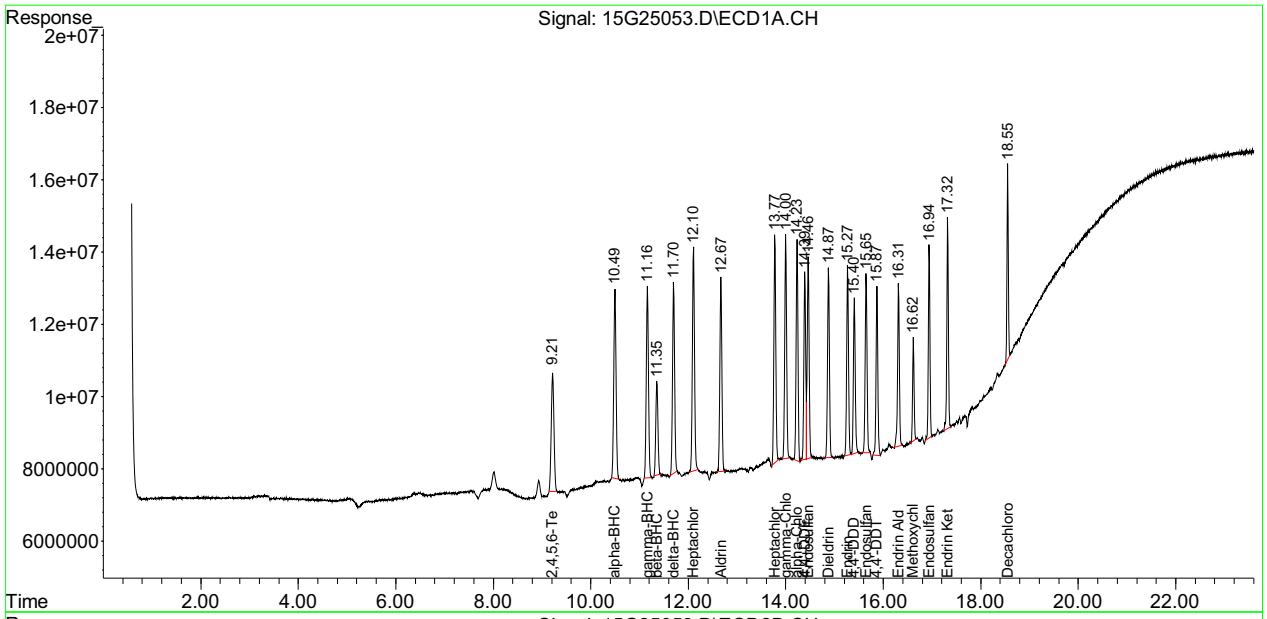
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.22 | 9.13 | 127.3E6 | 102.6E6 | 0.980 | 1.066 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 4.90%# | 5.33%# |
| 22) S | Decachlorobiphen | 18.55 | 18.86 | 99553837 | 74990478 | 1.119 | 1.171 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 5.59%# | 5.86%# |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.50 | 10.49 | 171.1E6 | 127.9E6 | 0.888 | 0.914 |
| 3) | gamma-BHC | 11.16 | 11.23 | 164.5E6 | 129.7E6 | 0.920 | 0.959 |
| 4) | beta-BHC | 11.35 | 11.41 | 79420315 | 61739604 | 1.010 | 1.039 |
| 5) | Heptachlor | 12.11 | 12.08 | 186.1E6 | 140.6E6 | 1.080 | 1.098 |
| 6) | delta-BHC | 11.70 | 11.98 | 155.7E6 | 129.6E6 | 0.867 | 0.941 |
| 7) | Aldrin | 12.67 | 12.69 | 154.7E6 | 127.2E6 | 0.999 | 1.021 |
| 8) | Heptachlor Epoxi | 13.77 | 13.74 | 170.9E6 | 109.2E6 | 1.098 | 1.055 |
| 9) | gamma-Chlordane | 14.00 | 14.08 | 165.3E6 | 120.3E6 | 1.022 | 1.025 |
| 10) | alpha-Chlordane | 14.23 | 14.34 | 159.0E6 | 121.9E6 | 1.050 | 1.071 |
| 11) | Endosulfan I | 14.46 | 14.43 | 150.6E6 | 104.9E6 | 1.093 | 1.119 |
| 12) | 4,4'-DDE | 14.39 | 14.65 | 134.4E6 | 105.4E6 | 0.943 | 0.977 |
| 13) | Dieldrin | 14.88 | 14.91 | 139.8E6 | 114.2E6 | 1.042 | 1.029 |
| 14) | Endrin | 15.27 | 15.43 | 135.2E6 | 97864204 | 1.010 | 1.057 |
| 15) | 4,4'-DDD | 15.40 | 15.64 | 111.2E6 | 86556940 | 0.954 | 0.987 |
| 16) | Endosulfan II | 15.65 | 15.80 | 131.2E6 | 103.9E6 | 1.066 | 1.100 |
| 17) | 4,4'-DDT | 15.87 | 16.15 | 115.6E6 | 86574497 | 0.983 | 0.981 |
| 18) | Endrin Aldehyde | 16.31 | 16.33 | 113.1E6 | 79281418 | 1.151 | 1.139 |
| 19) | Endosulfan Sulfa | 16.94 | 16.74 | 118.3E6 | 93385128 | 1.110 | 1.120 |
| 20) | Methoxychlor | 16.62 | 17.13 | 59214694 | 47325221 | 1.037 | 1.119 |
| 21) | Endrin Ketone | 17.32 | 17.45 | 127.9E6 | 92347876 | 1.086 | 1.070 |

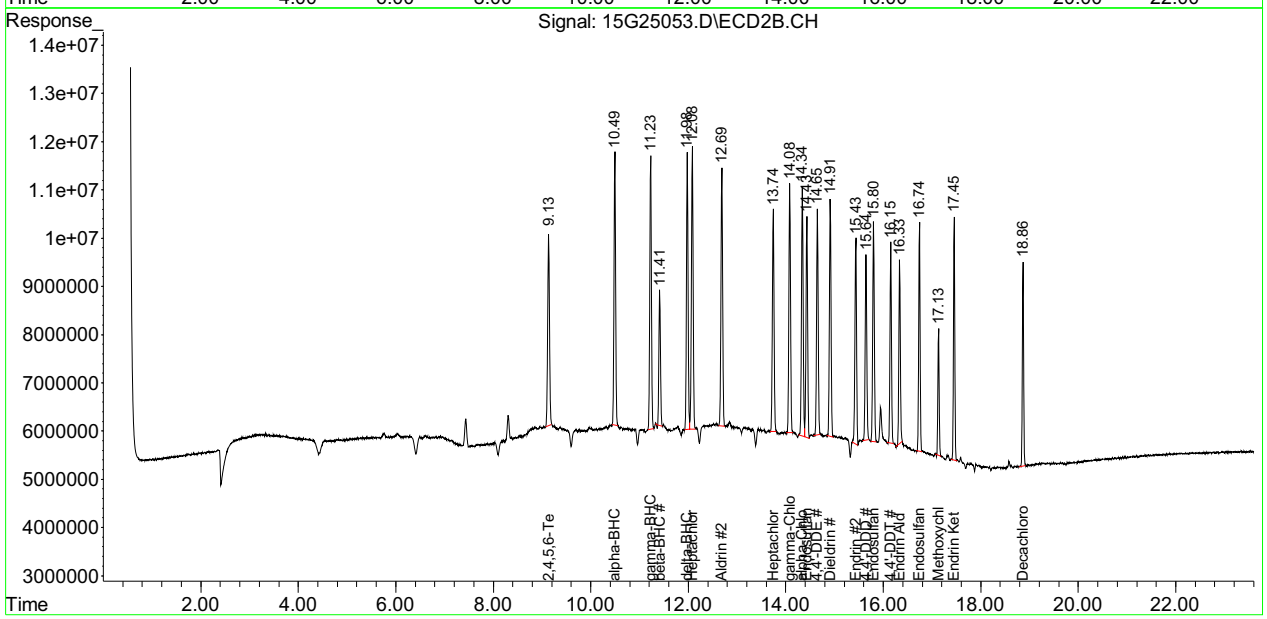
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25053.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 22:51 (#1); 18 Feb 2011 23:19 (#2)
Operator : ECL
Sample : WG357037-06 PEST ICAL 1 PPB
Misc : 1,1 STD43387
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:50:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:50:48 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25054.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 23:19 (#1); 18 Feb 2011 23:48 (#2)
Operator : ECL
Sample : WG357037-07 PEST ALT 20 PPB
Misc : 1,1 STD43387
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:52:34 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:52:08 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.22 | 9.13 | 2689.9E6 | 1990.1E6 | 20.715 | 20.620 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 103.57% | 103.10% |
| 22) S | Decachlorobiphen | 18.55 | 18.86 | 1499.6E6 | 1066.4E6 | 16.863 | 16.653 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 84.31% | 83.26% |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.49 | 10.49 | 3819.0E6 | 2880.9E6 | 19.830 | 20.555 |
| 3) | gamma-BHC | 11.16 | 11.23 | 3524.1E6 | 2689.5E6 | 19.711 | 19.878 |
| 4) | beta-BHC | 11.35 | 11.41 | 1529.6E6 | 1181.5E6 | 19.455 | 19.841 |
| 5) | Heptachlor | 12.11 | 12.08 | 3419.6E6 | 2562.1E6 | 19.850 | 20.006 |
| 6) | delta-BHC | 11.70 | 11.98 | 3594.7E6 | 2736.4E6 | 20.024 | 19.882 |
| 7) | Aldrin | 12.67 | 12.69 | 3041.2E6 | 2488.2E6 | 19.644 | 19.972 |
| 8) | Heptachlor Epoxi | 13.78 | 13.74 | 3025.4E6 | 2101.7E6 | 19.443 | 20.297 |
| 9) | gamma-Chlordane | 14.00 | 14.08 | 3129.5E6 | 2306.8E6 | 19.356 | 19.655 |
| 10) | alpha-Chlordane | 14.23 | 14.34 | 2961.9E6 | 2204.2E6 | 19.562 | 19.355 |
| 11) | Endosulfan I | 14.46 | 14.43 | 2760.2E6 | 1941.4E6 | 20.038 | 20.698 |
| 12) | 4,4'-DDE | 14.39 | 14.65 | 2838.0E6 | 2174.5E6 | 19.911 | 20.164 |
| 13) | Dieldrin | 14.88 | 14.91 | 2757.3E6 | 2174.2E6 | 20.541 | 19.589 |
| 14) | Endrin | 15.27 | 15.43 | 2632.9E6 | 1884.7E6 | 19.666 | 20.350 |
| 15) | 4,4'-DDD | 15.40 | 15.64 | 2314.2E6 | 1746.5E6 | 19.856 | 19.925 |
| 16) | Endosulfan II | 15.65 | 15.80 | 2372.3E6 | 1826.4E6 | 19.262 | 19.338 |
| 17) | 4,4'-DDT | 15.87 | 16.15 | 2241.6E6 | 1752.4E6 | 19.059 | 19.865 |
| 18) | Endrin Aldehyde | 16.31 | 16.33 | 1837.4E6 | 1365.0E6 | 18.698 | 19.603 |
| 19) | Endosulfan Sulfa | 16.94 | 16.74 | 2049.3E6 | 1614.4E6 | 19.223 | 19.359 |
| 20) | Methoxychlor | 16.62 | 17.13 | 1134.1E6 | 827.2E6 | 19.866 | 19.562 |
| 21) | Endrin Ketone | 17.32 | 17.45 | 2368.8E6 | 1757.8E6 | 20.117 | 20.360 |

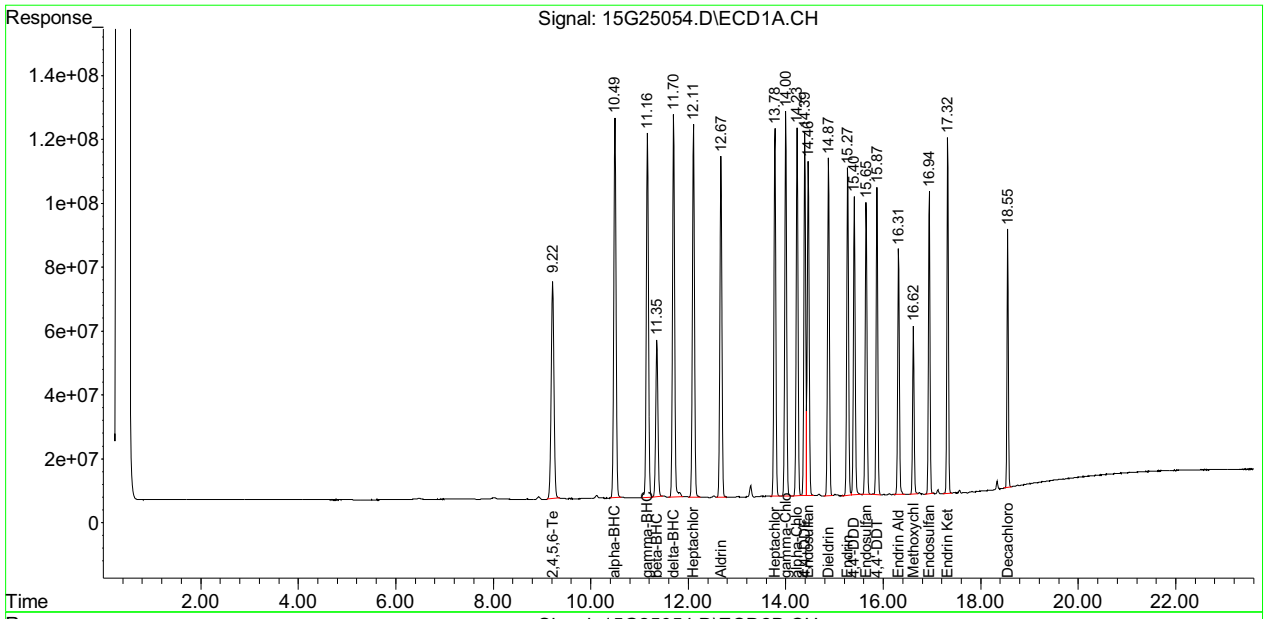
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.



Data Path : C:\MSDCHEM\1\DATA\021811\
Data File : 15G25054.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Feb 2011 23:19 (#1); 18 Feb 2011 23:48 (#2)
Operator : ECL
Sample : WG357037-07 PEST ALT 20 PPB
Misc : 1,1 STD43387
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 10:52:34 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Sat Feb 19 10:52:08 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25547.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 18:13 (#1); 22 Mar 2011 18:41 (#2)
Operator : ECL
Sample : WG359603-03 PEST CCV 10 PPB
Misc : 1,1 STD43387
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 10:58:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.21 | 9.14 | 1292.9E6 | 1031.6E6 | 9.957 | 10.689 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 49.79% | 53.45% |
| 22) S | Decachlorobiphen | 18.54 | 18.86 | 909.0E6 | 633.7E6 | 10.221 | 9.896 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 51.11% | 49.48% |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.49 | 10.49 | 1880.7E6 | 1550.0E6 | 9.765 | 11.059 |
| 3) | gamma-BHC | 11.15 | 11.23 | 1742.9E6 | 1444.0E6 | 9.748 | 10.672 |
| 4) | beta-BHC | 11.35 | 11.41 | 769.0E6 | 629.7E6 | 9.780 | 10.575 |
| 5) | Heptachlor | 12.10 | 12.08 | 1751.7E6 | 1471.1E6 | 10.168 | 11.487 |
| 6) | delta-BHC | 11.69 | 11.98 | 1744.5E6 | 1521.9E6 | 9.718 | 11.058 |
| 7) | Aldrin | 12.66 | 12.69 | 1572.4E6 | 1401.1E6 | 10.157 | 11.246 |
| 8) | Heptachlor Epoxi | 13.77 | 13.74 | 1588.2E6 | 1217.8E6 | 10.207 | 11.761 |
| 9) | gamma-Chlordane | 13.99 | 14.08 | 1591.7E6 | 1262.5E6 | 9.845 | 10.757 |
| 10) | alpha-Chlordane | 14.22 | 14.34 | 1513.2E6 | 1216.3E6 | 9.994 | 10.680 |
| 11) | Endosulfan I | 14.45 | 14.43 | 1428.3E6 | 1116.0E6 | 10.368 | 11.898 |
| 12) | 4,4'-DDE | 14.38 | 14.65 | 1443.5E6 | 1180.2E6 | 10.127 | 10.944 |
| 13) | Dieldrin | 14.87 | 14.91 | 1458.9E6 | 1225.8E6 | 10.868 | 11.044 |
| 14) | Endrin | 15.26 | 15.43 | 1360.0E6 | 1065.3E6 | 10.159 | 11.502 |
| 15) | 4,4'-DDD | 15.40 | 15.64 | 1164.9E6 | 986.4E6 | 9.995 | 11.253 |
| 16) | Endosulfan II | 15.64 | 15.80 | 1304.1E6 | 1040.9E6 | 10.589 | 11.020 |
| 17) | 4,4'-DDT | 15.86 | 16.15 | 1238.4E6 | 895.3E6 | 10.529 | 10.149 |
| 18) | Endrin Aldehyde | 16.30 | 16.33 | 988.7E6 | 816.7E6 | 10.061m | 11.728m |
| 19) | Endosulfan Sulfa | 16.93 | 16.74 | 1073.9E6 | 907.9E6 | 10.073 | 10.887 |
| 20) | Methoxychlor | 16.61 | 17.13 | 612.3E6 | 431.4E6 | 10.726 | 10.203 |
| 21) | Endrin Ketone | 17.31 | 17.45 | 1209.9E6 | 944.2E6 | 10.275 | 10.936 |

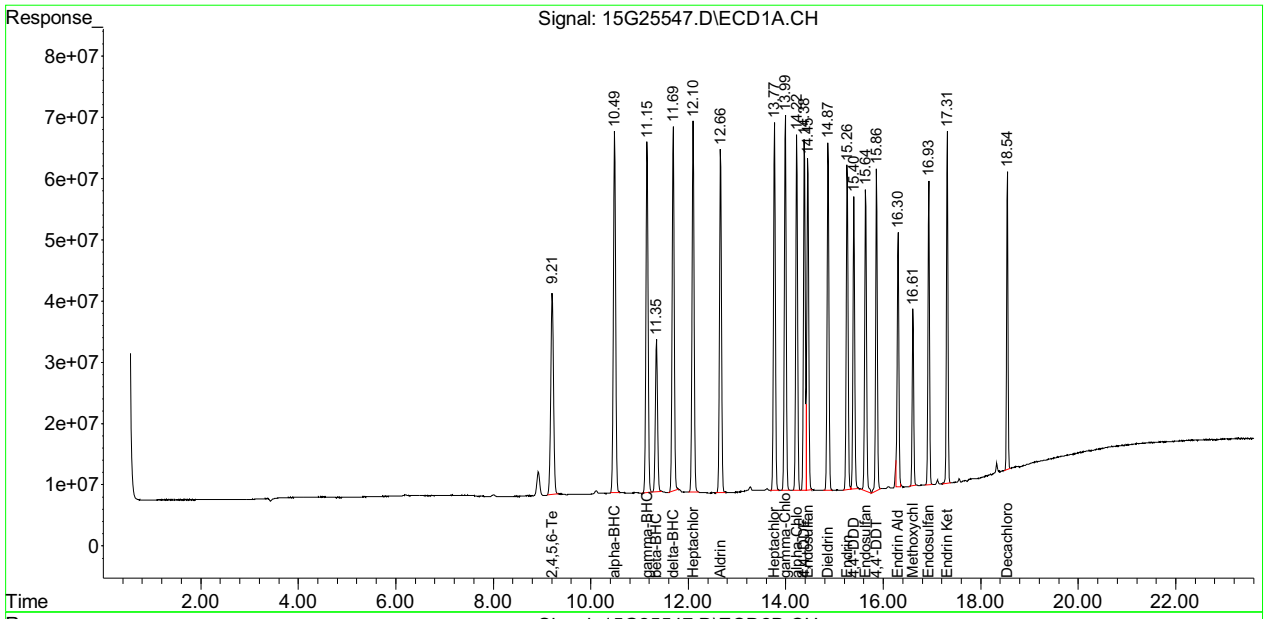
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

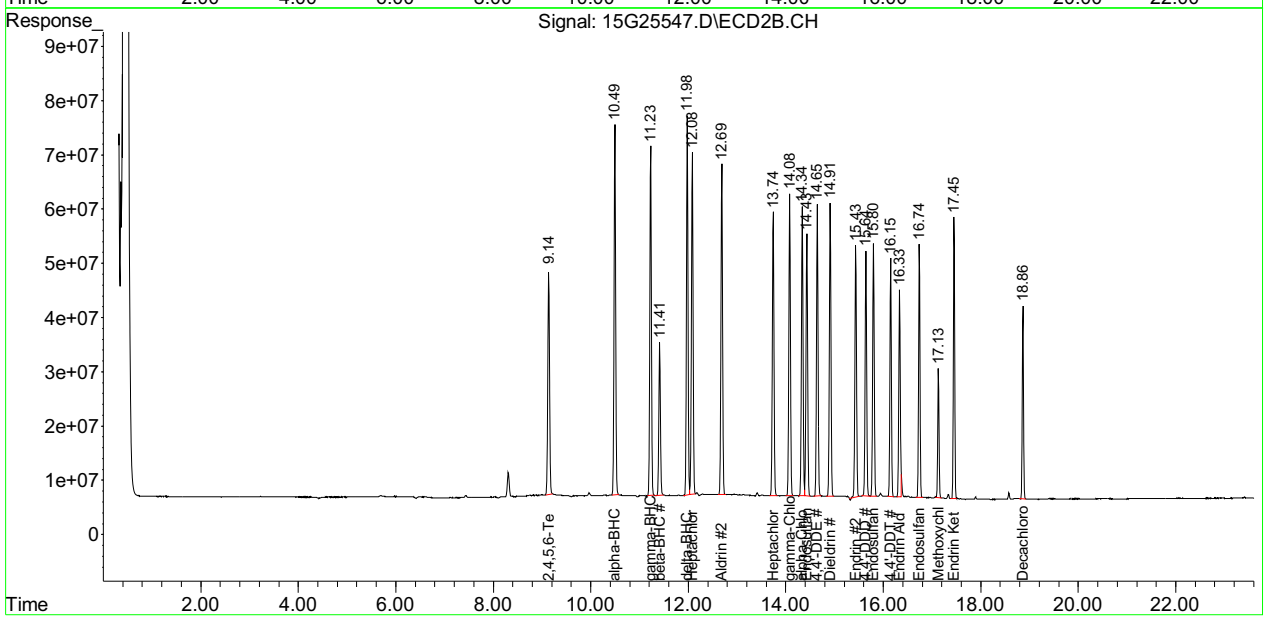


Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25547.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 18:13 (#1); 22 Mar 2011 18:41 (#2)
Operator : ECL
Sample : WG359603-03 PEST CCV 10 PPB
Misc : 1,1 STD43387
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 10:58:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

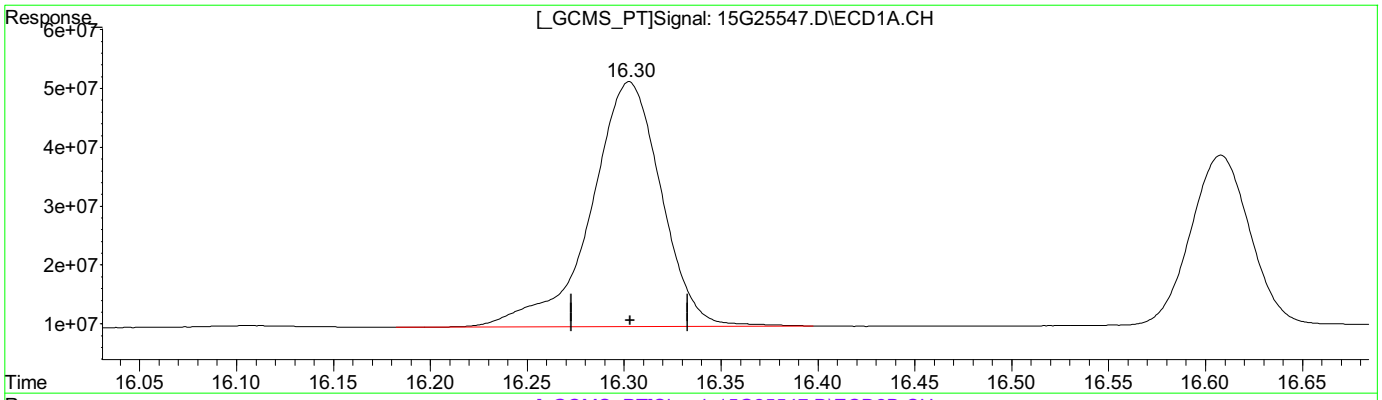


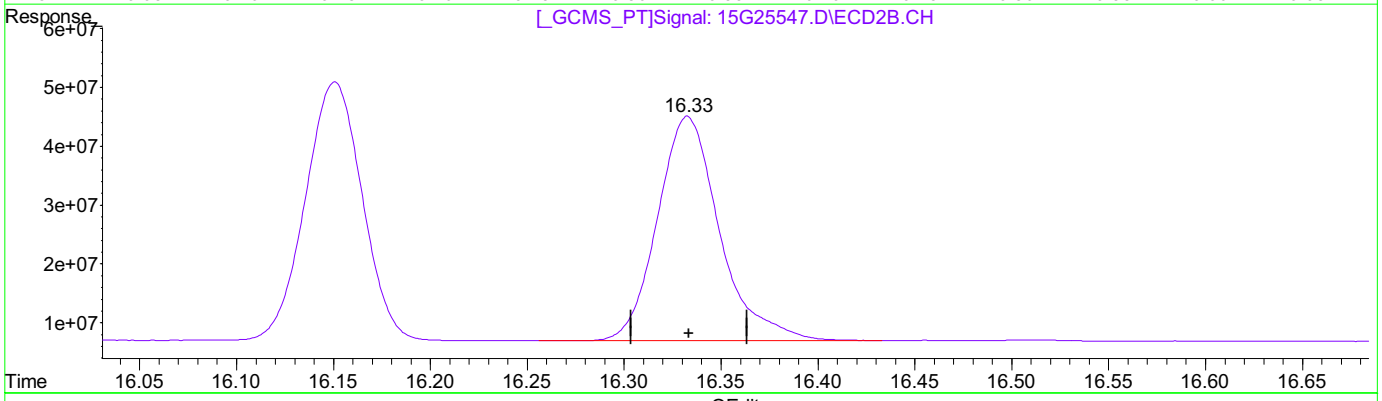



Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25547.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Mar 2011  18:13 (#1); 22 Mar 2011  18:41 (#2)
Operator : ECL
Sample : WG359603-03 PEST CCV 10 PPB
Misc : 1,1 STD43387
ALS Vial : 14  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 10:57:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION  February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(18) Endrin Aldehyde

16.30min 10.711UG/L

response 1052587619

(18) Endrin Aldehyde #2

16.33min 12.194UG/L

response 849052014

(+) = Expected Retention Time

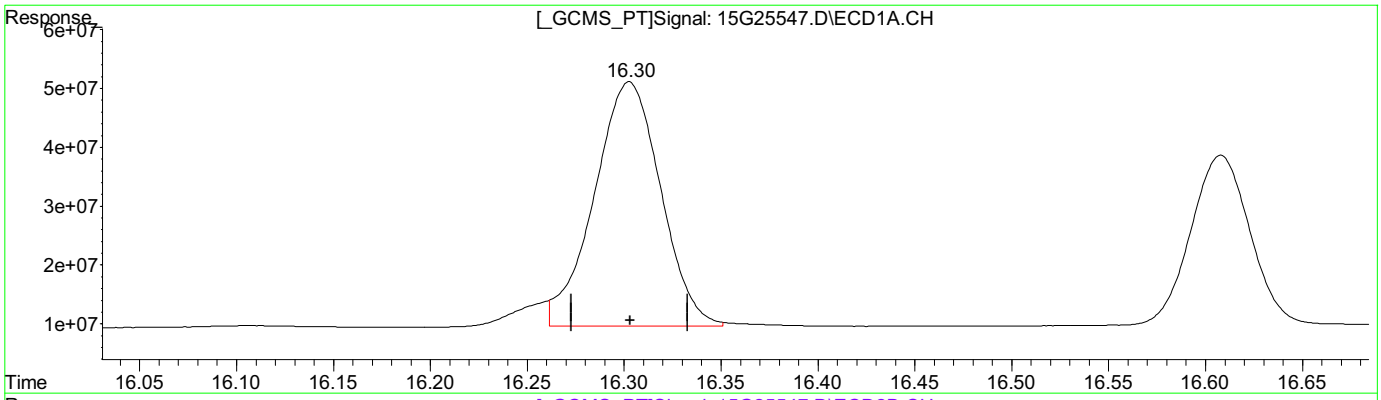
8081.M Wed Mar 23 10:58:46 2011 Page: 1

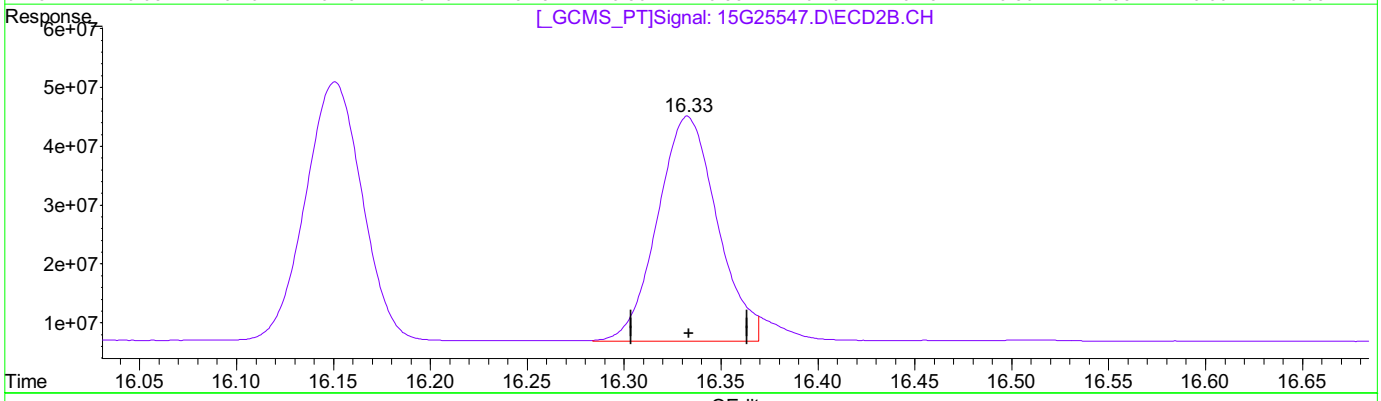
Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25547.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Mar 2011  18:13 (#1); 22 Mar 2011  18:41 (#2)
Operator : ECL
Sample : WG359603-03 PEST CCV 10 PPB
Misc : 1,1 STD43387
ALS Vial : 14  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 10:57:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION  February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(18) Endrin Aldehyde

16.30min 10.061UG/L mint

response 988664313

(18) Endrin Aldehyde #2

16.33min 11.728UG/L mint

response 816655299

(+) = Expected Retention Time
8081.M Wed Mar 23 10:59:03 2011

Analyst: 03/23/2011 14:46  Supervisor: 03/24/2011 10:37

Page: 1

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25548.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 18:41 (#1); 22 Mar 2011 19:10 (#2)
Operator : ECL
Sample : WG359604-02 TOX CCV 200 PPB
Misc : 1,1 STD43915
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 10:59:27 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

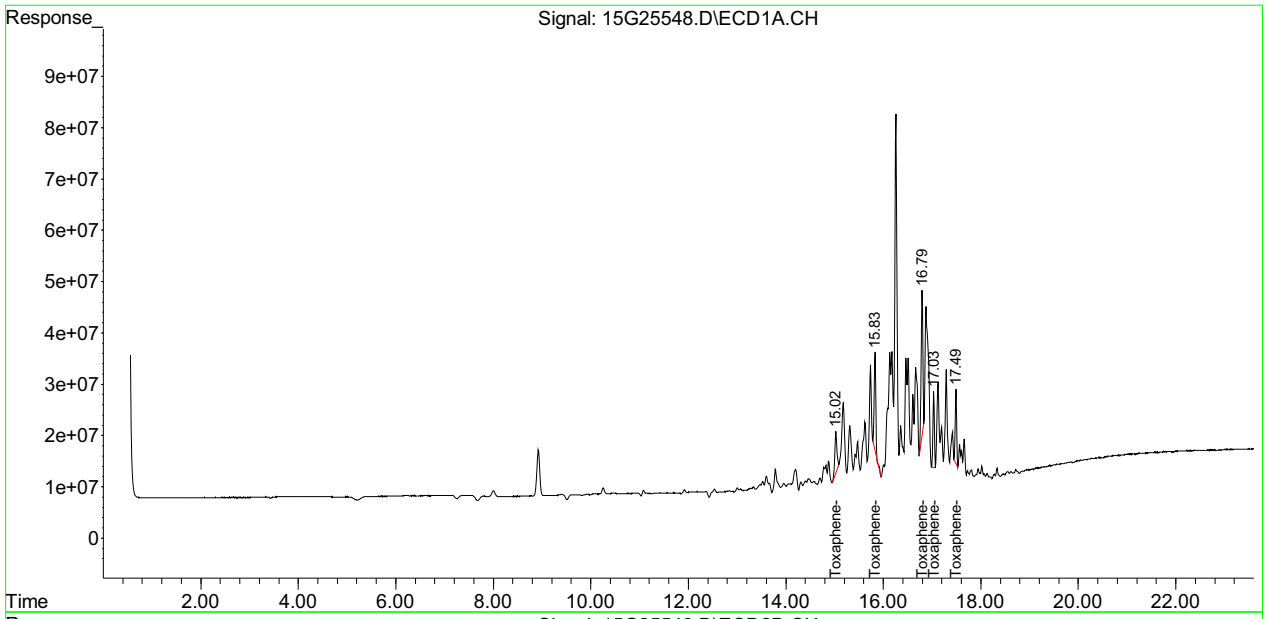
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | Target Compounds | | | | | | |
| 1) | L1 Toxaphene-1 | 15.03 | 14.88 | 247.0E6 | 255.5E6 | 193.732 | 233.669 |
| 2) | L1 Toxaphene-2 | 15.83 | 15.94 | 435.6E6 | 702.3E6 | 231.117 | 211.812 |
| 3) | L1 Toxaphene-3 | 16.80 | 16.73 | 704.6E6 | 210.7E6 | 208.549 | 209.204 |
| 4) | L1 Toxaphene-4 | 17.03 | 17.07 | 306.2E6 | 421.9E6 | 201.599 | 183.496 |
| 5) | L1 Toxaphene-5 | 17.49 | 17.58 | 291.9E6 | 172.0E6 | 207.800 | 195.730 |
| | Sum Toxaphene-1 | | | 1985.4E6 | 1762.4E6 | 1042.797 | 1033.911 |
| Average | Toxaphene-1 | | | | | 208.559 | 206.782 |

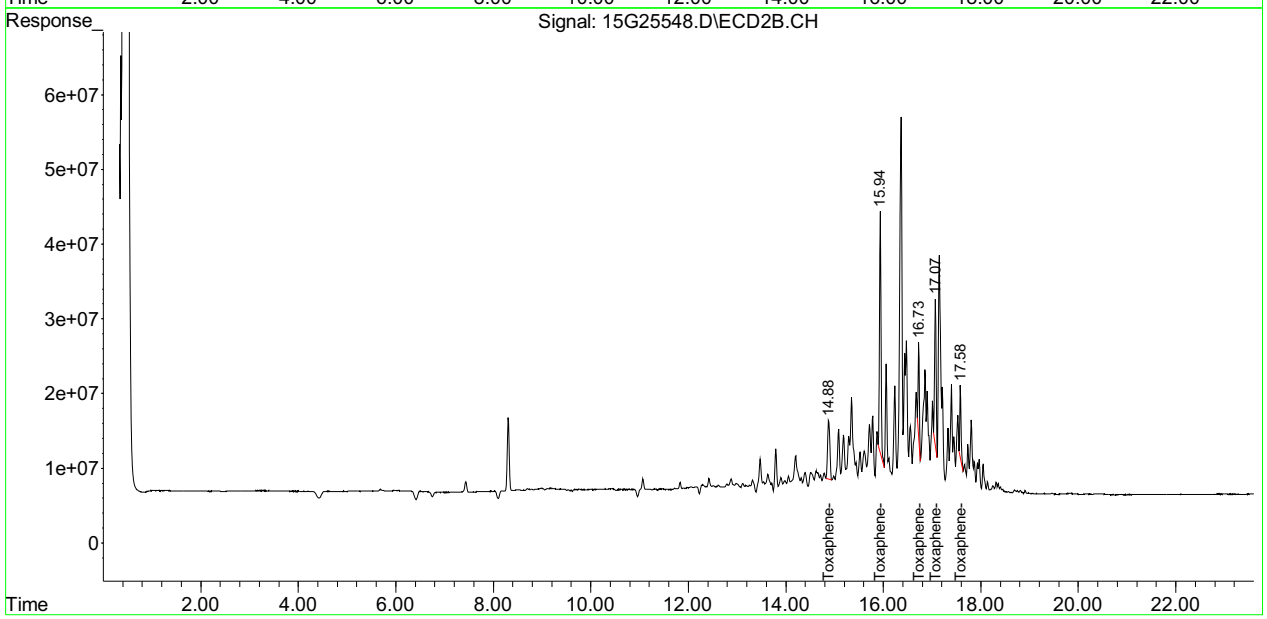
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25548.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 18:41 (#1); 22 Mar 2011 19:10 (#2)
Operator : ECL
Sample : WG359604-02 TOX CCV 200 PPB
Misc : 1,1 STD43915
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 10:59:27 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25560.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2011 00:22 (#1); 23 Mar 2011 00:50 (#2)
Operator : ECL
Sample : WG359603-05 PEST CCV 20 PPB
Misc : 1,1 STD43387
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 11:01:14 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.20 | 9.14 | 2731.7E6 | 2007.7E6 | 21.037 | 20.801 |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 105.19% | 104.01% |
| 22) S | Decachlorobiphen | 18.54 | 18.86 | 1919.2E6 | 1211.1E6 | 21.581 | 18.913 |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 107.91% | 94.56% |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.48 | 10.49 | 4166.5E6 | 3086.4E6 | 21.634 | 22.021 |
| 3) | gamma-BHC | 11.15 | 11.23 | 3886.6E6 | 2867.2E6 | 21.738 | 21.191 |
| 4) | beta-BHC | 11.34 | 11.41 | 1648.8E6 | 1221.5E6 | 20.971 | 20.512 |
| 5) | Heptachlor | 12.09 | 12.08 | 3814.3E6 | 2805.1E6 | 22.140 | 21.903 |
| 6) | delta-BHC | 11.68 | 11.98 | 3897.6E6 | 2958.3E6 | 21.712 | 21.494 |
| 7) | Aldrin | 12.66 | 12.69 | 3486.3E6 | 2777.5E6 | 22.519 | 22.294 |
| 8) | Heptachlor Epoxi | 13.76 | 13.74 | 3470.1E6 | 2269.2E6 | 22.301 | 21.915 |
| 9) | gamma-Chlordane | 13.98 | 14.08 | 3580.1E6 | 2504.2E6 | 22.143 | 21.338 |
| 10) | alpha-Chlordane | 14.22 | 14.34 | 3349.2E6 | 2392.7E6 | 22.120 | 21.010 |
| 11) | Endosulfan I | 14.45 | 14.43 | 3137.8E6 | 2013.0E6 | 22.779 | 21.461 |
| 12) | 4,4'-DDE | 14.38 | 14.65 | 3344.7E6 | 2364.9E6 | 23.466 | 21.930 |
| 13) | Dieldrin | 14.86 | 14.91 | 2970.8E6 | 2426.3E6 | 22.131 | 21.860 |
| 14) | Endrin | 15.26 | 15.43 | 3084.0E6 | 1949.5E6 | 23.036 | 21.050 |
| 15) | 4,4'-DDD | 15.39 | 15.64 | 2682.3E6 | 1980.3E6 | 23.014 | 22.591 |
| 16) | Endosulfan II | 15.63 | 15.80 | 2855.3E6 | 2030.6E6 | 23.185 | 21.500 |
| 17) | 4,4'-DDT | 15.86 | 16.15 | 2803.9E6 | 1824.6E6 | 23.839m | 20.683 |
| 18) | Endrin Aldehyde | 16.30 | 16.33 | 2203.3E6 | 1480.5E6 | 22.422 | 21.263 |
| 19) | Endosulfan Sulfa | 16.93 | 16.74 | 2374.5E6 | 1774.7E6 | 22.274 | 21.281 |
| 20) | Methoxychlor | 16.61 | 17.13 | 1337.2E6 | 838.3E6 | 23.424 | 19.824 |
| 21) | Endrin Ketone | 17.31 | 17.45 | 2654.7E6 | 1868.4E6 | 22.545 | 21.641 |

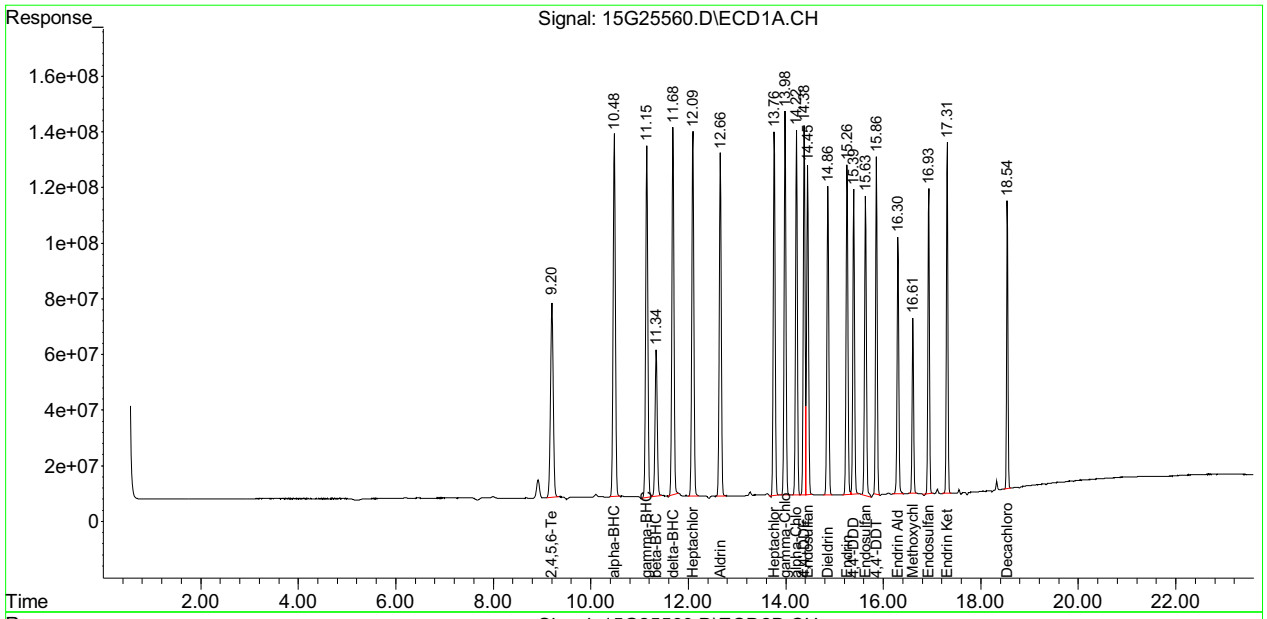
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.



Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25560.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2011 00:22 (#1); 23 Mar 2011 00:50 (#2)
Operator : ECL
Sample : WG359603-05 PEST CCV 20 PPB
Misc : 1,1 STD43387
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 11:01:14 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

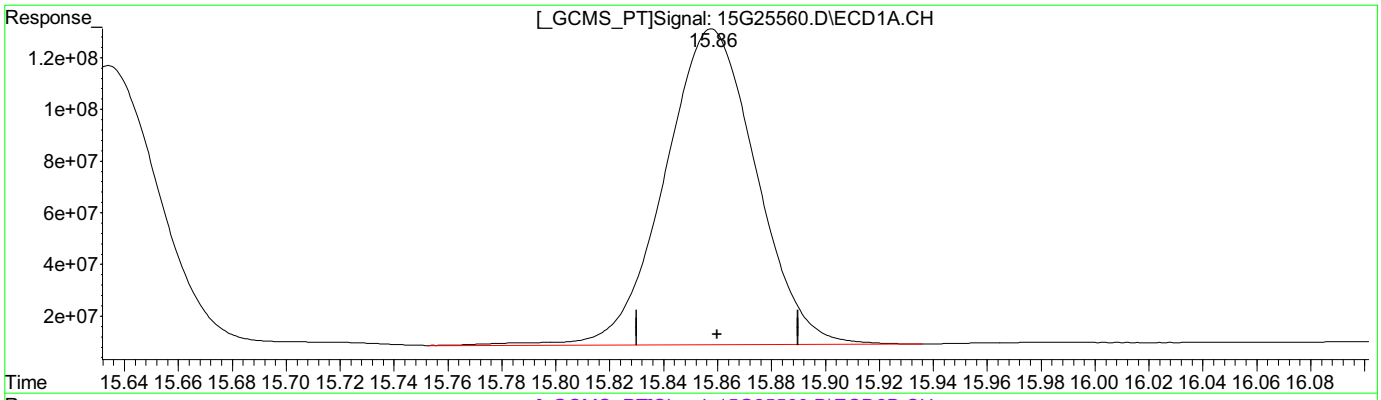
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

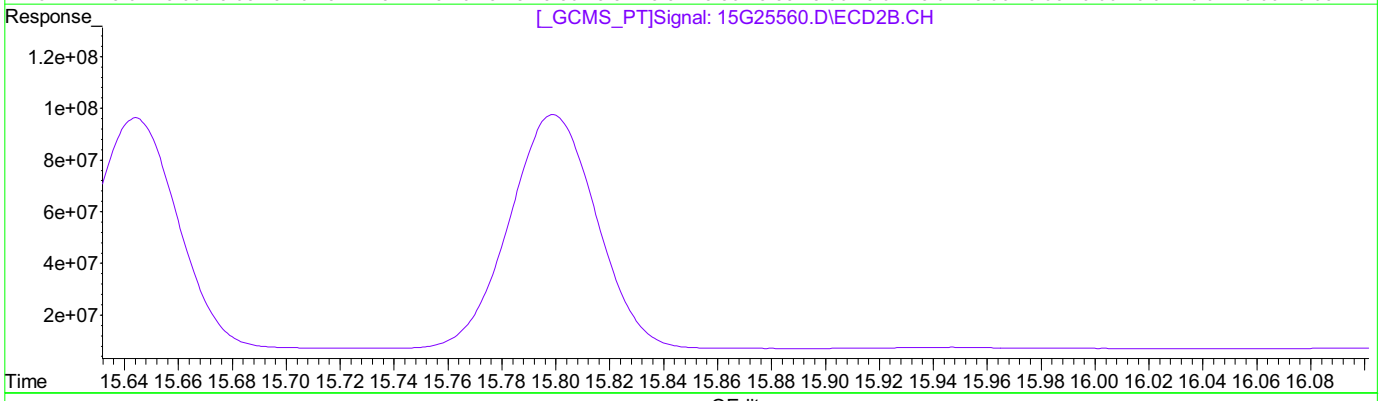


Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25560.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Mar 2011  00:22 (#1); 23 Mar 2011  00:50 (#2)
Operator : ECL
Sample : WG359603-05 PEST CCV 20 PPB
Misc : 1,1 STD43387
ALS Vial : 27  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 11:00:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION  February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(17) 4,4'-DDT

15.86min 24.415UG/L

response 2871610268

(17) 4,4'-DDT #2

16.15min 20.683UG/L

response 1824588144

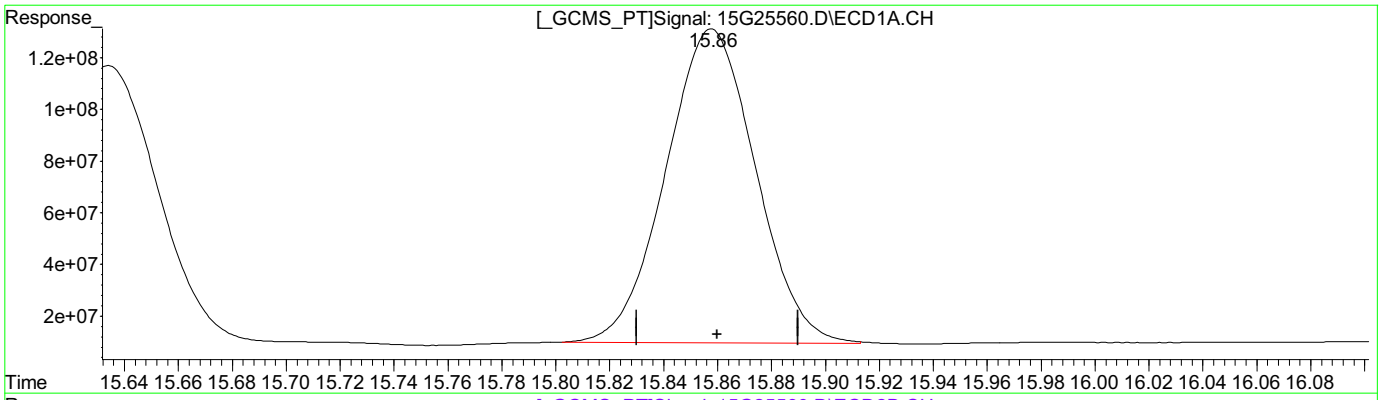
(+) = Expected Retention Time

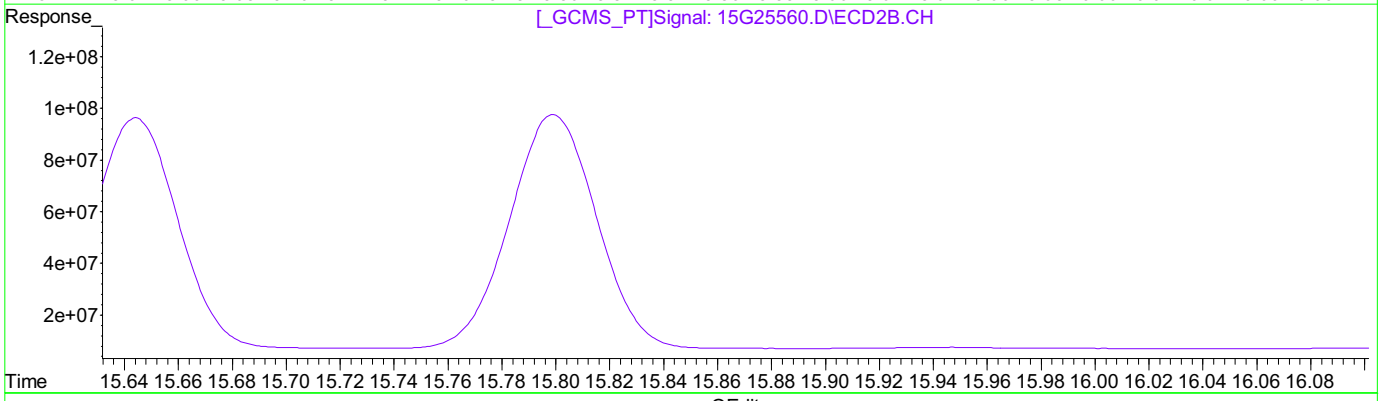
Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25560.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Mar 2011  00:22 (#1); 23 Mar 2011  00:50 (#2)
Operator : ECL
Sample : WG359603-05 PEST CCV 20 PPB
Misc : 1,1 STD43387
ALS Vial : 27  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 11:00:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION  February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(17) 4,4'-DDT

15.86min 23.839UG/L mint

response 2803946146

(17) 4,4'-DDT #2

16.15min 20.683UG/L

response 1824588144

(+) = Expected Retention Time
8081.M Wed Mar 23 11:01:19 2011

Analyst: 03/23/2011 14:46  Supervisor: 03/24/2011 10:37

#4 - System establishes incorrect baseline

Page: 1

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25561.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2011 00:50 (#1); 23 Mar 2011 1:19 (#2)
Operator : ECL
Sample : WG359604-03 TOX CCV 500 PPB
Misc : 1,1 STD43915
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 11:02:02 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

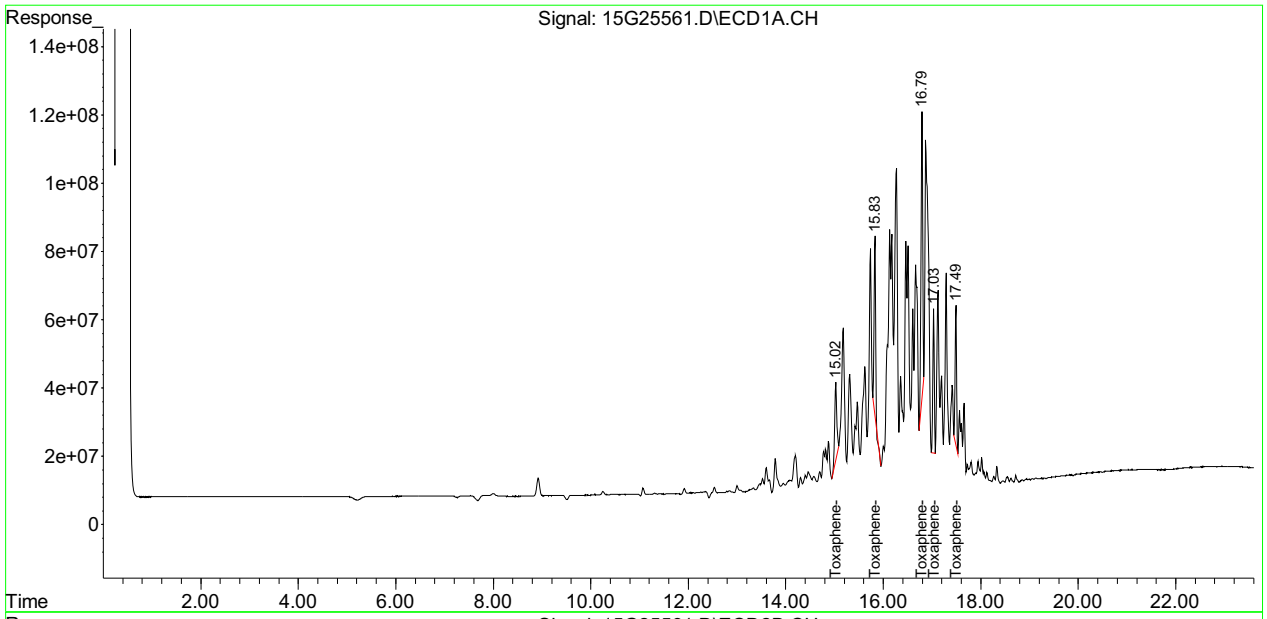
| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) L1 Toxaphene-1 | 15.02 | 14.88 | 686.0E6 | 611.0E6 | 538.079 | 558.869 |
| 2) L1 Toxaphene-2 | 15.83 | 15.94 | 1107.9E6 | 1809.1E6 | 587.744 | 545.626 |
| 3) L1 Toxaphene-3 | 16.79 | 16.73 | 2029.5E6 | 546.6E6 | 600.678m | 542.761 |
| 4) L1 Toxaphene-4 | 17.03 | 17.07 | 878.0E6 | 1090.9E6 | 578.036 | 474.421 |
| 5) L1 Toxaphene-5 | 17.49 | 17.58 | 837.4E6 | 462.0E6 | 596.116 | 525.669 |
| Sum Toxaphene-1 | | | 5538.8E6 | 4519.6E6 | 2900.652 | 2647.345 |
| Average Toxaphene-1 | | | | | 580.130 | 529.469 |

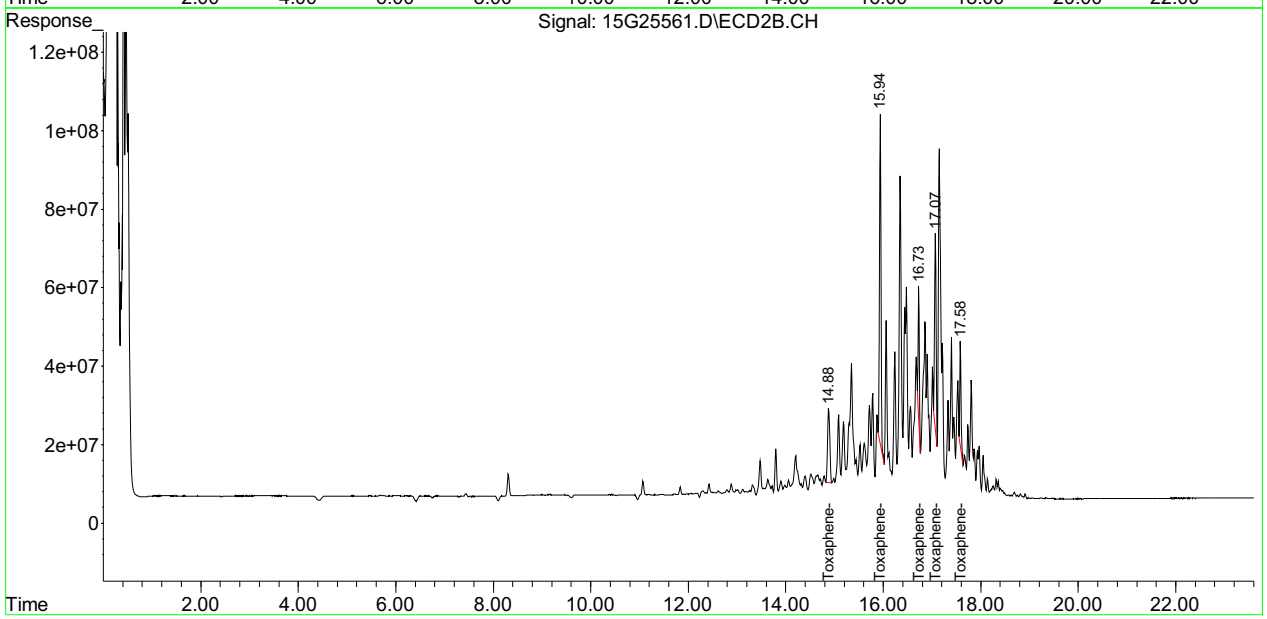
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25561.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2011 00:50 (#1); 23 Mar 2011 1:19 (#2)
Operator : ECL
Sample : WG359604-03 TOX CCV 500 PPB
Misc : 1,1 STD43915
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 11:02:02 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

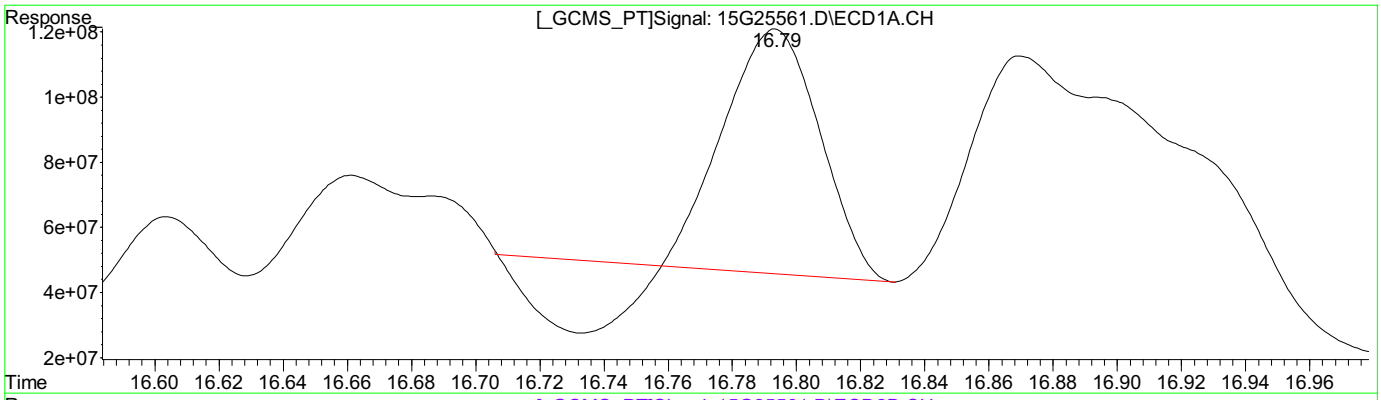


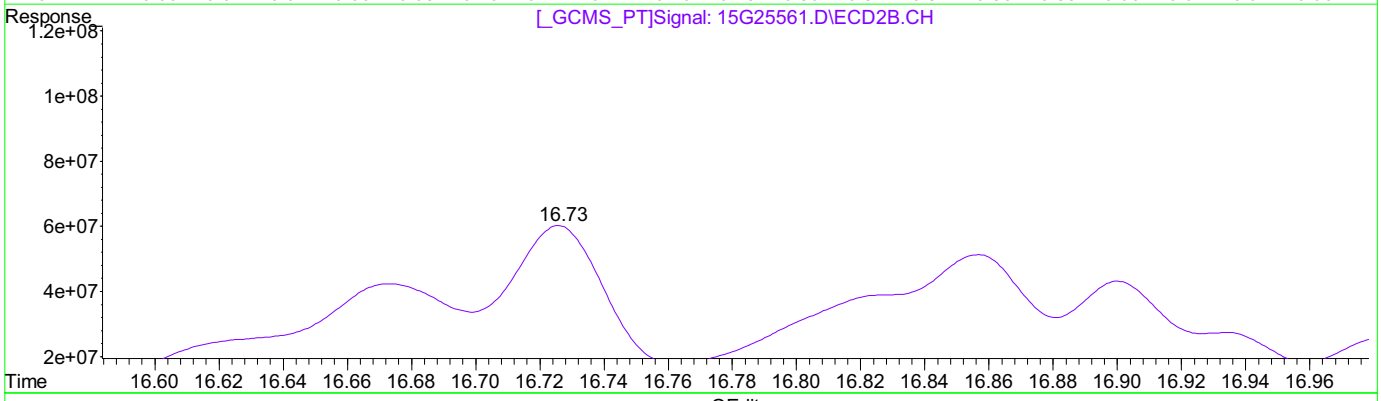



Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25561.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Mar 2011  00:50 (#1); 23 Mar 2011  1:19 (#2)
Operator : ECL
Sample : WG359604-03 TOX CCV 500 PPB
Misc : 1,1 STD43915
ALS Vial : 28  Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 11:01:47 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15  CALIBRATION 8081 TOX  February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(3) Toxaphene-3 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.79 | 1193675870 | 353.30 |
| 17.03 | 878047154 | 578.04 |
| 17.49 | 837362375 | 596.12 |

(3) Toxaphene-3 #2 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.73 | 546567652 | 542.76 |
| 17.07 | 1090923326 | 474.42 |
| 17.58 | 461999325 | 525.67 |

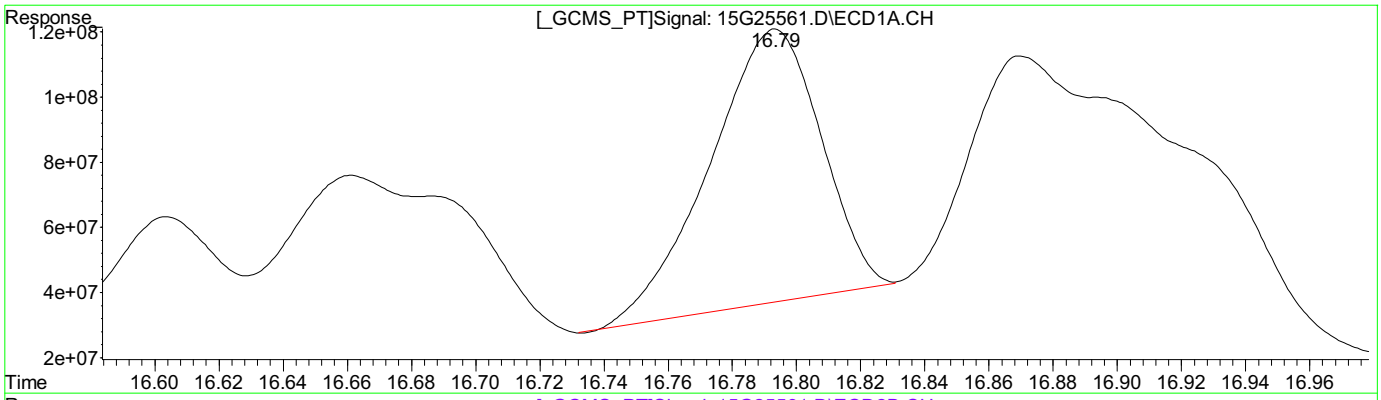
(+) = Expected Retention Time

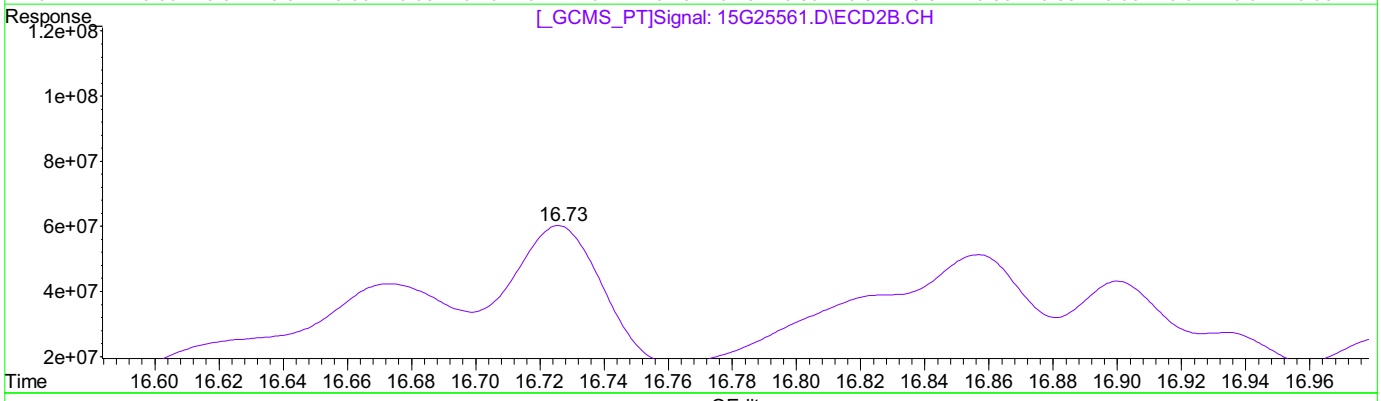
Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25561.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Mar 2011  00:50 (#1); 23 Mar 2011  1:19 (#2)
Operator : ECL
Sample : WG359604-03 TOX CCV 500 PPB
Misc : 1,1 STD43915
ALS Vial : 28  Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 11:01:47 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15  CALIBRATION 8081 TOX  February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :




QEdit

(3) Toxaphene-3 #2 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.79 | 2029498457 | 600.68 |
| 17.03 | 878047154 | 578.04 |
| 17.49 | 837362375 | 596.12 |

(3) Toxaphene-3 #2 (L1)

| R.T. | Response | Conc |
|---|---|---|
| 16.73 | 546567652 | 542.76 |
| 17.07 | 1090923326 | 474.42 |
| 17.58 | 461999325 | 525.67 |

(+) = Expected Retention Time
TOX.M Wed Mar 23 11:02:04 2011

Analyst: 03/23/2011 14:56  Supervisor: 03/24/2011 10:38
Page: 1
#4 - System establishes incorrect baseline

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25534.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 11:22 (#1); 22 Mar 2011 11:50 (#2)
Operator : ECL
Sample : WG359603-01 ENDRIN/DDT
Misc : 1,1 STD39983
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 12:58:53 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

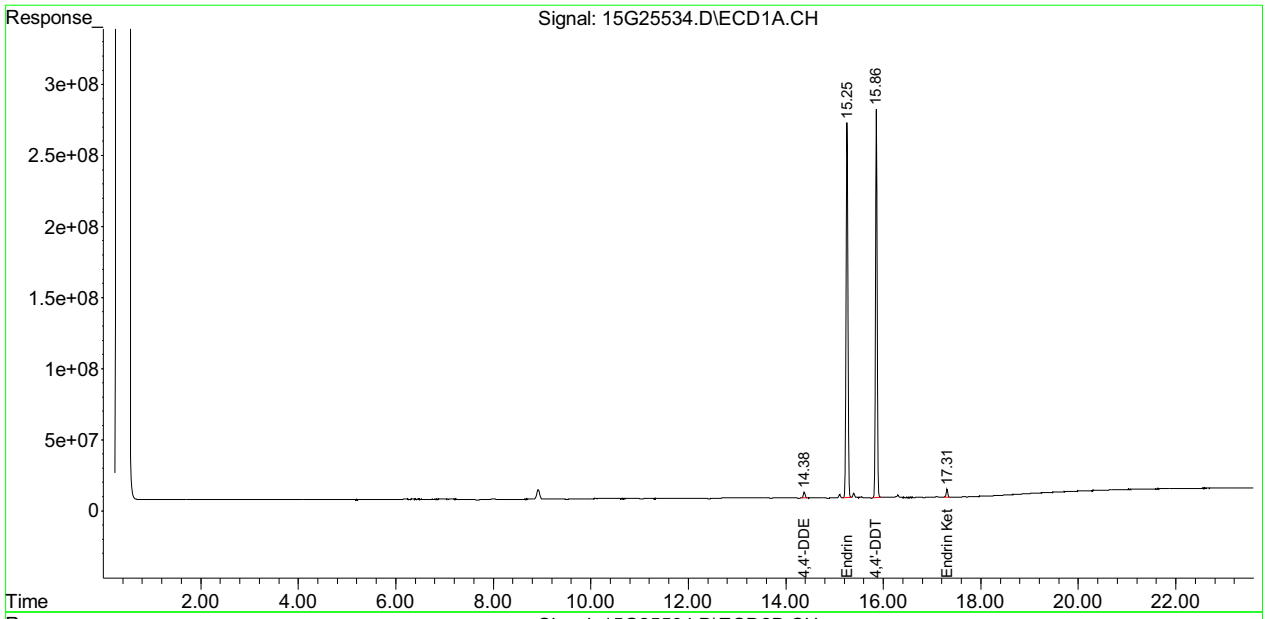
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 0.00%# | 0.00%# |
| 22) S | Decachlorobiphen | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 3) | gamma-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 4) | beta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 5) | Heptachlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 6) | delta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 7) | Aldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor Epoxi | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 9) | gamma-Chlordane | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 10) | alpha-Chlordane | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 11) | Endosulfan I | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 12) | 4,4'-DDE | 14.38 | 14.64 | 100.9E6 | 82825486 | 0.708 | 0.768 |
| 13) | Dieldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 14) | Endrin | 15.25 | 15.43 | 6893.6E6 | 4800.0E6 | 51.491 | 51.826 |
| 15) | 4,4'-DDD | 0.00 | 15.64 | 0 | 108.8E6 | N.D. | 1.242 # |
| 16) | Endosulfan II | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 17) | 4,4'-DDT | 15.86 | 16.15 | 6377.0E6 | 4524.6E6 | 54.218 | 51.290 |
| 18) | Endrin Aldehyde | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 19) | Endosulfan Sulfa | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 20) | Methoxychlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 21) | Endrin Ketone | 17.31 | 17.45 | 121.1E6 | 123.1E6 | 1.029 | 1.426 # |

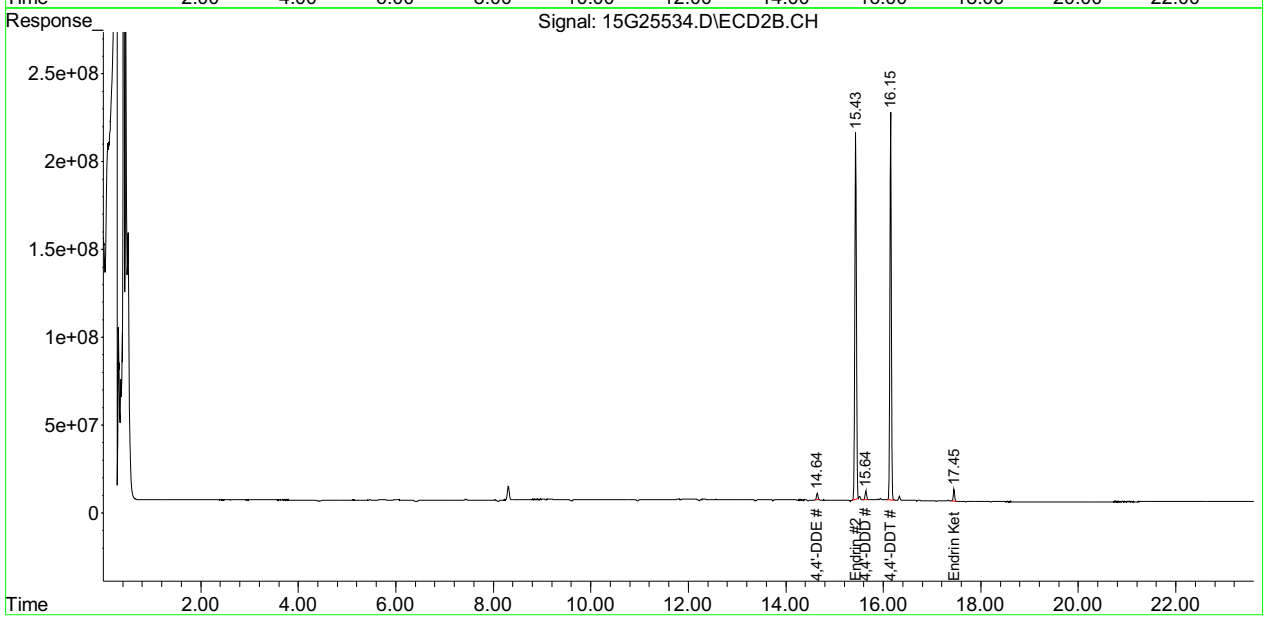
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25534.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 11:22 (#1); 22 Mar 2011 11:50 (#2)
Operator : ECL
Sample : WG359603-01 ENDRIN/DDT
Misc : 1,1 STD39983
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 12:58:53 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25559.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 23:54 (#1); 23 Mar 2011 00:22 (#2)
Operator : ECL
Sample : WG359603-04 ENDRIN/DDT
Misc : 1,1 STD39983
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 10:59:53 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

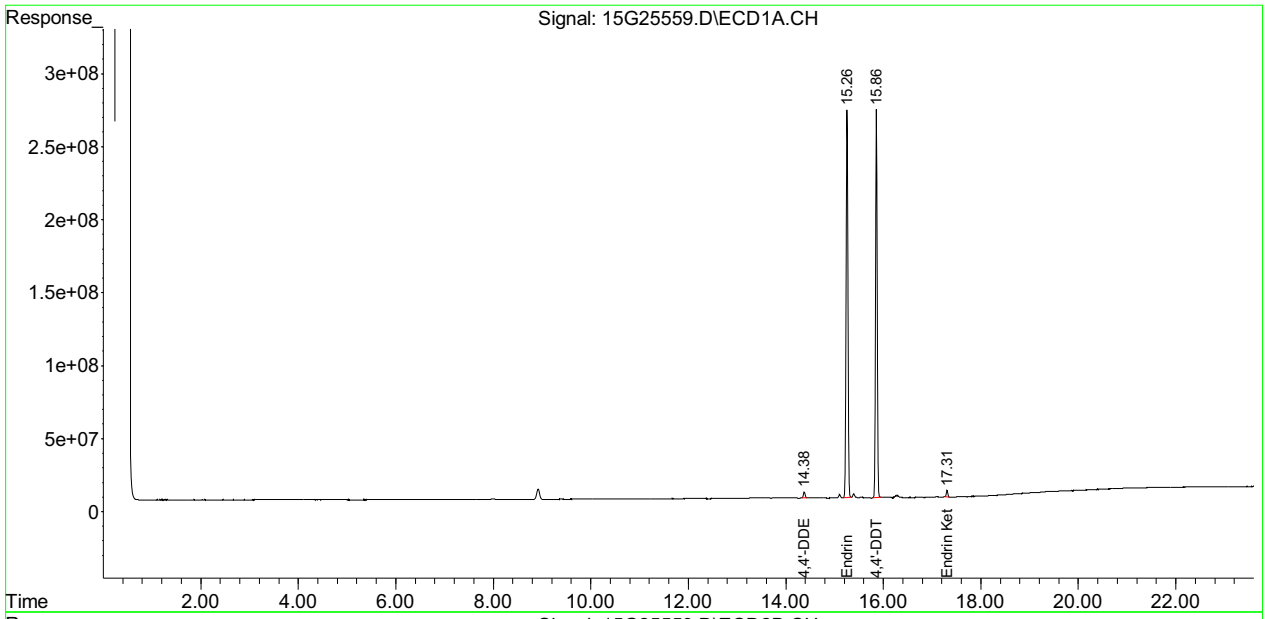
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 20.000 | Range 30 - 132 | | Recovery = | | 0.00%# | 0.00%# |
| 22) S | Decachlorobiphen | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 20.000 | Range 36 - 144 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 3) | gamma-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 4) | beta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 5) | Heptachlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 6) | delta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 7) | Aldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor Epoxi | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 9) | gamma-Chlordane | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 10) | alpha-Chlordane | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 11) | Endosulfan I | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 12) | 4,4'-DDE | 14.38 | 14.65 | 100.9E6 | 80775032 | 0.708 | 0.749 |
| 13) | Dieldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 14) | Endrin | 15.26 | 15.43 | 6924.0E6 | 4742.4E6 | 51.718 | 51.204 |
| 15) | 4,4'-DDD | 0.00 | 15.64 | 0 | 137.3E6 | N.D. | 1.567 # |
| 16) | Endosulfan II | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 17) | 4,4'-DDT | 15.86 | 16.15 | 6228.1E6 | 4238.7E6 | 52.951 | 48.049 |
| 18) | Endrin Aldehyde | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 19) | Endosulfan Sulfa | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 20) | Methoxychlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. |
| 21) | Endrin Ketone | 17.31 | 17.45 | 94321371 | 150.2E6 | 0.801 | 1.740 # |

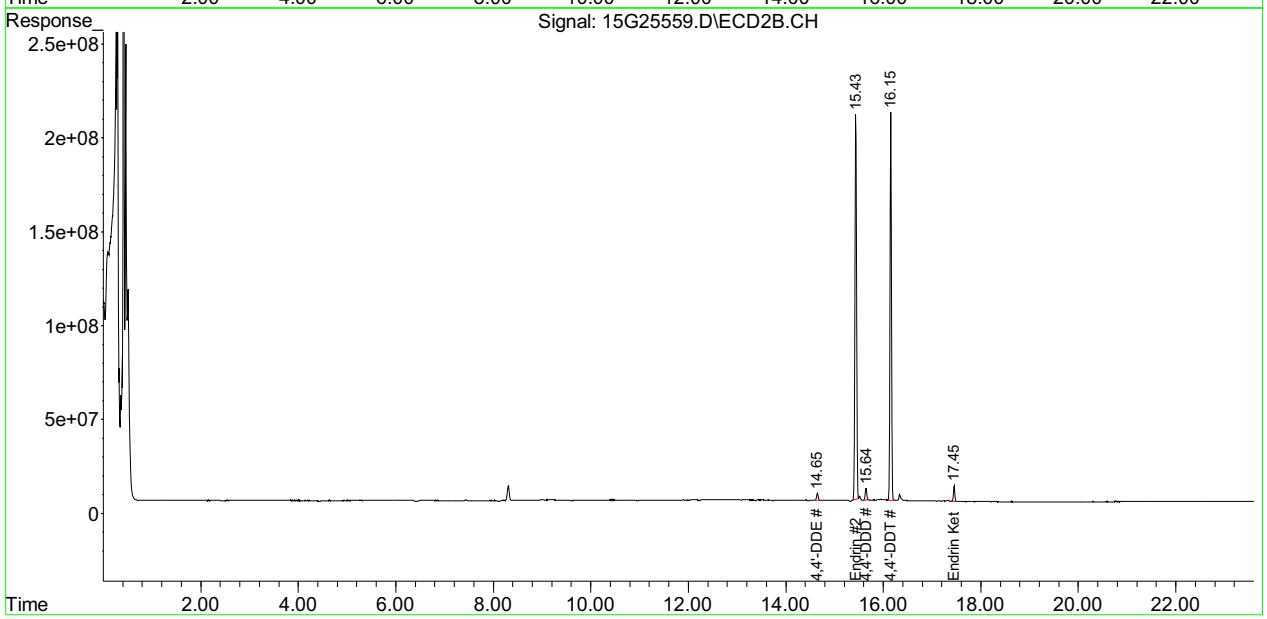
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDChem\1\DATA\032211\
Data File : 15G25559.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 23:54 (#1); 23 Mar 2011 00:22 (#2)
Operator : ECL
Sample : WG359603-04 ENDRIN/DDT
Misc : 1,1 STD39983
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 10:59:53 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



RETENTION TIME WINDOWS

Lab Name: Microbac Laboratories

Instrument ID: HP 15

GC Column: RTx-CLP (Front)

| | STANDARD #1 | STANDARD #2 | STANDARD #3 |
|---|---|---|---|
| Date Run | 8/27/09 | 8/28/09 | 9/1/09 |
| File # | 15G18733 | 15G18777 | 15G18817 |

| COMPOUND | STD #1 RT | STD #2 RT | STD #3 RT | RT WIN |
|---|---|---|---|---|
| alpha-BHC | 10.90 | 10.89 | 10.89 | 0.017 |
| gamma-BHC | 11.58 | 11.57 | 11.56 | 0.030 |
| beta-BHC | 11.77 | 11.76 | 11.75 | 0.030 |
| Heptachlor | 12.53 | 12.51 | 12.51 | 0.035 |
| delta-BHC | 12.12 | 12.11 | 12.10 | 0.030 |
| Aldrin | 13.09 | 13.08 | 13.08 | 0.017 |
| Heptachlor Epoxide | 14.22 | 14.21 | 14.20 | 0.030 |
| gamma-Chlordane | 14.44 | 14.43 | 14.42 | 0.030 |
| alpha-Chlordane | 14.67 | 14.66 | 14.66 | 0.017 |
| Endosulfan I | 14.91 | 14.90 | 14.90 | 0.017 |
| 4,4'-DDE | 14.82 | 14.81 | 14.80 | 0.030 |
| Dieldrin | 15.33 | 15.32 | 15.31 | 0.030 |
| Endrin | 15.73 | 15.72 | 15.71 | 0.030 |
| 4,4'-DDD | 15.84 | 15.83 | 15.83 | 0.017 |
| Endosulfan II | 16.09 | 16.09 | 16.08 | 0.017 |
| 4,4'-DDT | 16.28 | 16.27 | 16.27 | 0.017 |
| Endrin Aldehyde | 16.73 | 16.73 | 16.72 | 0.017 |
| Endosulfan Sulfate | 17.34 | 17.34 | 17.33 | 0.017 |
| Methoxychlor | 16.99 | 16.98 | 16.97 | 0.030 |
| Endrin Ketone | 17.71 | 17.70 | 17.70 | 0.017 |
| 2,4,5,6-Tetrachloro-M-Xylene | 9.60 | 9.59 | 9.59 | 0.017 |
| Decachlorobiphenyl | 18.89 | 18.89 | 18.88 | 0.017 |

# RETENTION TIME WINDOWS

Lab Name: Microbac Laboratories

Instrument ID: HP 15
GC Column: RTx-CLP II (Rear)

| | STANDARD #1 | STANDARD #2 | STANDARD #3 |
|---|---|---|---|
| Date Run | 8/27/09 | 8/28/09 | 9/1/09 |
| File # | 15G18733 | 15G18777 | 15G18817 |

| COMPOUND | STD #1 RT | STD #2 RT | STD #3 RT | RT WIN |
|---|---|---|---|---|
| alpha-BHC | 10.70 | 10.70 | 10.70 | 0.000 |
| gamma-BHC | 11.44 | 11.44 | 11.43 | 0.017 |
| beta-BHC | 11.61 | 11.61 | 11.61 | 0.000 |
| Heptachlor | 12.30 | 12.30 | 12.29 | 0.017 |
| delta-BHC | 12.18 | 12.19 | 12.18 | 0.017 |
| Aldrin | 12.91 | 12.91 | 12.90 | 0.017 |
| Heptachlor Epoxide | 13.96 | 13.97 | 13.96 | 0.017 |
| gamma-Chlordane | 14.30 | 14.30 | 14.30 | 0.000 |
| alpha-Chlordane | 14.56 | 14.56 | 14.56 | 0.000 |
| Endosulfan I | 14.66 | 14.66 | 14.66 | 0.000 |
| 4,4'-DDE | 14.87 | 14.87 | 14.86 | 0.017 |
| Dieldrin | 15.14 | 15.14 | 15.14 | 0.000 |
| Endrin | 15.67 | 15.67 | 15.67 | 0.000 |
| 4,4'-DDD | 15.86 | 15.86 | 15.86 | 0.000 |
| Endosulfan II | 16.02 | 16.02 | 16.01 | 0.017 |
| 4,4'-DDT | 16.35 | 16.35 | 16.35 | 0.000 |
| Endrin Aldehyde | 16.54 | 16.54 | 16.53 | 0.017 |
| Endosulfan Sulfate | 16.93 | 16.93 | 16.93 | 0.000 |
| Methoxychlor | 17.30 | 17.30 | 17.30 | 0.000 |
| Endrin Ketone | 17.63 | 17.63 | 17.63 | 0.000 |
| 2,4,5,6-Tetrachloro-M-Xylene | 9.33 | 9.33 | 9.33 | 0.000 |
| Decachlorobiphenyl | 19.03 | 19.03 | 19.03 | 0.000 |

# 2.1.1.5 Raw QC Data

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25549.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 19:10 (#1); 22 Mar 2011 19:38 (#2)
Operator : ECL
Sample : WG359333-02 BLANK
Misc : 7,1 SOIL
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:00:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

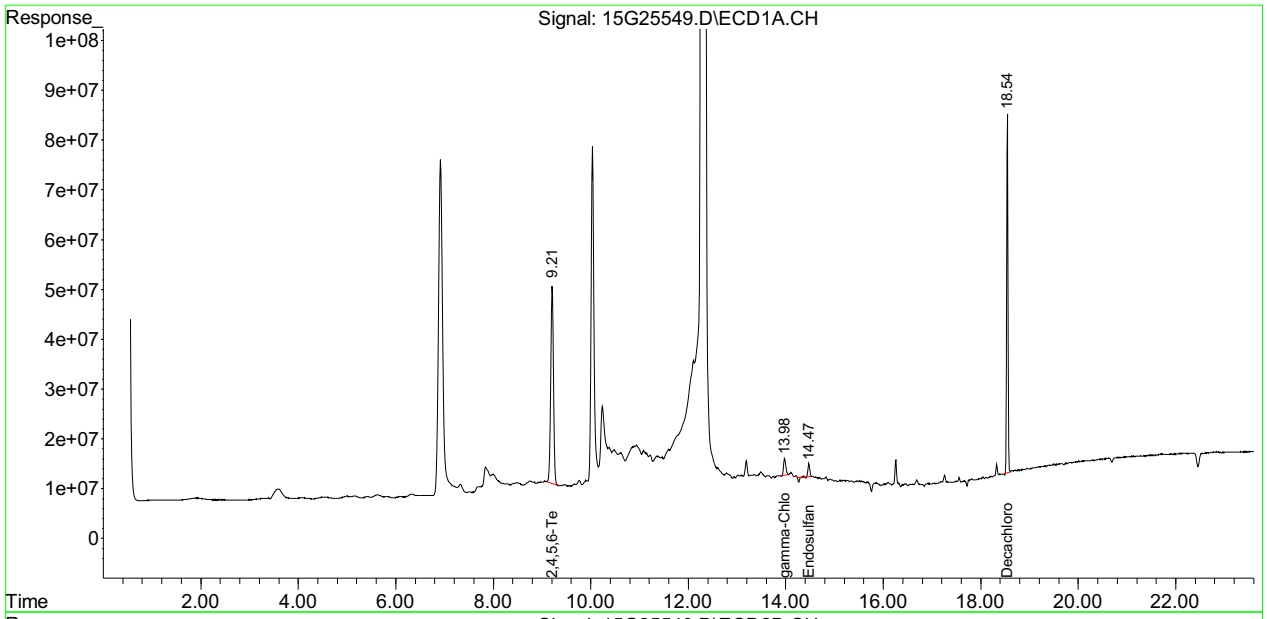
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L | |
|---|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.21 | 9.14 | 1546.4E6 | 1216.8E6 | 11.909 | 12.607 | |
| | Spiked Amount 20.000 | Range 29 - 133 | | Recovery = | | 59.55% | 63.03% | |
| 22) S | Decachlorobiphen | 18.54 | 18.86 | 1323.8E6 | 886.2E6 | 14.886 | 13.840 | |
| | Spiked Amount 20.000 | Range 30 - 173 | | Recovery = | | 74.43% | 69.20% | |
| | Target Compounds | | | | | | | |
| 2) | alpha-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 3) | gamma-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 4) | beta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 5) | Heptachlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 6) | delta-BHC | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 7) | Aldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 8) | Heptachlor Epoxi | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 9) | gamma-Chlordane | 13.97 | 0.00 | 105.9E6 | 0 | 0.655 | N.D. | # |
| 10) | alpha-Chlordane | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 11) | Endosulfan I | 14.47f | 0.00 | 50344883 | 0 | 0.365 | N.D. | # |
| 12) | 4,4'-DDE | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 13) | Dieldrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 14) | Endrin | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 15) | 4,4'-DDD | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 16) | Endosulfan II | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 17) | 4,4'-DDT | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 18) | Endrin Aldehyde | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 19) | Endosulfan Sulfa | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 20) | Methoxychlor | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |
| 21) | Endrin Ketone | 0.00 | 0.00 | 0 | 0 | N.D. | N.D. | |

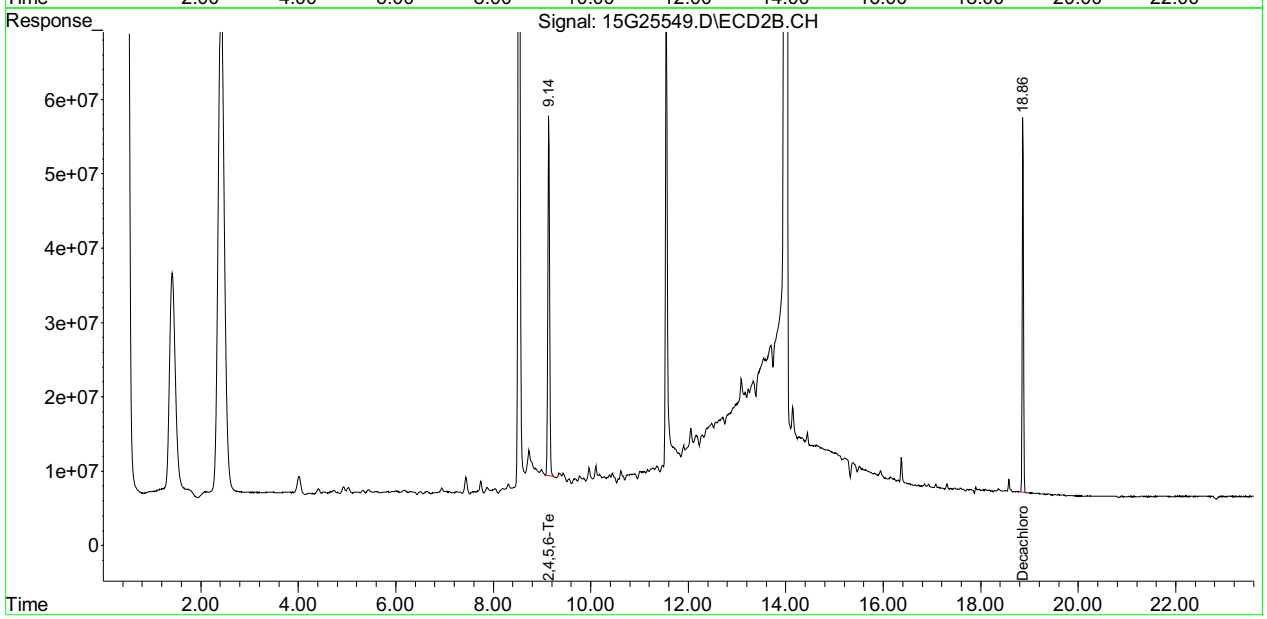
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25549.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 19:10 (#1); 22 Mar 2011 19:38 (#2)
Operator : ECL
Sample : WG359333-02 BLANK
Misc : 7,1 SOIL
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:00:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25550.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 19:38 (#1); 22 Mar 2011 20:06 (#2)
Operator : ECL
Sample : WG359333-03 LCS
Misc : 7,1 SOIL
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:00:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

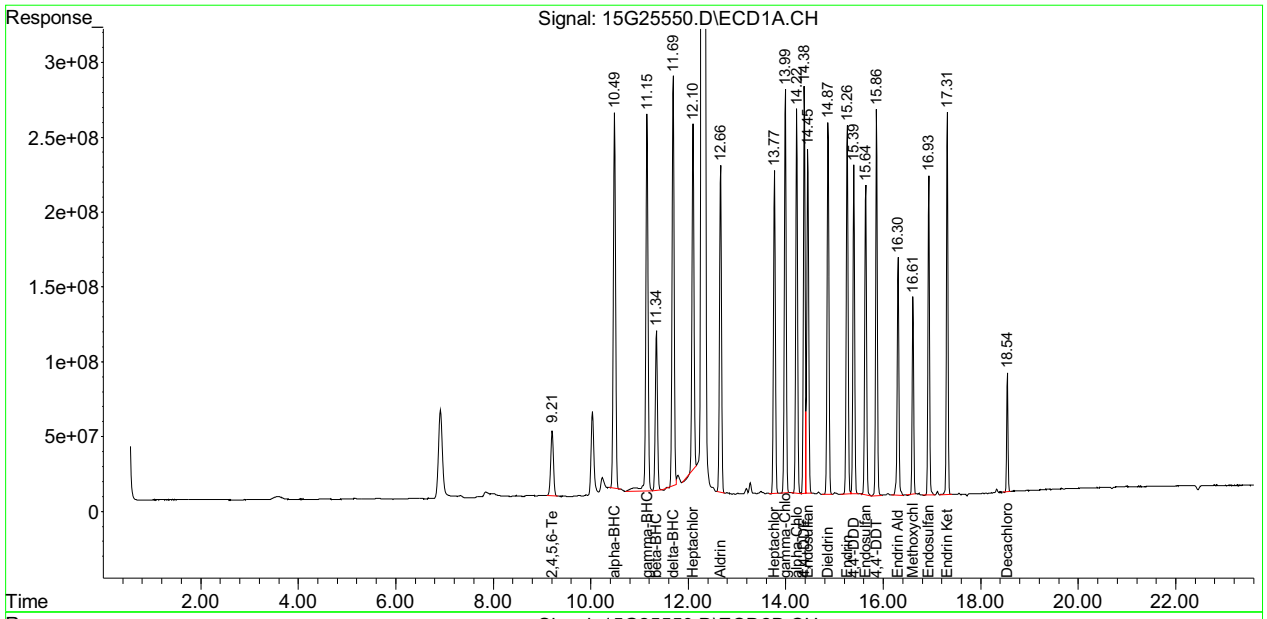
| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|---|
| | System Monitoring Compounds | | | | | | |
| 1) S | 2,4,5,6-Tetrachl | 9.21 | 9.14 | 1689.9E6 | 1345.0E6 | 13.014 | 13.935 |
| | Spiked Amount 20.000 | Range 29 - 133 | | Recovery = | | 65.07% | 69.67% |
| 22) S | Decachlorobiphen | 18.54 | 18.86 | 1458.2E6 | 969.6E6 | 16.398 | 15.142 |
| | Spiked Amount 20.000 | Range 30 - 173 | | Recovery = | | 81.99% | 75.71% |
| | Target Compounds | | | | | | |
| 2) | alpha-BHC | 10.49 | 10.49 | 7981.0E6 | 6108.0E6 | 41.440 | 43.579 |
| 3) | gamma-BHC | 11.15 | 11.23 | 8010.9E6 | 5900.0E6 | 44.806 | 43.607 |
| 4) | beta-BHC | 11.34 | 11.41 | 3246.8E6 | 2437.8E6 | 41.295 | 40.937 |
| 5) | Heptachlor | 12.10 | 12.08 | 6480.5E6 | 5851.2E6 | 37.616 | 45.689 |
| 6) | delta-BHC | 11.69 | 11.98 | 7946.0E6 | 6318.2E6 | 44.264 | 45.907 |
| 7) | Aldrin | 12.66 | 12.69 | 6150.1E6 | 5186.9E6 | 39.725 | 41.634 |
| 8) | Heptachlor Epoxi | 13.77 | 13.74 | 5795.8E6 | 4182.5E6 | 37.247 | 40.392 |
| 9) | gamma-Chlordane | 13.99 | 14.08 | 6956.7E6 | 5243.9E6 | 43.028 | 44.682 |
| 10) | alpha-Chlordane | 14.22 | 14.34 | 6595.6E6 | 5143.9E6 | 43.562 | 45.168 |
| 11) | Endosulfan I | 14.45 | 14.43 | 6017.3E6 | 4355.4E6 | 43.683 | 46.434 |
| 12) | 4,4'-DDE | 14.38 | 14.65 | 6712.8E6 | 5173.1E6 | 47.095 | 47.970 |
| 13) | Dieldrin | 14.87 | 14.91 | 6520.2E6 | 5195.1E6 | 48.572 | 46.806 |
| 14) | Endrin | 15.26 | 15.43 | 6396.3E6 | 4591.3E6 | 47.777 | 49.574 |
| 15) | 4,4'-DDD | 15.39 | 15.64 | 5375.7E6 | 4263.8E6 | 46.124 | 48.642 |
| 16) | Endosulfan II | 15.64 | 15.80 | 5401.8E6 | 4192.5E6 | 43.861 | 44.389 |
| 17) | 4,4'-DDT | 15.86 | 16.15 | 5995.9E6 | 4425.9E6 | 50.978 | 50.172 |
| 18) | Endrin Aldehyde | 16.30 | 16.33 | 3835.0E6 | 2752.1E6 | 39.026 | 39.525 |
| 19) | Endosulfan Sulfa | 16.93 | 16.74 | 4726.3E6 | 3674.5E6 | 44.334 | 44.063 |
| 20) | Methoxychlor | 16.61 | 17.13 | 2759.5E6 | 2032.2E6 | 48.336 | 48.059 |
| 21) | Endrin Ketone | 17.31 | 17.45 | 5492.7E6 | 4063.1E6 | 46.646 | 47.061 |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25550.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 19:38 (#1); 22 Mar 2011 20:06 (#2)
Operator : ECL
Sample : WG359333-03 LCS
Misc : 7,1 SOIL
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 12:00:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : HP15: 8081/608 CALIBRATION February 18, 2011
QLast Update : Wed Feb 23 09:50:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25551.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 20:06 (#1); 22 Mar 2011 20:35 (#2)
Operator : ECL
Sample : WG359333-04 TOX LCS
Misc : 7,1 SOIL
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 14:09:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

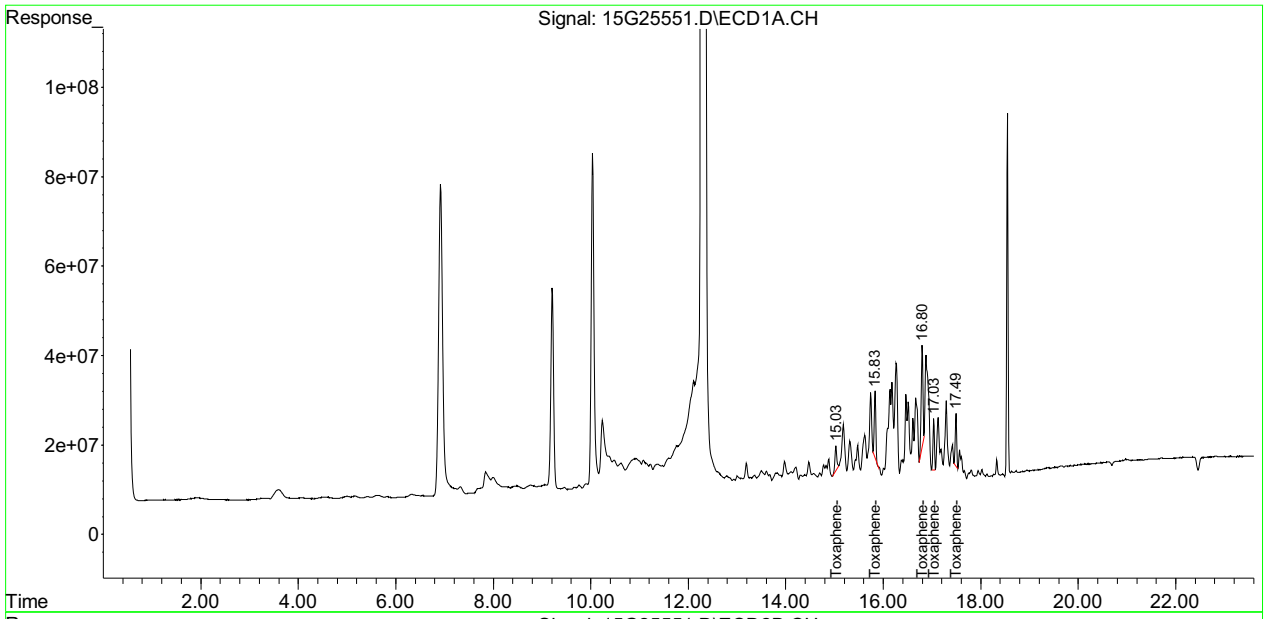
| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | UG/L | UG/L |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) L1 Toxaphene-1 | 15.03 | 14.87 | 146.1E6 | 170.9E6 | 114.564 | 156.329 # |
| 2) L1 Toxaphene-2 | 15.83 | 15.94 | 321.6E6 | 589.3E6 | 170.600 | 177.726 |
| 3) L1 Toxaphene-3 | 16.80 | 16.73 | 550.5E6 | 167.5E6 | 162.930 | 166.381 |
| 4) L1 Toxaphene-4 | 17.03 | 17.07 | 238.7E6 | 380.2E6 | 157.131 | 165.344 |
| 5) L1 Toxaphene-5 | 17.49 | 17.58 | 238.9E6 | 151.0E6 | 170.081 | 171.829 |
| Sum Toxaphene-1 | | | 1495.7E6 | 1459.0E6 | 775.307 | 837.608 |
| Average Toxaphene-1 | | | | | 155.061 | 167.522 |

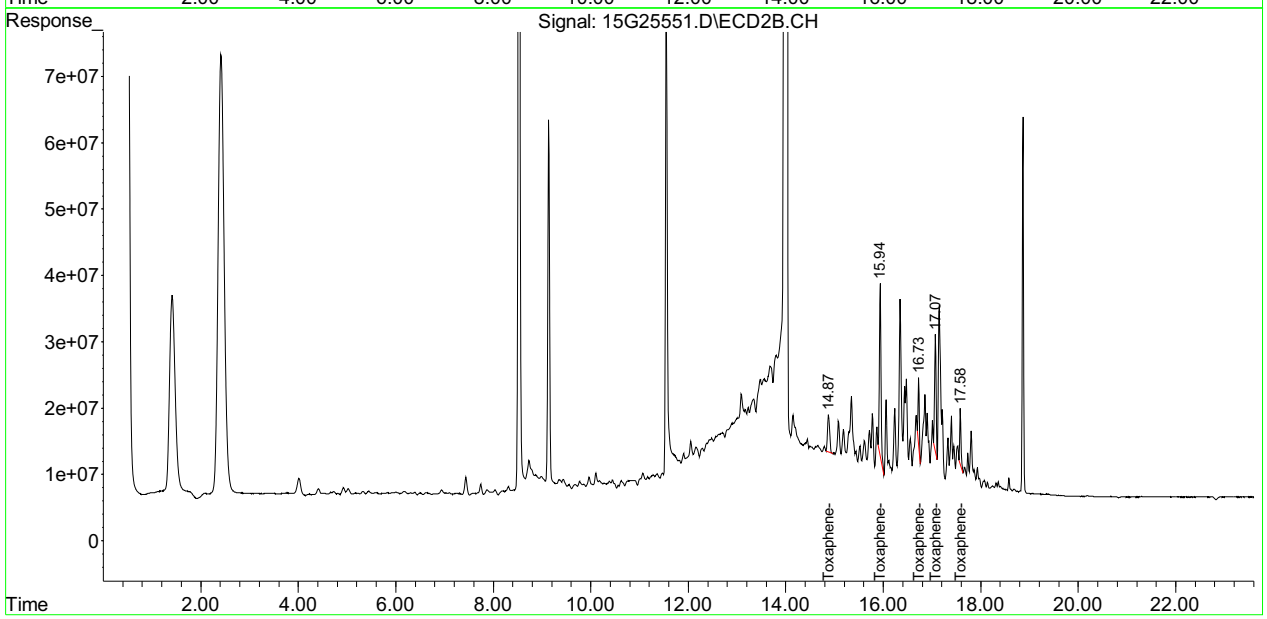
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032211\
Data File : 15G25551.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Mar 2011 20:06 (#1); 22 Mar 2011 20:35 (#2)
Operator : ECL
Sample : WG359333-04 TOX LCS
Misc : 7,1 SOIL
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: .E
Integration File signal 2: EVENTS.E
Quant Time: Mar 23 14:09:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX February 18, 2011
QLast Update : Tue Mar 01 09:20:27 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



# 2.2 General Chemistry Data

# 2.2.1 Percent Solids Data

# 2.2.1.1 Raw Data

# LABORATORY REPORT

## L11030544

03/24/11 15:55

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
( 740 ) 373 - 4071

For

Account Name: CT Laboratories
1230 Lange Court

Baraboo, WI 53913
Attention: Patrick Letterer

Project Number: 2694.005
Project: Kansas AAP
Site: PARSONS KANSAS

## Sample Analysis Summary

| Client ID | Lab ID | Method | Dilution | Date Received |
|---|---|---|---|---|
| 898909 | L11030544-01 | D2216-90 | 1 | 16-MAR-11 |
| 898916 | L11030544-02 | D2216-90 | 1 | 16-MAR-11 |

Report Number: **L11030544**

Report Date : **March 24, 2011**

| | | | | | |
|---|---|---|---|---|---|
| Sample Number: | L11030544-01 | PrePrep Method: | NONE | Instrument: | BAL013 |
| Client ID: | 898909 | Prep Method: | D2216-90 | Prep Date: | 03/24/2011 13:27 |
| Matrix: | Soil | Analytical Method: | D2216-90 | Cal Date: | |
| Workgroup Number: | WG359746 | Analyst: | JDH | Run Date: | 03/24/2011 13:27 |
| Collect Date: | 03/08/2011 10:10 | Dilution: | 1 | File ID: | B1.359746-0109 |
| Sample Tag: | 01 | Units: | weight % | | |

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| Percent Solids | 10-02-6 | 98.1 | | 1.00 | 1.00 |

Report Number: **L11030544**

Report Date : **March 24, 2011**

| | | | | | |
|---|---|---|---|---|---|
| Sample Number: | L11030544-02 | PrePrep Method: | NONE | Instrument: | BAL013 |
| Client ID: | 898916 | Prep Method: | D2216-90 | Prep Date: | 03/24/2011 13:27 |
| Matrix: | Soil | Analytical Method: | D2216-90 | Cal Date: | |
| Workgroup Number: | WG359746 | Analyst: | JDH | Run Date: | 03/24/2011 13:27 |
| Collect Date: | 03/08/2011 10:10 | Dilution: | 1 | File ID: | B1.359746-0110 |
| Sample Tag: | 01 | Units: | weight % | | |

| Analyte | CAS. Number | Result | Qual | LOQ | LOD |
|---|---|---|---|---|---|
| Percent Solids | 10-02-6 | 97.9 | | 1.00 | 1.00 |

**Example Percent Solids Calculations**

**1.0 Calculating the percent solids of a sample.**

$$\%Solids = \frac{WT3 - WT1}{WT2 - WT1} \times F$$

| Where: | |
|---|---|
| WT1 = Weight, in grams, of the empty container | 1.30 g |
| WT2 = Weight, in grams, of the container and wet sample | 21.274 g |
| WT3 = Weight, in grams, of the container and dried sample | 5.21 g |
| F = Factor to get units as percent weight | 100 |
| %Solids = Percent solids present in sample. | 19.58% |

**2.0 Calculating the percent moisture of a sample.**

**% Moisture = 100 - % Solids from 1.0 calculation**

Microbac Laboratories Inc.

PERCENT SOLIDS

Workgroup (AAB#):WG359746 Analyst:JDH ADT(on):03/23/2011 14:20
Method:D2216-90 Instrument:BAL013 ADT(off):03/24/2011 13:27
SOP:K0003 Rev:11

| SAMPLE NUMBER | EMPTY PAN WT 1 | WET WT 2 | DRY WT 3A | DRY WT 3B | DRY WT 3C | PERCENT SOLID | PERCENT MOISTURE |
|---|---|---|---|---|---|---|---|
| L11030412-01 | 1.335 | 36.531 | 31.643 | | | 86.11 | |
| L11030412-02 | 1.335 | 33.116 | 30.421 | | | 91.52 | |
| L11030412-03 | 1.332 | 34.019 | 32.793 | | | 96.25 | |
| L11030412-04 | 1.318 | 41.768 | 39.084 | | | 93.36 | |
| L11030412-05 | 1.322 | 46.259 | 43.61 | | | 94.11 | |
| L11030412-06 | 1.329 | 29.655 | 25.773 | | | 86.30 | |
| L11030412-07 | 1.326 | 39.715 | 34.056 | | | 85.26 | |
| L11030412-08 | 1.322 | 34.429 | 30.53 | | | 88.22 | |
| L11030456-01 | 1.336 | 21.948 | 11.469 | | | 49.16 | |
| L11030544-01 | 1.318 | 21.875 | 21.494 | | | 98.15 | |
| L11030544-02 | 1.34 | 17.659 | 17.319 | | | 97.92 | |
| L11030575-01 | 1.329 | 38.666 | 31.911 | | | 81.91 | |
| L11030575-02 | 1.324 | 29.369 | 24.06 | | | 81.07 | |
| L11030575-03 | 1.329 | 34.751 | 28.278 | | | 80.63 | |
| L11030575-04 | 1.318 | 21.614 | 16.847 | | | 76.51 | |
| L11030575-05 | 1.325 | 32.468 | 26.891 | | | 82.09 | |
| L11030575-06 | 1.339 | 28.226 | 22.799 | | | 79.82 | |
| L11030641-01 | 1.338 | 17.415 | 12.513 | | | 69.51 | |
| L11030655-01 | 1.333 | 21.65 | 14.645 | | | 65.52 | |
| L11030655-02 | 1.323 | 24.395 | 18.171 | | | 73.02 | |
| L11030655-03 | 1.328 | 25.693 | 18.248 | | | 69.44 | |
| L11030655-04 | 1.33 | 32.364 | 23.88 | | | 72.66 | |
| L11030655-05 | 1.33 | 32.364 | 23.88 | | | 72.66 | |
| L11030655-06 | 1.33 | 32.364 | 23.88 | | | 72.66 | |
| L11030655-07 | 1.331 | 37.395 | 27.686 | | | 73.08 | |
| L11030655-08 | 1.32 | 32.795 | 24.391 | | | 73.30 | |
| L11030655-09 | 1.329 | 24.833 | 19.072 | | | 75.49 | |
| L11030658-01 | 1.328 | 21.967 | 21.312 | | | 96.83 | |
| L11030658-02 | 1.325 | 20.022 | 18.974 | | | 94.39 | |
| L11030658-03 | 1.336 | 28.17 | 26.715 | | | 94.58 | |
| L11030658-04 | 1.327 | 24.029 | 22.955 | | | 95.27 | |
| L11030658-05 | 1.32 | 22.507 | 21.863 | | | 96.96 | |
| L11030658-06 | 1.341 | 23.942 | 23.36 | | | 97.42 | |
| L11030658-07 | 1.322 | 26.72 | 25.625 | | | 95.69 | |
| L11030658-08 | 1.326 | 18.771 | 17.914 | | | 95.09 | |
| L11030658-09 | 1.321 | 28.929 | 27.703 | | | 95.56 | |
| L11030658-10 | 1.326 | 17.755 | 16.643 | | | 93.23 | |
| L11030658-11 | 1.328 | 29.389 | 28.394 | | | 96.45 | |
| L11030658-12 | 1.323 | 23.565 | 22.477 | | | 95.11 | |
| L11030658-13 | 1.324 | 20.213 | 19.675 | | | 97.15 | |
| L11030658-14 | 1.324 | 20.213 | 19.675 | | | 97.15 | |
| L11030658-15 | 1.324 | 20.213 | 19.675 | | | 97.15 | |

PERCENT_SOLIDS - Modified 04/24/2008
PDF ID: 1952965
Report generated: 03/24/2011 14:26

Microbac Laboratories Inc.

PERCENT SOLIDS

Workgroup (AAB#):WG359746 Analyst:JDH ADT(on):03/23/2011 14:20
Method:D2216-90 Instrument:BAL013 ADT(off):03/24/2011 13:27
SOP:K0003 Rev:11

| SAMPLE NUMBER | EMPTY PAN WT 1 | WET WT 2 | DRY WT 3A | DRY WT 3B | DRY WT 3C | PERCENT SOLID | PERCENT MOISTURE |
|---|---|---|---|---|---|---|---|
| L11030658-16 | 1.326 | 22.78 | 22.184 | | | 97.22 | |
| L11030678-01 | 1.341 | 24.789 | 24.559 | | | 99.02 | |
| L11030715-01 | 1.32 | 26.706 | 22.602 | | | 83.83 | |
| L11030715-02 | 1.324 | 25.965 | 21.709 | | | 82.73 | |
| L11030715-03 | 1.325 | 29.978 | 24.925 | | | 82.36 | |
| L11030715-04 | 1.325 | 29.978 | 24.925 | | | 82.36 | |
| L11030715-05 | 1.325 | 29.978 | 24.925 | | | 82.36 | |
| L11030715-06 | 1.316 | 19.325 | 16.214 | | | 82.73 | |
| L11030715-07 | 1.322 | 28.785 | 24.004 | | | 82.59 | |
| L11030715-08 | 1.32 | 19.77 | 16.564 | | | 82.62 | |
| L11030715-09 | 1.325 | 21.707 | 18.147 | | | 82.53 | |
| L11030715-10 | 1.322 | 31.144 | 26.261 | | | 83.63 | |
| L11030715-11 | 1.322 | 24.638 | 20.478 | | | 82.16 | |
| L11030715-12 | 1.357 | 25.696 | 21.592 | | | 83.14 | |
| L11030715-13 | 1.319 | 27.371 | 22.935 | | | 82.97 | |
| L11030715-14 | 1.319 | 27.652 | 23.387 | | | 83.80 | |
| L11030715-15 | 1.318 | 29.252 | 25.005 | | | 84.80 | |
| L11030715-16 | 1.32 | 14.919 | 12.604 | | | 82.98 | |
| L11030715-17 | 1.32 | 22.802 | 19.047 | | | 82.52 | |
| L11030715-18 | 1.332 | 17.921 | 15.173 | | | 83.43 | |
| WG359746-01 | 1.329 | 38.666 | 31.911 | | | 81.91 | 18.09 |
| WG359746-02 | 1.323 | 34.395 | 18.171 | | | 50.94 | 49.06 |
| WG359746-03 | 1.332 | 17.921 | 15.173 | | | 83.43 | 16.57 |
| WG359746-04 | 1.317 | 22.344 | 18.594 | | | 82.17 | 17.83 |
| WG359746-05 | 1.33 | 27.995 | 14.171 | | | 48.16 | 51.84 |
| WG359746-06 | 1.33 | 15.19 | 12.945 | | | 83.80 | 16.20 |

Analyst: 

PERCENT_SOLIDS - Modified 04/24/2008
PDF ID: 1952965
Report generated: 03/24/2011 14:26

# 3.0 Attachments

**Microbac Laboratories Inc.**
**Analyst Listing**
**March 29, 2011**

---

| | | |
|---|---|---|
| ADC – ANTHONY D. CANTER | AJF – AMANDA J. FICKIESEN | ALB – ANNIE L. BROWN |
| ALV – AMY L. VALENTINE | AML – TONY M. LONG | AZH – AFTER HOURS |
| BLG – BRENDA L. GREENWALT | BRG – BRENDA R. GREGORY | CAA – CASSIE A. AUGENSTEIN |
| CAF – CHERYL A. FLOWERS | CEB – CHAD E. BARNES | CLC – CHRYS L. CRAWFORD |
| CLS – CARA L. STRICKLER | CLW – CHARISSA L. WINTERS | CPD – CHAD P. DAVIS |
| CSH – CHRIS S. HILL | DDE – DEBRA D. ELLIOTT | DEL – DON E. LIGHTFRITZ |
| DEV – DAVID E. VANDENBERG | DGB – DOUGLAS G. BUTCHER | DIH – DEANNA I. HESSON |
| DLB – DAVID L. BUMGARNER | DLP – DOROTHY L. PAYNE | DLR – DIANNA L. RAUCH |
| ECL – ERIC C. LAWSON | EDL – ERIN D. LONG | ERP – ERIN R. PORTER |
| FJB – FRANCES J. BOLDEN | HAV – HEMA VILASAGAR | HJR – HOLLY J. REED |
| JAL – JOHN A. LENT | JBK – JEREMY B. KINNEY | JDH – JUSTIN D. HESSON |
| JKT – JANE K. THOMPSON | JLL – JOHN L. LENT | JWR – JOHN W. RICHARDS |
| JWS – JACK W. SHEAVES | JYH – JI Y. HU | KEB – KATIE E. BARNES |
| KHR – KIM H. RHODES | KRA – KATHY R. ALBERTSON | LKN – LINDA K. NEDEFF |
| LSB – LESLIE S. BUCINA | MDA – MIKE D. ALBERTSON | MDC – MIKE D. COCHRAN |
| MES – MARY E. SCHILLING | MMB – MAREN M. BEERY | MRT – MICHELLE R. TAYLOR |
| MSW – MATT S. WILSON | PDM – PIERCE D. MORRIS | PWD – PAUL W. DENT |
| RAH – ROY A. HALSTEAD | RB – BOB BUCHANAN | REK – BOB E. KYER |
| RLK – ROBIN L. KLINGER | RWC – RODNEY W. CAMPBELL | SLM – STEPHANIE L. MOSSBURG |
| SLP – SHERI L. PFALZGRAF | TIP – TAE I. PARRISH | TMB – TIFFANY M. BAILEY |
| TMM – TAMMY M. MORRIS | VC – VICKI COLLIER | WJB – WILL J. BEASLEY |
| WTD – WADE T. DELONG | | |

Microbac Laboratories Inc.
List of Valid Qualifiers
March 29, 2011

Qualkey: DOD

| Qualifier | Description |
|---|---|
| * | Surrogate or spike compound out of range |
| + | Correlation coefficient for the MSA is less than 0.995 |
| < | Result is less than the associated numerical value. |
| > | Result is greater than the associated numerical value. |
| A | See the report narrative |
| B | The reported result is associated with a contaminated method blank. |
| B1 | Target analyte detected in method blank at or above the method reporting limit |
| B3 | Target analyte detected in calibration blank at or above the method reporting limit |
| B4 | The BOD unseeded dilution water blank exceeded 0.2 mg/L |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| DL | Surrogate or spike compound was diluted out |
| E | Estimated concentration due to sample matrix interference |
| EDL | Elevated sample reporting limits, presence of non-target analytes |
| EMPC | Estimated Maximum Possible Concentration |
| F, S | Estimated result below quantitation limit; method of standard additions(MSA) |
| FL | Free Liquid |
| H1 | Sample analysis performed past holding time. |
| I | Semiquantitative result (out of instrument calibration range) |
| J | Estimated concentration; sample matrix interference. |
| J | Estimated value ; the analyte concentration was greater than the highest standard |
| J | Estimated value ; the analyte concentration was less than the low standard (LOQ) |
| J | The reported result is an estimated value. |
| J,B | Analyte detected in both the method blank and sample above the MDL. |
| J,P | Estimate; columns don't agree to within 40% |
| J,S | Estimated concentration; analyzed by method of standard addition (MSA) |
| L | Sample reporting limits elevated due to matrix interference |
| L1 | The associated blank spike (LCS) recovery was above the laboratory acceptance limits. |
| L2 | The associated blank spike (LCS) recovery was below the laboratory acceptance limits. |
| M | Matrix effect; the concentration is an estimate due to matrix effect. |
| N | Nontarget analyte; the analyte is a tentativlely identified compound (TIC) by GC/MS |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL). |
| ND, L | Not detected; sample reporting limit (RL) elevated due to interference |
| ND, S | Not detected; analyzed by method of standard addition (MSA) |
| NF | Not found by library search |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentrations >40% difference between the two GC columns |
| Q | One or more quality control criteria failed. See narrative. |
| QNS | Quantity of sample not sufficient to perform analysis |
| RA | Reanalysis confirms reported results |
| RE | Reanalysis confirms sample matrix interference |
| S | Analyzed by method of standard addition (MSA) |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TIC | Library Search Compound |
| TNTC | Too numerous to count |
| U | Analyte was not detected. The concentration is below the reported LOD. |
| UJ | Undetected; the analyte was analyzed for, but not detected. |
| UQ | Undetected; the analyte was analyzed for, but not detected. |
| W | Post-digestion spike for furnace AA out of control limits |
| X | Exceeds regulatory limit |
| X, S | Exceeds regulatory limit; method of standard additions (MSA) |
| Z | Cannot be resolved from isomer - see below |

*****Special Notes for Organic Analytes**

Qualkey: DOD

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound an are matrix dependent.

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www.ctlaboratories.com

***Upon Receipt of Samples, please verify that samples were received in acceptable condition then sign this form and fax to (608)356-2766 or email to the project manager.*** **Sample temperature, upon receipt, must be recorded on this document unless thermal preservation is not a method requirement.**

**Ship to:** **Microbac**
158 Starlight Drive
Marietta, OH 45750

Return Invoice and Results to:

**CT Laboratories**
Pat Letterer
1230 Lange Court
Baraboo WI 53913
**pletterer@ctlaboratories.com**

Please analyze following QSM 4.1.

**PURCHASE ORDER #** 83966 MICROBAC ***The PO# must appear on all invoice and reports!***

**Date Due:** 2 week TAT ***RUSH TURNAROUND NEEDED? Y or (N) (Circle One)***

Report results as EDD? N (Y) (Circle one and indicate type: ADR A1+A3) Data Deliverable Package LEVEL: Level IV

PML 03-14-11

| CTLabs ID# | Sample Date/Time | Matrix | Sample Description | Analyses / Method | | Cost |
|---|---|---|---|---|---|---|
| 898909 | 3/8/2011 1010 | SOIL | DL2SS-001M-0001-SO | PESTICIDES 8081 | SW8081 | |
| 898916 | 3/8/2011 1010 | SOIL | DL2SS-001M-0002-SO | PESTICIDES ↓ | SW8081 | |

Relinquished by: [signature] Date/Time: 3/15/11 14:50

Received by: _____ Date/Time: _____

**COMMENTS:**

Microbac OVD
Received: 03/16/2011 11:54
By: BRENDA GREENWALT
221000013204
Brenda Greenwalt

**REPORT ALL SOLIDS ON A DRY WEIGHT BASIS UNLESS OTHERWISE INDICATED**

# COOLER INSPECTION

Microbac

Received: 03/22/2011 10:56
Delivery Method: FedEx
Opened By: Robin Klinger
Comments:

Login(s): L11030723|

Cooler(s)

| Cooler # | Temp Gun | Temp | Tracking # | COC # | Comments |
|---|---|---|---|---|---|
| 0015711 | H | 0.0 | 345750811100000297549580363420 17 | 1103109<br>1103117<br>1103133 | |

| | | |
|---|---|---|
| 1 | Yes | Were shipping coolers sealed? |
| 2 | Yes | Were custody seals intact? |
| 3 | Yes | Were cooler temperatures in range of 0-6? |
| 4 | Yes | Was ice present? |
| 5 | Yes | Were COC's received/information complete/signed and dated? |
| 6 | Yes | Were sample containers and labels intact and match COC? |
| 7 | Yes | Were the correct containers and volumes received? |
| 8 | Yes | Were samples received within EPA hold times? |
| 9 | Yes | Were correct perservatives used? (water only) |
| 10 | NA | Were pH ranges acceptable? (voa's excluded) |
| 11 | Yes | Were VOA samples free of headspace (less than 6mm)? |

Discrepancies:



**Microbac - Ohio Valley Division**
158 Starlite Drive
Marietta, OH 45750
Tel: (740)373-4071 Fax: (740)373-4835

**Microbac Laboratories Inc.**

Internal Chain of Custody Report

**Login:** L11030544
**Account:** 2694
**Project:** 2694.005
**Samples:** 2
**Due Date:** 25-MAR-2011

| Samplenum | Container ID | Products |
|---|---|---|
| **L11030544-01** | 808284 | PCT-S |

Bottle: 1

| Seq. | Purpose | From | To | Date/Time | Accept | Relinquish |
|---|---|---|---|---|---|---|
| 1 | LOGIN | COOLER | W1 | 16-MAR-2011 15:16 | JKT | |
| 2 | PREP | W1 | EXT | 18-MAR-2011 06:49 | CEB | AZH |
| 3 | STORE | EXT | W1 | 18-MAR-2011 10:39 | JKT | CEB |
| 4 | ANALYZ | W1 | WET | 22-MAR-2011 08:44 | JDH | RLK |
| 5 | STORE | WET | W1 | 24-MAR-2011 08:17 | JDH | JDH |

| Samplenum | Container ID | Products |
|---|---|---|
| **L11030544-02** | 808285 | PCT-S |

Bottle: 1

| Seq. | Purpose | From | To | Date/Time | Accept | Relinquish |
|---|---|---|---|---|---|---|
| 1 | LOGIN | COOLER | W1 | 16-MAR-2011 15:16 | JKT | |
| 2 | PREP | W1 | EXT | 18-MAR-2011 06:49 | CEB | AZH |
| 3 | STORE | EXT | W1 | 18-MAR-2011 10:39 | JKT | CEB |
| 4 | ANALYZ | W1 | WET | 22-MAR-2011 08:44 | JDH | RLK |
| 5 | STORE | WET | W1 | 24-MAR-2011 08:17 | JDH | JDH |

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

## NELAP Addendum - March 4, 2011

## Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
Total Halide by Bomb Combustion (TX)
Particle Sizing - 200 Mesh (PS200)
Sulfate (SO4) - 9038
Specific Gravity/Density (SPGRAV)
Total Residual Chlorine (CL-TRL)
Total Volatile Solids (all forms) (TVS)
Total Coliform Bacteria (all methods)
Fecal Coliform Bacteria (all methods)
Sulfite (SO3)
Thiodiglycol (TDG-LCMS)

## NELAP Accreditation by Laboratory SOP

**NONPOTABLE WATER**

OVL HPLC02/HPLC-UV

Nitroglycerin
Nitroguanidine
Acetic acid
Butyric acid
Lactic acid
Propionic acid
Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene
1,4-Dioxane
Atrazine
Benzaldehyde
Biphenyl
Caprolactam
Hexamethylphosphoramide (HMPA)
Pentachlorobenzene
Pentachloroethane

## NELAP Accreditation by Laboratory SOP

### NONPOTABLE WATER

OVL MSV0I/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL RSKOI/GC-FID

Isobutane
n-Butane
Propane
Propylene
Propyne

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

### SOLID AND HAZARDOUS CHEMICALS

OVL HPLCOS-HPLC-UV

Nitroguanidine

OVL KNITRO-C-S/UV-VIS

Nitrocellulose

OVL MSS0I/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

OVL MSV0I/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

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# QC SUMMARY REPORT

**USACE - LOUISVILLE** **Project Name: RAVENNA - GROUP 2 ORE**

**SDG #: 0** **Folder #: 83966** **Project Number: W912QR-10-D-0024**

## *Duplicate*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73956 | Analysis Date: | 3/16/2011 | Prep Batch #: | | Matrix: | SOIL |
| CTLab #: | 901492 | Analysis Time: | 17:00 | Prep Date/Time: | | Method: | SW8000C |
| Parent Sample #: | 898909 | Analyst: | KMB | Prep Analyst: | | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Solids, Percent | 99.2 | % | <N/A | | | | | 0 | 8 |

## *Duplicate*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74052 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36456 | Matrix: | SOIL |
| CTLab #: | 901967 | Analysis Time: | 13:00 | Prep Date/Time: | 03/21/2011 14:00 | Method: | SW7196 |
| Parent Sample #: | 898909 | Analyst: | EJC | Prep Analyst: | EJC | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hexavalent Chromium | 3.46 | mg/kg | 98 | | | | | 13 | 30 |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74052 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36456 | Matrix: | SOLID |
| CTLab #: | 901966 | Analysis Time: | 13:00 | Prep Date/Time: | 03/21/2011 14:00 | Method: | SW7196 |
| Parent Sample #: | | Analyst: | EJC | Prep Analyst: | EJC | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hexavalent Chromium | 18.6 | mg/kg | | | 20.0 | 93 | 83 --- 115 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74052 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36456 | Matrix: | SOLID |
| CTLab #: | 901965 | Analysis Time: | 13:00 | Prep Date/Time: | 03/21/2011 14:00 | Method: | SW7196 |
| Parent Sample #: | | Analyst: | EJC | Prep Analyst: | EJC | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hexavalent Chromium | 2.6 | mg/kg | | U | 0 | | 5.0 | | |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74052 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36456 | Matrix: | SOIL |
| CTLab #: | 901968 | Analysis Time: | 13:00 | Prep Date/Time: | 03/21/2011 14:00 | Method: | SW7196 |
| Parent Sample #: | 898909 | Analyst: | EJC | Prep Analyst: | EJC | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hexavalent Chromium | 3.95 | mg/kg | 3.9 | | 40.3 | 0 | 75 --- 125 | | |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74052 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36456 | Matrix: | SOIL |
| CTLab #: | 901969 | Analysis Time: | 13:00 | Prep Date/Time: | 03/21/2011 14:00 | Method: | SW7196 |
| Parent Sample #: | 898909 | Analyst: | EJC | Prep Analyst: | EJC | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hexavalent Chromium | 136 | mg/kg | 3.9 | | 403 | 33 | 75 --- 125 | | |

***Lab Control Spike Soil***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74142 | Analysis Date: | 3/26/2011 | Prep Batch #: | 36468 | Matrix: | SOLID |
| CTLab #: | 902272 | Analysis Time: | 08:43 | Prep Date/Time: | 03/22/2011 09:00 | Method: | SW9056M |
| Parent Sample #: | | Analyst: | RLD | Prep Analyst: | BMS | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrocellulose | 392 | mg/kg | | | 500 | 78 | 70 --- 130 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74142 | Analysis Date: | 3/26/2011 | Prep Batch #: | 36468 | Matrix: | SOLID |
| CTLab #: | 902271 | Analysis Time: | 09:01 | Prep Date/Time: | 03/22/2011 09:00 | Method: | SW9056M |
| Parent Sample #: | | Analyst: | RLD | Prep Analyst: | BMS | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrocellulose | 13 | mg/kg | | U | 0 | | 50 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74142 | Analysis Date: | 3/26/2011 | Prep Batch #: | 36468 | Matrix: | SOIL |
| CTLab #: | 902274 | Analysis Time: | 09:55 | Prep Date/Time: | 03/22/2011 09:00 | Method: | SW9056M |
| Parent Sample #: | 902273 | Analyst: | RLD | Prep Analyst: | BMS | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrocellulose | 329 | mg/kg | BDL | | 500 | 66 | 70 --- 130 | 2 | 20 |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74142 | Analysis Date: | 3/26/2011 | Prep Batch #: | 36468 | Matrix: | SOIL |
| CTLab #: | 902273 | Analysis Time: | 09:37 | Prep Date/Time: | 03/22/2011 09:00 | Method: | SW9056M |
| Parent Sample #: | 898909 | Analyst: | RLD | Prep Analyst: | BMS | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrocellulose | 323 | mg/kg | BDL | | 500 | 65 | 70 --- 130 | | |

***Duplicate***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73908 | Analysis Date: | 3/16/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900055 | Analysis Time: | 23:14 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 898909 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 12600 | mg/kg | 501000. | | | | 9.6 | 0 | 20 |
| Antimony | 1.4 | mg/kg | 52.4 | | | | 21.6 | 8 | 20 |
| Arsenic | 8.2 | mg/kg | 323. | | | | 36 | 1 | 20 |
| Barium | 121 | mg/kg | 4910. | | | | 1.92 | 2 | 20 |
| Beryllium | 0.45 | mg/kg | 17.3 | | | | 0.96 | 4 | 20 |
| Cadmium | 0.19 | mg/kg | 9.21 | | | | 1.68 | 19 | 20 |
| Calcium | 3320 | mg/kg | 133000. | | | | 36 | 1 | 20 |
| Chromium | 154 | mg/kg | 6180. | | | | 10 | 1 | 20 |
| Cobalt | 10.2 | mg/kg | 401. | | | | 3.92 | 1 | 20 |
| Copper | 431 | mg/kg | 1760 | | | | 15.2 | 3 | 20 |
| Iron | 20100 | mg/kg | 81300 | | | | 72 | 2 | 20 |
| Lead | 33.0 | mg/kg | 1280. | | | | 9.6 | 2 | 20 |
| Magnesium | 1580 | mg/kg | 63100. | | | | 28.8 | 1 | 20 |
| Manganese | 1540 | mg/kg | 3190 | | | | 4.8 | 63 | 20 |
| Nickel | 12.1 | mg/kg | 476. | | | | 4.8 | 1 | 20 |
| Selenium | 0.0705 | mg/kg | 3.21 | U | | | 16.8 | 200 | 20 |
| Silver | 0.0171 | mg/kg | BDL | U | | | 8.8 | 0 | 20 |
| Thallium | 1.3 | mg/kg | 52.3 | | | | 22.4 | 2 | 20 |
| Vanadium | 17.2 | mg/kg | 686. | | | | 5.6 | 0 | 20 |
| Zinc | 284 | mg/kg | 11600. | | | | 19.2 | 3 | 20 |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73908 | Analysis Date: | 3/18/2011 | Prep Batch #: | 36396 | Matrix: | SOLID |
| CTLab #: | 900054 | Analysis Time: | 13:24 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 108 | mg/kg | | | 100 | 108 | 80 --- 120 | | |
| Antimony | 24.9 | mg/kg | | | 25.0 | 100 | 80 --- 120 | | |
| Arsenic | 96.3 | mg/kg | | | 100 | 96 | 80 --- 120 | | |
| Barium | 98.5 | mg/kg | | | 100 | 98 | 80 --- 120 | | |
| Beryllium | 2.4 | mg/kg | | | 2.5 | 96 | 80 --- 120 | | |
| Cadmium | 2.2 | mg/kg | | | 2.5 | 88 | 80 --- 120 | | |
| Calcium | 5280 | mg/kg | | | 5000 | 106 | 80 --- 120 | | |
| Chromium | 9.7 | mg/kg | | | 10.0 | 97 | 80 --- 120 | | |
| Cobalt | 22.2 | mg/kg | | | 25.0 | 89 | 80 --- 120 | | |
| Copper | 10.3 | mg/kg | | | 12.5 | 82 | 80 --- 120 | | |
| Iron | 45.0 | mg/kg | | | 50.0 | 90 | 80 --- 120 | | |
| Lead | 21.2 | mg/kg | | | 25.0 | 85 | 80 --- 120 | | |
| Magnesium | 2450 | mg/kg | | | 2500 | 98 | 80 --- 120 | | |
| Manganese | 21.8 | mg/kg | | | 25.0 | 87 | 80 --- 120 | | |
| Nickel | 23.7 | mg/kg | | | 25.0 | 95 | 80 --- 120 | | |
| Selenium | 94.5 | mg/kg | | | 100 | 94 | 80 --- 120 | | |
| Silver | 2.5 | mg/kg | | | 2.5 | 100 | 75 --- 120 | | |
| Thallium | 93.0 | mg/kg | | | 100 | 93 | 80 --- 120 | | |
| Vanadium | 24.1 | mg/kg | | | 25.0 | 96 | 80 --- 120 | | |
| Zinc | 22.7 | mg/kg | | | 25.0 | 91 | 80 --- 120 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73908 | Analysis Date: | 3/16/2011 | Prep Batch #: | 36396 | Matrix: | SOLID |
| CTLab #: | 900053 | Analysis Time: | 21:03 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 0.45 | mg/kg | | | 0 | | 0.12 | | |
| Antimony | 0.08 | mg/kg | | U | 0 | | 0.27 | | |
| Arsenic | 0.13 | mg/kg | | U | 0 | | 0.45 | | |
| Barium | 0.014 | mg/kg | | | 0 | | 0.024 | | |
| Beryllium | 0.0079 | mg/kg | | | 0 | | 0.012 | | |
| Cadmium | 0.006 | mg/kg | | U | 0 | | 0.021 | | |
| Calcium | 0.59 | mg/kg | | | 0 | | 0.45 | | |
| Chromium | 0.019 | mg/kg | | U | 0 | | 0.125 | | |
| Cobalt | 0.015 | mg/kg | | U | 0 | | 0.049 | | |
| Copper | 0.06 | mg/kg | | U | 0 | | 0.19 | | |
| Iron | 1.1 | mg/kg | | | 0 | | 0.9 | | |
| Lead | 0.04 | mg/kg | | U | 0 | | 0.12 | | |
| Magnesium | 0.32 | mg/kg | | | 0 | | 0.36 | | |
| Manganese | 0.048 | mg/kg | | | 0 | | 0.06 | | |
| Nickel | 0.018 | mg/kg | | U | 0 | | 0.060 | | |
| Selenium | 0.07 | mg/kg | | U | 0 | | 0.21 | | |
| Silver | 0.017 | mg/kg | | U | 0 | | 0.110 | | |
| Thallium | 0.043 | mg/kg | | | 0 | | 0.28 | | |
| Vanadium | 0.011 | mg/kg | | U | 0 | | 0.070 | | |
| Zinc | 0.04 | mg/kg | | U | 0 | | 0.24 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73908 | Analysis Date: | 3/16/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900057 | Analysis Time: | 23:27 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 900056 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 19300 | mg/kg | 12600 | | 5140 | 130 | 80 --- 120 | 1 | 20 |
| Antimony | 3.7 | mg/kg | 1.3 | | 25.2 | 10 | 80 --- 120 | 1 | 20 |
| Arsenic | 92.6 | mg/kg | 8.1 | | 101 | 84 | 80 --- 120 | 0 | 20 |
| Barium | 211 | mg/kg | 124 | | 101 | 86 | 80 --- 120 | 1 | 20 |
| Beryllium | 2.7 | mg/kg | 0.44 | | 2.5 | 90 | 80 --- 120 | 1 | 20 |
| Cadmium | 1.9 | mg/kg | 0.23 | | 2.5 | 67 | 80 --- 120 | 0 | 20 |
| Calcium | 7880 | mg/kg | 3350 | | 5040 | 90 | 80 --- 120 | 1 | 20 |
| Chromium | 135 | mg/kg | 156 | | 10.1 | 0 | 80 --- 120 | 4 | 20 |
| Cobalt | 15.3 | mg/kg | 10.1 | | 25.2 | 21 | 80 --- 120 | 2 | 20 |
| Copper | 446 | mg/kg | 443 | | 12.6 | 24 | 80 --- 120 | 4 | 20 |
| Iron | 22200 | mg/kg | <3.02 | | 5090 | 33 | 80 --- 120 | 1 | 20 |
| Lead | 52.1 | mg/kg | 32.2 | | 25.2 | 79 | 80 --- 120 | 1 | 20 |
| Magnesium | 3730 | mg/kg | 1590 | | 2520 | 85 | 80 --- 120 | 1 | 20 |
| Manganese | 1490 | mg/kg | 803 | | 25.2 | 2726 | 80 --- 120 | 0 | 20 |
| Nickel | 32.2 | mg/kg | 12.0 | | 25.2 | 80 | 80 --- 120 | 0 | 20 |
| Selenium | 74.3 | mg/kg | 0.081 | | 101 | 73 | 80 --- 120 | 0 | 20 |
| Silver | 1.6 | mg/kg | BDL | | 2.5 | 64 | 75 --- 120 | 2 | 20 |
| Thallium | 53.9 | mg/kg | 1.3 | | 101 | 52 | 80 --- 120 | 1 | 20 |
| Vanadium | 36.8 | mg/kg | 17.3 | | 25.2 | 77 | 80 --- 120 | 1 | 20 |
| Zinc | 277 | mg/kg | 292 | | 25.2 | 0 | 80 --- 120 | 3 | 20 |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73908 | Analysis Date: | 3/16/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900056 | Analysis Time: | 23:20 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 898909 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 19400 | mg/kg | 12600 | | 5140 | 132 | 80 --- 120 | | |
| Antimony | 3.7 | mg/kg | 1.3 | | 25.2 | 10 | 80 --- 120 | | |
| Arsenic | 92.6 | mg/kg | 8.1 | | 101 | 84 | 80 --- 120 | | |
| Barium | 214 | mg/kg | 124 | | 101 | 89 | 80 --- 120 | | |
| Beryllium | 2.7 | mg/kg | 0.44 | | 2.5 | 90 | 80 --- 120 | | |
| Cadmium | 1.9 | mg/kg | 0.23 | | 2.5 | 67 | 80 --- 120 | | |
| Calcium | 7960 | mg/kg | 3350 | | 5040 | 91 | 80 --- 120 | | |
| Chromium | 130 | mg/kg | 156 | | 10.1 | 0 | 80 --- 120 | | |
| Cobalt | 15.7 | mg/kg | 10.1 | | 25.2 | 22 | 80 --- 120 | | |
| Copper | 428 | mg/kg | 443 | | 12.6 | 0 | 80 --- 120 | | |
| Iron | 22500 | mg/kg | <3.02 | | 5090 | 39 | 80 --- 120 | | |
| Lead | 51.6 | mg/kg | 32.2 | | 25.2 | 77 | 80 --- 120 | | |
| Magnesium | 3750 | mg/kg | 1590 | | 2520 | 86 | 80 --- 120 | | |
| Manganese | 1480 | mg/kg | 803 | | 25.2 | 2687 | 80 --- 120 | | |
| Nickel | 32.2 | mg/kg | 12.0 | | 25.2 | 80 | 80 --- 120 | | |
| Selenium | 74.3 | mg/kg | 0.081 | | 101 | 73 | 80 --- 120 | | |
| Silver | 1.7 | mg/kg | BDL | | 2.5 | 68 | 75 --- 120 | | |
| Thallium | 54.6 | mg/kg | 1.3 | | 101 | 53 | 80 --- 120 | | |
| Vanadium | 37.0 | mg/kg | 17.3 | | 25.2 | 78 | 80 --- 120 | | |
| Zinc | 284 | mg/kg | 292 | | 25.2 | 0 | 80 --- 120 | | |

***Duplicate***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900055 | Analysis Time: | 13:51 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 898909 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 982 | mg/kg | 39.6 | | | | 5760 | 2 | 20 |

***Duplicate***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900055 | Analysis Time: | 13:51 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 898909 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sodium | 58.2 | mg/kg | <4.03 | | | | 2080 | 4 | 20 |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOLID |
| CTLab #: | 900054 | Analysis Time: | 13:41 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 2250 | mg/kg | | | 2500 | 90 | 80 --- 120 | | |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOLID |
| CTLab #: | 900054 | Analysis Time: | 13:41 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sodium | 2470 | mg/kg | | | 2500 | 99 | 80 --- 120 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOLID |
| CTLab #: | 900053 | Analysis Time: | 13:44 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 4 | mg/kg | | U | 0 | | 72 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOLID |
| CTLab #: | 900053 | Analysis Time: | 13:44 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sodium | 4 | mg/kg | | U | 0 | | 26 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900057 | Analysis Time: | 13:57 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 900056 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 3350 | mg/kg | 997 | | 2520 | 93 | 80 --- 120 | 1 | 20 |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900057 | Analysis Time: | 13:57 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 900056 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sodium | 2790 | mg/kg | 60.4 | | 2520 | 108 | 80 --- 120 | 1 | 20 |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900056 | Analysis Time: | 13:54 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 898909 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 3370 | mg/kg | 997 | | 2520 | 94 | 80 --- 120 | | |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73909 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36396 | Matrix: | SOIL |
| CTLab #: | 900056 | Analysis Time: | 13:54 | Prep Date/Time: | 03/15/2011 10:00 | Method: | SW6010 |
| Parent Sample #: | 898909 | Analyst: | NAH | Prep Analyst: | AMA | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sodium | 2770 | mg/kg | 60.4 | | 2520 | 108 | 80 --- 120 | | |

***Duplicate***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74075 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36461 | Matrix: | SOIL |
| CTLab #: | 902230 | Analysis Time: | 10:33 | Prep Date/Time: | 03/21/2011 14:25 | Method: | |
| Parent Sample #: | 898909 | Analyst: | AMA | Prep Analyst: | LJF | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.022 | mg/kg | 0.70 | | | | 0.19 | 37 | 20 |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74075 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36461 | Matrix: | SOLID |
| CTLab #: | 901981 | Analysis Time: | 10:26 | Prep Date/Time: | 03/21/2011 14:25 | Method: | |
| Parent Sample #: | | Analyst: | AMA | Prep Analyst: | LJF | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.080 | mg/kg | | | 0.083 | 96 | 80 --- 120 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74075 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36461 | Matrix: | SOLID |
| CTLab #: | 901980 | Analysis Time: | 10:28 | Prep Date/Time: | 03/21/2011 14:25 | Method: | |
| Parent Sample #: | | Analyst: | AMA | Prep Analyst: | LJF | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.0024 | mg/kg | | U | 0 | | 00395 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74075 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36461 | Matrix: | SOIL |
| CTLab #: | 902232 | Analysis Time: | 10:37 | Prep Date/Time: | 03/21/2011 14:25 | Method: | |
| Parent Sample #: | 902231 | Analyst: | AMA | Prep Analyst: | LJF | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.11 | mg/kg | 0.031 | | 0.088 | 90 | 80 --- 120 | 21 | 20 |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74075 | Analysis Date: | 3/22/2011 | Prep Batch #: | 36461 | Matrix: | SOIL |
| CTLab #: | 902231 | Analysis Time: | 10:35 | Prep Date/Time: | 03/21/2011 14:25 | Method: | |
| Parent Sample #: | 898909 | Analyst: | AMA | Prep Analyst: | LJF | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.087 | mg/kg | 0.031 | | 0.087 | 64 | 80 --- 120 | | |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOLID |
| CTLab #: | 899019 | Analysis Time: | 09:38 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 486 | ug/kg | | | 500 | 97 | 70 --- 135 | | 20 |
| 1,1,2,2-Tetrachloroethane | 439 | ug/kg | | | 500 | 88 | 55 --- 130 | | 20 |
| 1,1,2-Trichloroethane | 450 | ug/kg | | | 500 | 90 | 60 --- 125 | | 20 |
| 1,1-Dichloroethane | 472 | ug/kg | | | 500 | 94 | 75 --- 125 | | 20 |
| 1,1-Dichloroethene | 472 | ug/kg | | | 500 | 94 | 65 --- 135 | | 20 |
| 1,2 Dichloroethane-d4 | 103 | % Recovery | | | 100 | 103 | 72 --- 117 | | |
| 1,2-Dibromoethane | 440 | ug/kg | | | 500 | 88 | 70 --- 125 | | 20 |
| 1,2-Dichloroethane | 470 | ug/kg | | | 500 | 94 | 70 --- 135 | | 20 |
| 1,2-Dichloropropane | 462 | ug/kg | | | 500 | 92 | 70 --- 120 | | 20 |
| 2-Butanone | 4310 | ug/kg | | | 5000 | 86 | 30 --- 160 | | 20 |
| 2-Hexanone | 4290 | ug/kg | | | 5000 | 86 | 45 --- 145 | | 20 |
| 4-Methyl-2-pentanone | 4440 | ug/kg | | | 5000 | 89 | 45 --- 145 | | 20 |
| Acetone | 4470 | ug/kg | | | 5000 | 89 | 20 --- 160 | | 20 |
| Benzene | 471 | ug/kg | | | 500 | 94 | 75 --- 125 | | 20 |
| Bromochloromethane | 487 | ug/kg | | | 500 | 97 | 70 --- 125 | | 20 |
| Bromodichloromethane | 463 | ug/kg | | | 500 | 93 | 70 --- 130 | | 20 |
| Bromofluorobenzene | 100 | % Recovery | | | 100 | 100 | 85 --- 120 | | |
| Bromoform | 439 | ug/kg | | | 500 | 88 | 55 --- 135 | | 20 |
| Bromomethane | 506 | ug/kg | | | 500 | 101 | 30 --- 160 | | 20 |
| Carbon disulfide | 940 | ug/kg | | | 1000 | 94 | 45 --- 160 | | 20 |
| Carbon tetrachloride | 482 | ug/kg | | | 500 | 96 | 65 --- 135 | | 20 |
| Chlorobenzene | 464 | ug/kg | | | 500 | 93 | 75 --- 125 | | 20 |
| Chloroethane | 524 | ug/kg | | | 500 | 105 | 40 --- 155 | | 20 |
| Chloroform | 471 | ug/kg | | | 500 | 94 | 70 --- 125 | | 20 |
| Chloromethane | 483 | ug/kg | | | 500 | 97 | 50 --- 130 | | 20 |
| cis-1,2-Dichloroethene | 479 | ug/kg | | | 500 | 96 | 65 --- 125 | | 20 |
| cis-1,3-Dichloropropene | 461 | ug/kg | | | 500 | 92 | 70 --- 125 | | 20 |
| d8-Toluene | 102 | % Recovery | | | 100 | 102 | 85 --- 115 | | |
| Dibromochloromethane | 447 | ug/kg | | | 500 | 89 | 65 --- 130 | | 20 |
| Dibromofluoromethane | 102 | % Recovery | | | 100 | 102 | 77 --- 119 | | |
| Ethylbenzene | 469 | ug/kg | | | 500 | 94 | 75 --- 125 | | 20 |
| m & p-Xylene | 926 | ug/kg | | | 1000 | 93 | 80 --- 125 | | 20 |
| Methylene chloride | 483 | ug/kg | | | 500 | 97 | 55 --- 140 | | 20 |
| Naphthalene | 427 | ug/kg | | | 500 | 85 | 40 --- 125 | | 20 |
| o-Xylene | 457 | ug/kg | | | 500 | 91 | 75 --- 125 | | 20 |
| Styrene | 449 | ug/kg | | | 500 | 90 | 75 --- 125 | | 20 |
| Tetrachloroethene | 477 | ug/kg | | | 500 | 95 | 65 --- 140 | | 20 |
| Toluene | 468 | ug/kg | | | 500 | 94 | 70 --- 125 | | 20 |
| trans-1,2-Dichloroethene | 460 | ug/kg | | | 500 | 92 | 65 --- 135 | | 20 |
| trans-1,3-Dichloropropene | 464 | ug/kg | | | 500 | 93 | 65 --- 125 | | 20 |
| Trichloroethene | 471 | ug/kg | | | 500 | 94 | 75 --- 125 | | 20 |
| Trichlorofluoromethane | 490 | ug/kg | | | 500 | 98 | 25 --- 185 | | 20 |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOLID |
| CTLab #: | 899019 | Analysis Time: | 09:38 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 473 | ug/kg | | | 500 | 95 | 65 --- 125 | | 20 |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOLID |
| CTLab #: | 899018 | Analysis Time: | 10:16 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 10 | ug/kg | | U | 0 | | 25 | | |
| 1,1,2,2-Tetrachloroethane | 10 | ug/kg | | U | 0 | | 25 | | |
| 1,1,2-Trichloroethane | 10 | ug/kg | | U | 0 | | 25 | | |
| 1,1-Dichloroethane | 10 | ug/kg | | U | 0 | | 25 | | |
| 1,1-Dichloroethene | 10 | ug/kg | | U | 0 | | 25 | | |
| 1,2 Dichloroethane-d4 | 100 | % Recovery | | | 100 | 100 | 72 --- 117 | | |
| 1,2-Dibromoethane | 10 | ug/kg | | U | 0 | | 25 | | |
| 1,2-Dichloroethane | 10 | ug/kg | | U | 0 | | 25 | | |
| 1,2-Dichloropropane | 10 | ug/kg | | U | 0 | | 25 | | |
| 2-Butanone | 10 | ug/kg | | U | 0 | | 250 | | |
| 2-Hexanone | 10 | ug/kg | | U | 0 | | 250 | | |
| 4-Methyl-2-pentanone | 10 | ug/kg | | U | 0 | | 250 | | |
| Acetone | 10 | ug/kg | | U | 0 | | 500 | | |
| Benzene | 10 | ug/kg | | U | 0 | | 25 | | |
| Bromochloromethane | 10 | ug/kg | | U | 0 | | 25 | | |
| Bromodichloromethane | 10 | ug/kg | | U | 0 | | 25 | | |
| Bromofluorobenzene | 102 | % Recovery | | | 100 | 102 | 85 --- 120 | | |
| Bromoform | 10 | ug/kg | | U | 0 | | 25 | | |
| Bromomethane | 10 | ug/kg | | U | 0 | | 50 | | |
| Carbon disulfide | 10 | ug/kg | | U | 0 | | 50 | | |
| Carbon tetrachloride | 10 | ug/kg | | U | 0 | | 25 | | |
| Chlorobenzene | 8 | ug/kg | | U | 0 | | 25 | | |
| Chloroethane | 10 | ug/kg | | U | 0 | | 50 | | |
| Chloroform | 10 | ug/kg | | U | 0 | | 25 | | |
| Chloromethane | 10 | ug/kg | | U | 0 | | 50 | | |
| cis-1,2-Dichloroethene | 10 | ug/kg | | U | 0 | | 25 | | |
| cis-1,3-Dichloropropene | 10 | ug/kg | | U | 0 | | 25 | | |
| d8-Toluene | 101 | % Recovery | | | 100 | 101 | 85 --- 115 | | |
| Dibromochloromethane | 10 | ug/kg | | U | 0 | | 25 | | |
| Dibromofluoromethane | 104 | % Recovery | | | 100 | 104 | 77 --- 119 | | |
| Ethylbenzene | 8 | ug/kg | | U | 0 | | 25 | | |
| m & p-Xylene | 10 | ug/kg | | U | 0 | | 50 | | |
| Methylene chloride | 10 | ug/kg | | U | 0 | | 50 | | |
| Naphthalene | 10 | ug/kg | | U | 0 | | 25 | | |
| o-Xylene | 10 | ug/kg | | U | 0 | | 25 | | |
| Styrene | 10 | ug/kg | | U | 0 | | 25 | | |
| Tetrachloroethene | 10 | ug/kg | | U | 0 | | 25 | | |
| Toluene | 10 | ug/kg | | U | 0 | | 25 | | |
| trans-1,2-Dichloroethene | 10 | ug/kg | | U | 0 | | 25 | | |
| trans-1,3-Dichloropropene | 10 | ug/kg | | U | 0 | | 50 | | |
| Trichloroethene | 10 | ug/kg | | U | 0 | | 25 | | |
| Trichlorofluoromethane | 10 | ug/kg | | U | 0 | | 50 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOLID |
| CTLab #: | 899018 | Analysis Time: | 10:16 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 10 | ug/kg | | U | 0 | | 25 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOIL |
| CTLab #: | 899021 | Analysis Time: | 18:41 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | 899020 | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 402 | ug/kg | BDL | | 417 | 96 | 70 --- 135 | 4 | 30 |
| 1,1,2,2-Tetrachloroethane | 366 | ug/kg | BDL | | 417 | 88 | 55 --- 130 | 9 | 30 |
| 1,1,2-Trichloroethane | 387 | ug/kg | BDL | | 417 | 93 | 60 --- 125 | 5 | 30 |
| 1,1-Dichloroethane | 392 | ug/kg | BDL | | 417 | 94 | 75 --- 125 | 6 | 30 |
| 1,1-Dichloroethene | 400 | ug/kg | BDL | | 417 | 96 | 65 --- 135 | 1 | 30 |
| 1,2 Dichloroethane-d4 | 97.0 | % Recovery | BDL | | 100 | 97.0 | 72 --- 117 | | |
| 1,2-Dibromoethane | 377 | ug/kg | BDL | | 417 | 90 | 70 --- 125 | 8 | 30 |
| 1,2-Dichloroethane | 399 | ug/kg | BDL | | 417 | 96 | 70 --- 135 | 5 | 30 |
| 1,2-Dichloropropane | 395 | ug/kg | BDL | | 417 | 95 | 70 --- 120 | 3 | 30 |
| 2-Butanone | 3250 | ug/kg | BDL | | 4170 | 78 | 30 --- 160 | 16 | 30 |
| 2-Hexanone | 3470 | ug/kg | BDL | | 4170 | 83 | 45 --- 145 | 15 | 30 |
| 4-Methyl-2-pentanone | 3600 | ug/kg | BDL | | 4170 | 86 | 20 --- 145 | 10 | 30 |
| Acetone | 3050 | ug/kg | BDL | | 4170 | 73 | 20 --- 160 | 19 | 30 |
| Benzene | 398 | ug/kg | BDL | | 417 | 95 | 75 --- 125 | 2 | 30 |
| Bromochloromethane | 407 | ug/kg | BDL | | 417 | 98 | 70 --- 125 | 2 | 30 |
| Bromodichloromethane | 388 | ug/kg | BDL | | 417 | 93 | 70 --- 130 | 5 | 30 |
| Bromofluorobenzene | 105 | % Recovery | BDL | | 100 | 105 | 85 --- 120 | | |
| Bromoform | 348 | ug/kg | BDL | | 417 | 83 | 55 --- 135 | 11 | 30 |
| Bromomethane | 505 | ug/kg | BDL | | 417 | 121 | 30 --- 160 | 0 | 30 |
| Carbon disulfide | 791 | ug/kg | BDL | | 835 | 95 | 45 --- 160 | 4 | 30 |
| Carbon tetrachloride | 410 | ug/kg | BDL | | 417 | 98 | 65 --- 135 | 2 | 30 |
| Chlorobenzene | 393 | ug/kg | BDL | | 417 | 94 | 75 --- 125 | 6 | 30 |
| Chloroethane | 1650 | ug/kg | BDL | | 417 | 396 | 40 --- 155 | 71 | 30 |
| Chloroform | 394 | ug/kg | BDL | | 417 | 94 | 70 --- 125 | 5 | 30 |
| Chloromethane | 396 | ug/kg | BDL | | 417 | 95 | 50 --- 130 | 5 | 30 |
| cis-1,2-Dichloroethene | 397 | ug/kg | BDL | | 417 | 95 | 65 --- 125 | 2 | 30 |
| cis-1,3-Dichloropropene | 380 | ug/kg | BDL | | 417 | 91 | 70 --- 125 | 7 | 30 |
| d8-Toluene | 102 | % Recovery | BDL | | 100 | 102 | 85 --- 115 | | |
| Dibromochloromethane | 377 | ug/kg | BDL | | 417 | 90 | 65 --- 130 | 5 | 30 |
| Dibromofluoromethane | 101 | % Recovery | BDL | | 100 | 101 | 77 --- 119 | | |
| Ethylbenzene | 398 | ug/kg | BDL | | 417 | 95 | 75 --- 125 | 6 | 30 |
| m & p-Xylene | 782 | ug/kg | BDL | | 835 | 94 | 80 --- 125 | 8 | 30 |
| Methylene chloride | 407 | ug/kg | BDL | | 417 | 98 | 55 --- 140 | 2 | 30 |
| Naphthalene | 364 | ug/kg | BDL | | 417 | 87 | 40 --- 125 | 9 | 30 |
| o-Xylene | 390 | ug/kg | BDL | | 417 | 94 | 75 --- 125 | 9 | 30 |
| Styrene | 388 | ug/kg | BDL | | 417 | 93 | 75 --- 125 | 8 | 30 |
| Tetrachloroethene | 394 | ug/kg | BDL | | 417 | 94 | 65 --- 140 | 3 | 30 |
| Toluene | 394 | ug/kg | BDL | | 417 | 94 | 70 --- 125 | 4 | 30 |
| trans-1,2-Dichloroethene | 393 | ug/kg | BDL | | 417 | 94 | 65 --- 135 | 2 | 30 |
| trans-1,3-Dichloropropene | 376 | ug/kg | BDL | | 417 | 90 | 65 --- 125 | 6 | 30 |
| Trichloroethene | 409 | ug/kg | BDL | | 417 | 98 | 75 --- 125 | 2 | 30 |
| Trichlorofluoromethane | 416 | ug/kg | BDL | | 417 | 100 | 25 --- 185 | 1 | 30 |

***Matrix Spike Duplicate Soil***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOIL |
| CTLab #: | 899021 | Analysis Time: | 18:41 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | 899020 | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 401 | ug/kg | BDL | | 417 | 96 | 60 --- 125 | 5 | 30 |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOIL |
| CTLab #: | 899020 | Analysis Time: | 18:03 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | 898919 | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 458 | ug/kg | BDL | | 458 | 100 | 70 --- 135 | | |
| 1,1,2,2-Tetrachloroethane | 437 | ug/kg | BDL | | 458 | 95 | 55 --- 130 | | |
| 1,1,2-Trichloroethane | 447 | ug/kg | BDL | | 458 | 98 | 60 --- 125 | | |
| 1,1-Dichloroethane | 455 | ug/kg | BDL | | 458 | 99 | 75 --- 125 | | |
| 1,1-Dichloroethene | 443 | ug/kg | BDL | | 458 | 97 | 65 --- 135 | | |
| 1,2 Dichloroethane-d4 | 95.0 | % Recovery | BDL | | 100 | 95.0 | 72 --- 117 | | |
| 1,2-Dibromoethane | 449 | ug/kg | BDL | | 458 | 98 | 70 --- 125 | | |
| 1,2-Dichloroethane | 458 | ug/kg | BDL | | 458 | 100 | 70 --- 135 | | |
| 1,2-Dichloropropane | 447 | ug/kg | BDL | | 458 | 98 | 70 --- 120 | | |
| 2-Butanone | 4160 | ug/kg | BDL | | 4580 | 91 | 30 --- 160 | | |
| 2-Hexanone | 4410 | ug/kg | BDL | | 4580 | 96 | 45 --- 145 | | |
| 4-Methyl-2-pentanone | 4370 | ug/kg | BDL | | 4580 | 95 | 20 --- 145 | | |
| Acetone | 4060 | ug/kg | BDL | | 4580 | 89 | 20 --- 160 | | |
| Benzene | 448 | ug/kg | BDL | | 458 | 98 | 75 --- 125 | | |
| Bromochloromethane | 456 | ug/kg | BDL | | 458 | 100 | 70 --- 125 | | |
| Bromodichloromethane | 446 | ug/kg | BDL | | 458 | 97 | 70 --- 130 | | |
| Bromofluorobenzene | 101 | % Recovery | BDL | | 100 | 101 | 85 --- 120 | | |
| Bromoform | 428 | ug/kg | BDL | | 458 | 93 | 55 --- 135 | | |
| Bromomethane | 553 | ug/kg | BDL | | 458 | 121 | 30 --- 160 | | |
| Carbon disulfide | 899 | ug/kg | BDL | | 916 | 98 | 45 --- 160 | | |
| Carbon tetrachloride | 457 | ug/kg | BDL | | 458 | 100 | 65 --- 135 | | |
| Chlorobenzene | 456 | ug/kg | BDL | | 458 | 100 | 75 --- 125 | | |
| Chloroethane | 863 | ug/kg | BDL | | 458 | 188 | 40 --- 155 | | |
| Chloroform | 452 | ug/kg | BDL | | 458 | 99 | 70 --- 125 | | |
| Chloromethane | 454 | ug/kg | BDL | | 458 | 99 | 50 --- 130 | | |
| cis-1,2-Dichloroethene | 447 | ug/kg | BDL | | 458 | 98 | 65 --- 125 | | |
| cis-1,3-Dichloropropene | 447 | ug/kg | BDL | | 458 | 98 | 70 --- 125 | | |
| d8-Toluene | 99.0 | % Recovery | BDL | | 100 | 99.0 | 85 --- 115 | | |
| Dibromochloromethane | 436 | ug/kg | BDL | | 458 | 95 | 65 --- 130 | | |
| Dibromofluoromethane | 99.0 | % Recovery | BDL | | 100 | 99.0 | 77 --- 119 | | |
| Ethylbenzene | 462 | ug/kg | BDL | | 458 | 101 | 75 --- 125 | | |
| m & p-Xylene | 932 | ug/kg | BDL | | 916 | 102 | 80 --- 125 | | |
| Methylene chloride | 454 | ug/kg | BDL | | 458 | 99 | 55 --- 140 | | |
| Naphthalene | 434 | ug/kg | BDL | | 458 | 95 | 40 --- 125 | | |
| o-Xylene | 466 | ug/kg | BDL | | 458 | 102 | 75 --- 125 | | |
| Styrene | 460 | ug/kg | BDL | | 458 | 100 | 75 --- 125 | | |
| Tetrachloroethene | 447 | ug/kg | BDL | | 458 | 98 | 65 --- 140 | | |
| Toluene | 451 | ug/kg | BDL | | 458 | 98 | 70 --- 125 | | |
| trans-1,2-Dichloroethene | 441 | ug/kg | BDL | | 458 | 96 | 65 --- 135 | | |
| trans-1,3-Dichloropropene | 439 | ug/kg | BDL | | 458 | 96 | 65 --- 125 | | |
| Trichloroethene | 458 | ug/kg | BDL | | 458 | 100 | 75 --- 125 | | |
| Trichlorofluoromethane | 460 | ug/kg | BDL | | 458 | 100 | 25 --- 185 | | |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 73796 | Analysis Date: | 3/10/2011 | Prep Batch #: | 36363 | Matrix: | SOIL |
| CTLab #: | 899020 | Analysis Time: | 18:03 | Prep Date/Time: | 03/10/2011 08:30 | Method: | SW8260B |
| Parent Sample #: | 898919 | Analyst: | APG | Prep Analyst: | APG | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 461 | ug/kg | BDL | | 458 | 101 | 60 --- 125 | | |

***Lab Control Spike Soil***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74050 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36415 | Matrix: | SOLID |
| CTLab #: | 900705 | Analysis Time: | 14:12 | Prep Date/Time: | 03/18/2011 11:00 | Method: | SW8082 |
| Parent Sample #: | | Analyst: | JJY | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | 603 | ug/kg | | | 500 | 121 | 40 --- 140 | | 30 |
| Aroclor-1260 | 599 | ug/kg | | | 500 | 120 | 60 --- 130 | | 30 |
| Surr: DCBP | 123 | % Recovery | | | 100 | 123 | 60 --- 125 | | 30 |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74050 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36415 | Matrix: | SOLID |
| CTLab #: | 900704 | Analysis Time: | 13:57 | Prep Date/Time: | 03/18/2011 11:00 | Method: | SW8082 |
| Parent Sample #: | | Analyst: | JJY | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1221 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1232 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1242 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1248 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1254 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1260 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1262 | 21 | ug/kg | | U | 0 | | 50 | | |
| Aroclor-1268 | 21 | ug/kg | | U | 0 | | 50 | | |
| Surr: DCBP | 109 | % Recovery | | | 100 | 109 | 60 --- 125 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74050 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36415 | Matrix: | SOIL |
| CTLab #: | 900703 | Analysis Time: | 15:31 | Prep Date/Time: | 03/18/2011 11:00 | Method: | SW8082 |
| Parent Sample #: | 900702 | Analyst: | JJY | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | 586 | ug/kg | BDL | | 500 | 117 | 40 --- 140 | 18 | 30 |
| Aroclor-1260 | 585 | ug/kg | BDL | | 500 | 117 | 60 --- 130 | 17 | 30 |
| Surr: DCBP | 112 | % Recovery | BDL | | 100 | 112 | 60 --- 125 | | |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74050 | Analysis Date: | 3/21/2011 | Prep Batch #: | 36415 | Matrix: | SOIL |
| CTLab #: | 900702 | Analysis Time: | 15:15 | Prep Date/Time: | 03/18/2011 11:00 | Method: | SW8082 |
| Parent Sample #: | 898909 | Analyst: | JJY | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | 488 | ug/kg | BDL | | 501 | 97 | 40 --- 140 | | |
| Aroclor-1260 | 493 | ug/kg | BDL | | 501 | 98 | 60 --- 130 | | |
| Surr: DCBP | 86.5 | % Recovery | BDL | | 100 | 86.5 | 60 --- 125 | | |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOLID |
| CTLab #: | 900710 | Analysis Time: | 14:21 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 1460 | ug/kg | | | 2000 | 73 | 45 --- 110 | | 30 |
| 1,2-Dichlorobenzene | 1470 | ug/kg | | | 2000 | 74 | 45 --- 95 | | 30 |
| 1,3-Dichlorobenzene | 1400 | ug/kg | | | 2000 | 70 | 40 --- 100 | | 30 |
| 1,4-Dichlorobenzene | 1410 | ug/kg | | | 2000 | 70 | 35 --- 105 | | 30 |
| 1-Methylnaphthalene | 1400 | ug/kg | | | 2000 | 70 | 50 --- 150 | | 30 |
| 2,4,5-Trichlorophenol | 1450 | ug/kg | | | 2000 | 72 | 50 --- 110 | | 30 |
| 2,4,6-Trichlorophenol | 1530 | ug/kg | | | 2000 | 76 | 45 --- 110 | | 30 |
| 2,4-Dichlorophenol | 1520 | ug/kg | | | 2000 | 76 | 45 --- 110 | | 30 |
| 2,4-Dimethylphenol | 1320 | ug/kg | | | 2000 | 66 | 30 --- 105 | | 30 |
| 2,4-Dinitrophenol | 1090 | ug/kg | | | 2000 | 54 | 15 --- 130 | | 30 |
| 2,4-Dinitrotoluene | 1460 | ug/kg | | | 2000 | 73 | 50 --- 115 | | 30 |
| 2,6-Dichlorophenol | 1600 | ug/kg | | | 2000 | 80 | 48 --- 126 | | 30 |
| 2,6-Dinitrotoluene | 1510 | ug/kg | | | 2000 | 76 | 50 --- 110 | | 30 |
| 2-Chloronaphthalene | 1440 | ug/kg | | | 2000 | 72 | 45 --- 105 | | 30 |
| 2-Chlorophenol | 1420 | ug/kg | | | 2000 | 71 | 45 --- 105 | | 30 |
| 2-Methylnaphthalene | 1400 | ug/kg | | | 2000 | 70 | 45 --- 105 | | 30 |
| 2-Methylphenol | 1390 | ug/kg | | | 2000 | 70 | 40 --- 105 | | 30 |
| 2-Nitroaniline | 1400 | ug/kg | | | 2000 | 70 | 45 --- 120 | | 30 |
| 2-Nitrophenol | 1540 | ug/kg | | | 2000 | 77 | 40 --- 110 | | 30 |
| 3 & 4-Methylphenol | 1520 | ug/kg | | | 2000 | 76 | 40 --- 105 | | 30 |
| 3,3'-Dichlorobenzidine | 1130 | ug/kg | | | 2000 | 56 | 10 --- 130 | | 30 |
| 3-Nitroaniline | 1070 | ug/kg | | | 2000 | 54 | 25 --- 110 | | 30 |
| 4,6-Dinitro-2-methylphenol | 1490 | ug/kg | | | 2000 | 74 | 30 --- 135 | | 30 |
| 4-Bromophenyl-phenyl ether | 1570 | ug/kg | | | 2000 | 78 | 45 --- 115 | | 30 |
| 4-Chloro-3-methylphenol | 1470 | ug/kg | | | 2000 | 74 | 45 --- 115 | | 30 |
| 4-Chloroaniline | 747 | ug/kg | | | 2000 | 37 | 10 --- 95 | | 30 |
| 4-Chlorophenyl-phenyl ether | 1450 | ug/kg | | | 2000 | 72 | 45 --- 110 | | 30 |
| 4-Nitroaniline | 1410 | ug/kg | | | 2000 | 70 | 35 --- 115 | | 30 |
| 4-Nitrophenol | 1300 | ug/kg | | | 2000 | 65 | 15 --- 140 | | 30 |
| Acenaphthene | 1400 | ug/kg | | | 2000 | 70 | 45 --- 110 | | 30 |
| Acenaphthylene | 1450 | ug/kg | | | 2000 | 72 | 45 --- 105 | | 30 |
| Acetophenone | 1510 | ug/kg | | | 2000 | 76 | 48 --- 126 | | 30 |
| Aniline | 894 | ug/kg | | | 2000 | 45 | 14 --- 110 | | 30 |
| Anthracene | 1460 | ug/kg | | | 2000 | 73 | 55 --- 105 | | 30 |
| Azobenzene & 1,2-Diphenylhydra | 2840 | ug/kg | | | 4000 | 71 | 55 --- 115 | | 30 |
| Benzidine | 349 | ug/kg | | | 2000 | 17 | 1 --- 161 | | 30 |
| Benzo(a)anthracene | 1410 | ug/kg | | | 2000 | 70 | 50 --- 110 | | 30 |
| Benzo(a)pyrene | 1420 | ug/kg | | | 2000 | 71 | 50 --- 110 | | 30 |
| Benzo(b)fluoranthene | 1460 | ug/kg | | | 2000 | 73 | 45 --- 115 | | 30 |
| Benzo(g,h,i)perylene | 1280 | ug/kg | | | 2000 | 64 | 40 --- 125 | | 30 |
| Benzo(k)fluoranthene | 1500 | ug/kg | | | 2000 | 75 | 45 --- 125 | | 30 |
| Benzoic acid | 793 | ug/kg | | | 2000 | 40 | 0 --- 110 | | 30 |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOLID |
| CTLab #: | 900710 | Analysis Time: | 14:21 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzyl alcohol | 1570 | ug/kg | | | 2000 | 78 | 20 --- 125 | | 30 |
| Bis(2-chloroethoxy)methane | 1460 | ug/kg | | | 2000 | 73 | 45 --- 110 | | 30 |
| Bis(2-chloroethyl)ether | 1410 | ug/kg | | | 2000 | 70 | 40 --- 105 | | 30 |
| Bis(2-chloroisopropyl)ether | 1440 | ug/kg | | | 2000 | 72 | 20 --- 115 | | 30 |
| Bis(2-ethylhexyl)phthalate | 1600 | ug/kg | | | 2000 | 80 | 45 --- 125 | | 30 |
| Butylbenzylphthalate | 1550 | ug/kg | | | 2000 | 78 | 50 --- 125 | | 30 |
| Carbazole | 1520 | ug/kg | | | 2000 | 76 | 45 --- 115 | | 30 |
| Chrysene | 1420 | ug/kg | | | 2000 | 71 | 55 --- 110 | | 30 |
| Di-n-butylphthalate | 1580 | ug/kg | | | 2000 | 79 | 55 --- 110 | | 30 |
| Di-n-octylphthalate | 1510 | ug/kg | | | 2000 | 76 | 40 --- 130 | | 30 |
| Dibenzo(a,h)anthracene | 1340 | ug/kg | | | 2000 | 67 | 40 --- 125 | | 30 |
| Dibenzofuran | 1410 | ug/kg | | | 2000 | 70 | 50 --- 105 | | 30 |
| Diethylphthalate | 1470 | ug/kg | | | 2000 | 74 | 50 --- 115 | | 30 |
| Dimethylphthalate | 1490 | ug/kg | | | 2000 | 74 | 50 --- 110 | | 30 |
| Fluoranthene | 1590 | ug/kg | | | 2000 | 80 | 55 --- 115 | | 30 |
| Fluorene | 1460 | ug/kg | | | 2000 | 73 | 50 --- 110 | | 30 |
| Hexachlorobenzene | 1470 | ug/kg | | | 2000 | 74 | 45 --- 120 | | 30 |
| Hexachlorobutadiene | 1460 | ug/kg | | | 2000 | 73 | 40 --- 115 | | 30 |
| Hexachlorocyclopentadiene | 1280 | ug/kg | | | 2000 | 64 | 30 --- 137 | | 30 |
| Hexachloroethane | 1410 | ug/kg | | | 2000 | 70 | 35 --- 110 | | 30 |
| Indeno(1,2,3-cd)pyrene | 1290 | ug/kg | | | 2000 | 64 | 40 --- 120 | | 30 |
| Isophorone | 1400 | ug/kg | | | 2000 | 70 | 45 --- 110 | | 30 |
| N-Nitroso-di-n-propylamine | 1400 | ug/kg | | | 2000 | 70 | 40 --- 115 | | 30 |
| N-Nitrosodimethylamine | 1410 | ug/kg | | | 2000 | 70 | 20 --- 115 | | 30 |
| N-Nitrosodiphenylamine & Diphn | 2990 | ug/kg | | | 4000 | 75 | 50 --- 115 | | 30 |
| N-Nitrosopyrrolidine | 1560 | ug/kg | | | 2000 | 78 | 59 --- 110 | | 30 |
| Naphthalene | 1430 | ug/kg | | | 2000 | 72 | 40 --- 105 | | 30 |
| Nitrobenzene | 1410 | ug/kg | | | 2000 | 70 | 40 --- 115 | | 30 |
| Pentachlorophenol | 995 | ug/kg | | | 2000 | 50 | 25 --- 120 | | 30 |
| Phenanthrene | 1440 | ug/kg | | | 2000 | 72 | 50 --- 110 | | 30 |
| Phenol | 1380 | ug/kg | | | 2000 | 69 | 40 --- 100 | | 30 |
| Pyrene | 1510 | ug/kg | | | 2000 | 76 | 45 --- 125 | | 30 |
| Pyridine | 15.0 | ug/kg | | | 2000 | 1 | 16 --- 121 | | 30 |
| Surr: 2,4,6-Tribromophenol | 78.3 | % Recovery | | | 100 | 78.3 | 35 --- 125 | | |
| Surr: 2-Fluorobiphenyl | 74.2 | % Recovery | | | 100 | 74.2 | 45 --- 105 | | |
| Surr: 2-Fluorophenol | 69.2 | % Recovery | | | 100 | 69.2 | 35 --- 105 | | |
| Surr: Nitrobenzene-d5 | 70.2 | % Recovery | | | 100 | 70.2 | 35 --- 100 | | |
| Surr: Phenol-d5 | 73.8 | % Recovery | | | 100 | 73.8 | 40 --- 100 | | |
| Surr: Terphenyl-d14 | 76.3 | % Recovery | | | 100 | 76.3 | 30 --- 125 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOLID |
| CTLab #: | 900709 | Analysis Time: | 14:03 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 30 | ug/kg | | U | 0 | | 200 | | |
| 1,2-Dichlorobenzene | 30 | ug/kg | | U | 0 | | 200 | | |
| 1,3-Dichlorobenzene | 30 | ug/kg | | U | 0 | | 200 | | |
| 1,4-Dichlorobenzene | 30 | ug/kg | | U | 0 | | 200 | | |
| 1-Methylnaphthalene | 30 | ug/kg | | U | 0 | | 200 | | |
| 2,4,5-Trichlorophenol | 30 | ug/kg | | U | 0 | | 250 | | |
| 2,4,6-Trichlorophenol | 30 | ug/kg | | U | 0 | | 250 | | |
| 2,4-Dichlorophenol | 30 | ug/kg | | U | 0 | | 250 | | |
| 2,4-Dimethylphenol | 30 | ug/kg | | U | 0 | | 200 | | |
| 2,4-Dinitrophenol | 30 | ug/kg | | U | 0 | | 1000 | | |
| 2,4-Dinitrotoluene | 30 | ug/kg | | U | 0 | | 200 | | |
| 2,6-Dichlorophenol | 30 | ug/kg | | U | 0 | | 250 | | |
| 2,6-Dinitrotoluene | 30 | ug/kg | | U | 0 | | 200 | | |
| 2-Chloronaphthalene | 30 | ug/kg | | U | 0 | | 200 | | |
| 2-Chlorophenol | 30 | ug/kg | | U | 0 | | 250 | | |
| 2-Methylnaphthalene | 30 | ug/kg | | U | 0 | | 200 | | |
| 2-Methylphenol | 30 | ug/kg | | U | 0 | | 500 | | |
| 2-Nitroaniline | 30 | ug/kg | | U | 0 | | 200 | | |
| 2-Nitrophenol | 30 | ug/kg | | U | 0 | | 250 | | |
| 3 & 4-Methylphenol | 30 | ug/kg | | U | 0 | | 1000 | | |
| 3,3'-Dichlorobenzidine | 30 | ug/kg | | U | 0 | | 250 | | |
| 3-Nitroaniline | 30 | ug/kg | | U | 0 | | 500 | | |
| 4,6-Dinitro-2-methylphenol | 30 | ug/kg | | U | 0 | | 500 | | |
| 4-Bromophenyl-phenyl ether | 30 | ug/kg | | U | 0 | | 200 | | |
| 4-Chloro-3-methylphenol | 30 | ug/kg | | U | 0 | | 250 | | |
| 4-Chloroaniline | 30 | ug/kg | | U | 0 | | 200 | | |
| 4-Chlorophenyl-phenyl ether | 30 | ug/kg | | U | 0 | | 200 | | |
| 4-Nitroaniline | 30 | ug/kg | | U | 0 | | 200 | | |
| 4-Nitrophenol | 30 | ug/kg | | U | 0 | | 500 | | |
| Acenaphthene | 30 | ug/kg | | U | 0 | | 200 | | |
| Acenaphthylene | 30 | ug/kg | | U | 0 | | 200 | | |
| Acetophenone | 30 | ug/kg | | U | 0 | | 200 | | |
| Aniline | 30 | ug/kg | | U | 0 | | 200 | | |
| Anthracene | 30 | ug/kg | | U | 0 | | 200 | | |
| Azobenzene & 1,2-Diphenylhydra | 30 | ug/kg | | U | 0 | | 400 | | |
| Benzidine | 30 | ug/kg | | U | 0 | | 1000 | | |
| Benzo(a)anthracene | 30 | ug/kg | | U | 0 | | 200 | | |
| Benzo(a)pyrene | 30 | ug/kg | | U | 0 | | 200 | | |
| Benzo(b)fluoranthene | 30 | ug/kg | | U | 0 | | 200 | | |
| Benzo(g,h,i)perylene | 30 | ug/kg | | U | 0 | | 200 | | |
| Benzo(k)fluoranthene | 30 | ug/kg | | U | 0 | | 200 | | |
| Benzoic acid | 30 | ug/kg | | U | 0 | | 291 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOLID |
| CTLab #: | 900709 | Analysis Time: | 14:03 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzyl alcohol | 30 | ug/kg | | U | 0 | | | | 500 | | |
| Bis(2-chloroethoxy)methane | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Bis(2-chloroethyl)ether | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Bis(2-chloroisopropyl)ether | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Bis(2-ethylhexyl)phthalate | 30 | ug/kg | | U | 0 | | | | 500 | | |
| Butylbenzylphthalate | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Carbazole | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Chrysene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Di-n-butylphthalate | 79 | ug/kg | | U | 0 | | | | 200 | | |
| Di-n-octylphthalate | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Dibenzo(a,h)anthracene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Dibenzofuran | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Diethylphthalate | 64 | ug/kg | | U | 0 | | | | 200 | | |
| Dimethylphthalate | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Fluoranthene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Fluorene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Hexachlorobenzene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Hexachlorobutadiene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Hexachlorocyclopentadiene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Hexachloroethane | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Indeno(1,2,3-cd)pyrene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Isophorone | 30 | ug/kg | | U | 0 | | | | 200 | | |
| N-Nitroso-di-n-propylamine | 30 | ug/kg | | U | 0 | | | | 200 | | |
| N-Nitrosodimethylamine | 30 | ug/kg | | U | 0 | | | | 200 | | |
| N-Nitrosodiphenylamine & Diphn | 30 | ug/kg | | U | 0 | | | | 400 | | |
| N-Nitrosopyrrolidine | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Naphthalene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Nitrobenzene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Pentachlorophenol | 30 | ug/kg | | U | 0 | | | | 500 | | |
| Phenanthrene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Phenol | 30 | ug/kg | | U | 0 | | | | 250 | | |
| Pyrene | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Pyridine | 30 | ug/kg | | U | 0 | | | | 200 | | |
| Surr: 2,4,6-Tribromophenol | 84.2 | % Recovery | | | 100 | 84.2 | 35 | --- | 125 | | |
| Surr: 2-Fluorobiphenyl | 77.7 | % Recovery | | | 100 | 77.7 | 45 | --- | 105 | | |
| Surr: 2-Fluorophenol | 67.6 | % Recovery | | | 100 | 67.6 | 35 | --- | 105 | | |
| Surr: Nitrobenzene-d5 | 73.6 | % Recovery | | | 100 | 73.6 | 35 | --- | 100 | | |
| Surr: Phenol-d5 | 75.9 | % Recovery | | | 100 | 75.9 | 40 | --- | 100 | | |
| Surr: Terphenyl-d14 | 82.9 | % Recovery | | | 100 | 82.9 | 30 | --- | 125 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOIL |
| CTLab #: | 900708 | Analysis Time: | 18:16 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | 900707 | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 1390 | ug/kg | BDL | | 2000 | 70 | 45 --- 110 | 8 | 30 |
| 1,2-Dichlorobenzene | 1420 | ug/kg | BDL | | 2000 | 71 | 45 --- 95 | 3 | 30 |
| 1,3-Dichlorobenzene | 1340 | ug/kg | BDL | | 2000 | 67 | 40 --- 100 | 2 | 30 |
| 1,4-Dichlorobenzene | 1350 | ug/kg | BDL | | 2000 | 68 | 35 --- 105 | 5 | 30 |
| 1-Methylnaphthalene | 1320 | ug/kg | BDL | | 2000 | 66 | 50 --- 150 | 6 | 30 |
| 2,4,5-Trichlorophenol | 1360 | ug/kg | BDL | | 2000 | 68 | 50 --- 110 | 11 | 30 |
| 2,4,6-Trichlorophenol | 1330 | ug/kg | BDL | | 2000 | 66 | 45 --- 110 | 28 | 30 |
| 2,4-Dichlorophenol | 1390 | ug/kg | BDL | | 2000 | 70 | 45 --- 110 | 7 | 30 |
| 2,4-Dimethylphenol | 532 | ug/kg | BDL | | 2000 | 27 | 30 --- 105 | 26 | 30 |
| 2,4-Dinitrophenol | 39.0 | ug/kg | BDL | U | 2000 | 0 | 15 --- 130 | 0 | 30 |
| 2,4-Dinitrotoluene | 1470 | ug/kg | BDL | | 2000 | 74 | 50 --- 115 | 13 | 30 |
| 2,6-Dichlorophenol | 1490 | ug/kg | BDL | | 2000 | 74 | 48 --- 126 | 9 | 30 |
| 2,6-Dinitrotoluene | 1450 | ug/kg | BDL | | 2000 | 72 | 50 --- 110 | 11 | 30 |
| 2-Chloronaphthalene | 1450 | ug/kg | BDL | | 2000 | 72 | 45 --- 105 | 14 | 30 |
| 2-Chlorophenol | 1290 | ug/kg | BDL | | 2000 | 64 | 45 --- 105 | 11 | 30 |
| 2-Methylnaphthalene | 1340 | ug/kg | BDL | | 2000 | 67 | 45 --- 105 | 0 | 30 |
| 2-Methylphenol | 1160 | ug/kg | BDL | | 2000 | 58 | 40 --- 105 | 7 | 30 |
| 2-Nitroaniline | 1260 | ug/kg | BDL | | 2000 | 63 | 45 --- 120 | 12 | 30 |
| 2-Nitrophenol | 1350 | ug/kg | BDL | | 2000 | 68 | 40 --- 110 | 7 | 30 |
| 3 & 4-Methylphenol | 1350 | ug/kg | BDL | | 2000 | 68 | 40 --- 105 | 7 | 30 |
| 3,3'-Dichlorobenzidine | 39.0 | ug/kg | BDL | U | 2000 | 0 | 10 --- 130 | 0 | 30 |
| 3-Nitroaniline | 467 | ug/kg | BDL | | 2000 | 23 | 25 --- 110 | 20 | 30 |
| 4,6-Dinitro-2-methylphenol | 590 | ug/kg | BDL | | 2000 | 30 | 30 --- 135 | 19 | 30 |
| 4-Bromophenyl-phenyl ether | 1480 | ug/kg | BDL | | 2000 | 74 | 45 --- 115 | 2 | 30 |
| 4-Chloro-3-methylphenol | 1320 | ug/kg | BDL | | 2000 | 66 | 45 --- 115 | 4 | 30 |
| 4-Chloroaniline | 133 | ug/kg | BDL | | 2000 | 7 | 10 --- 95 | 38 | 30 |
| 4-Chlorophenyl-phenyl ether | 1420 | ug/kg | BDL | | 2000 | 71 | 45 --- 110 | 11 | 30 |
| 4-Nitroaniline | 764 | ug/kg | BDL | | 2000 | 38 | 35 --- 115 | 7 | 30 |
| 4-Nitrophenol | 1170 | ug/kg | BDL | | 2000 | 58 | 15 --- 140 | 18 | 30 |
| Acenaphthene | 1330 | ug/kg | BDL | | 2000 | 66 | 45 --- 110 | 13 | 30 |
| Acenaphthylene | 1340 | ug/kg | BDL | | 2000 | 67 | 45 --- 105 | 11 | 30 |
| Acetophenone | 1410 | ug/kg | BDL | | 2000 | 70 | 25 --- 96 | 2 | 30 |
| Aniline | 43.5 | ug/kg | BDL | | 2000 | 2 | 14 --- 110 | 20 | 30 |
| Anthracene | 1400 | ug/kg | BDL | | 2000 | 70 | 55 --- 105 | 4 | 30 |
| Azobenzene & 1,2-Diphenylhydra | 2890 | ug/kg | BDL | | 4000 | 72 | 55 --- 115 | 4 | 30 |
| Benzidine | 39.0 | ug/kg | BDL | U | 2000 | 0 | 1 --- 161 | 0 | 30 |
| Benzo(a)anthracene | 1520 | ug/kg | <73.1 | | 2000 | 73 | 50 --- 110 | 5 | 30 |
| Benzo(a)pyrene | 1390 | ug/kg | 46 | | 2000 | 67 | 50 --- 110 | 9 | 30 |
| Benzo(b)fluoranthene | 1400 | ug/kg | 86 | | 2000 | 66 | 45 --- 115 | 12 | 30 |
| Benzo(g,h,i)perylene | 1340 | ug/kg | 40 | | 2000 | 65 | 40 --- 125 | 8 | 30 |
| Benzo(k)fluoranthene | 1210 | ug/kg | 48 | | 2000 | 58 | 45 --- 125 | 22 | 30 |
| Benzoic acid | 353 | ug/kg | 450 | | 2000 | 0 | 0 --- 110 | 17 | 30 |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOIL |
| CTLab #: | 900708 | Analysis Time: | 18:16 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | 900707 | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzyl alcohol | 1340 | ug/kg | BDL | | 2000 | 67 | 20 --- 125 | 6 | 30 |
| Bis(2-chloroethoxy)methane | 1340 | ug/kg | BDL | | 2000 | 67 | 45 --- 110 | 7 | 30 |
| Bis(2-chloroethyl)ether | 1240 | ug/kg | BDL | | 2000 | 62 | 40 --- 105 | 11 | 30 |
| Bis(2-chloroisopropyl)ether | 1310 | ug/kg | BDL | | 2000 | 66 | 20 --- 115 | 7 | 30 |
| Bis(2-ethylhexyl)phthalate | 1650 | ug/kg | <87.1 | | 2000 | 77 | 45 --- 125 | 2 | 30 |
| Butylbenzylphthalate | 1520 | ug/kg | BDL | | 2000 | 76 | 50 --- 125 | 5 | 30 |
| Carbazole | 1500 | ug/kg | BDL | | 2000 | 75 | 45 --- 115 | 6 | 30 |
| Chrysene | 1460 | ug/kg | 74 | | 2000 | 69 | 55 --- 110 | 6 | 30 |
| Di-n-butylphthalate | 1620 | ug/kg | <79.1 | | 2000 | 75 | 55 --- 110 | 3 | 30 |
| Di-n-octylphthalate | 1460 | ug/kg | BDL | | 2000 | 73 | 40 --- 130 | 3 | 30 |
| Dibenzo(a,h)anthracene | 1410 | ug/kg | BDL | | 2000 | 70 | 40 --- 125 | 7 | 30 |
| Dibenzofuran | 1380 | ug/kg | BDL | | 2000 | 69 | 50 --- 105 | 11 | 30 |
| Diethylphthalate | 1450 | ug/kg | BDL | | 2000 | 72 | 50 --- 115 | 10 | 30 |
| Dimethylphthalate | 1420 | ug/kg | BDL | | 2000 | 71 | 50 --- 110 | 12 | 30 |
| Fluoranthene | 1830 | ug/kg | <26.0 | | 2000 | 84 | 55 --- 115 | 4 | 30 |
| Fluorene | 1440 | ug/kg | BDL | | 2000 | 72 | 50 --- 110 | 12 | 30 |
| Hexachlorobenzene | 1480 | ug/kg | BDL | | 2000 | 74 | 45 --- 120 | 3 | 30 |
| Hexachlorobutadiene | 1430 | ug/kg | BDL | | 2000 | 72 | 40 --- 115 | 4 | 30 |
| Hexachlorocyclopentadiene | 634 | ug/kg | BDL | | 2000 | 32 | 30 --- 137 | 38 | 30 |
| Hexachloroethane | 1320 | ug/kg | BDL | | 2000 | 66 | 35 --- 110 | 2 | 30 |
| Indeno(1,2,3-cd)pyrene | 1400 | ug/kg | 39 | | 2000 | 68 | 40 --- 120 | 7 | 30 |
| Isophorone | 1350 | ug/kg | BDL | | 2000 | 68 | 45 --- 110 | 5 | 30 |
| N-Nitroso-di-n-propylamine | 1290 | ug/kg | BDL | | 2000 | 64 | 40 --- 115 | 6 | 30 |
| N-Nitrosodimethylamine | 1310 | ug/kg | BDL | | 2000 | 66 | 20 --- 115 | 5 | 30 |
| N-Nitrosodiphenylamine & Diphn | 2710 | ug/kg | BDL | | 4000 | 68 | 50 --- 115 | 4 | 30 |
| N-Nitrosopyrrolidine | 1410 | ug/kg | BDL | | 2000 | 70 | 59 --- 110 | 5 | 30 |
| Naphthalene | 1410 | ug/kg | BDL | | 2000 | 70 | 40 --- 105 | 6 | 30 |
| Nitrobenzene | 1340 | ug/kg | BDL | | 2000 | 67 | 40 --- 115 | 4 | 30 |
| Pentachlorophenol | 691 | ug/kg | BDL | | 2000 | 35 | 25 --- 120 | 15 | 30 |
| Phenanthrene | 1560 | ug/kg | 76 | | 2000 | 74 | 50 --- 110 | 5 | 30 |
| Phenol | 1260 | ug/kg | BDL | | 2000 | 63 | 40 --- 100 | 5 | 30 |
| Pyrene | 1540 | ug/kg | 90 | | 2000 | 72 | 45 --- 125 | 6 | 30 |
| Pyridine | 39.0 | ug/kg | BDL | U | 2000 | 0 | 16 --- 121 | 0 | 30 |
| Surr: 2,4,6-Tribromophenol | 59.3 | % Recovery | BDL | | 100 | 59.3 | 35 --- 125 | | |
| Surr: 2-Fluorobiphenyl | 70.4 | % Recovery | BDL | | 100 | 70.4 | 45 --- 105 | | |
| Surr: 2-Fluorophenol | 54.6 | % Recovery | BDL | | 100 | 54.6 | 35 --- 105 | | |
| Surr: Nitrobenzene-d5 | 63.8 | % Recovery | BDL | | 100 | 63.8 | 35 --- 100 | | |
| Surr: Phenol-d5 | 65.9 | % Recovery | BDL | | 100 | 65.9 | 40 --- 100 | | |
| Surr: Terphenyl-d14 | 70.0 | % Recovery | BDL | | 100 | 70.0 | 30 --- 125 | | |

***Matrix Spike Soil***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOIL |
| CTLab #: | 900707 | Analysis Time: | 17:58 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | 898909 | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 1510 | ug/kg | BDL | | 2000 | 76 | 45 --- 110 | | |
| 1,2-Dichlorobenzene | 1450 | ug/kg | BDL | | 2000 | 72 | 45 --- 95 | | |
| 1,3-Dichlorobenzene | 1370 | ug/kg | BDL | | 2000 | 68 | 40 --- 100 | | |
| 1,4-Dichlorobenzene | 1420 | ug/kg | BDL | | 2000 | 71 | 35 --- 105 | | |
| 1-Methylnaphthalene | 1400 | ug/kg | BDL | | 2000 | 70 | 50 --- 150 | | |
| 2,4,5-Trichlorophenol | 1520 | ug/kg | BDL | | 2000 | 76 | 50 --- 110 | | |
| 2,4,6-Trichlorophenol | 1760 | ug/kg | BDL | | 2000 | 88 | 45 --- 110 | | |
| 2,4-Dichlorophenol | 1500 | ug/kg | BDL | | 2000 | 75 | 45 --- 110 | | |
| 2,4-Dimethylphenol | 691 | ug/kg | BDL | | 2000 | 35 | 30 --- 105 | | |
| 2,4-Dinitrophenol | 39.0 | ug/kg | BDL | U | 2000 | 0 | 15 --- 130 | | |
| 2,4-Dinitrotoluene | 1670 | ug/kg | BDL | | 2000 | 84 | 50 --- 115 | | |
| 2,6-Dichlorophenol | 1630 | ug/kg | BDL | | 2000 | 82 | 48 --- 126 | | |
| 2,6-Dinitrotoluene | 1610 | ug/kg | BDL | | 2000 | 80 | 50 --- 110 | | |
| 2-Chloronaphthalene | 1660 | ug/kg | BDL | | 2000 | 83 | 45 --- 105 | | |
| 2-Chlorophenol | 1430 | ug/kg | BDL | | 2000 | 72 | 45 --- 105 | | |
| 2-Methylnaphthalene | 1340 | ug/kg | BDL | | 2000 | 67 | 45 --- 105 | | |
| 2-Methylphenol | 1240 | ug/kg | BDL | | 2000 | 62 | 40 --- 105 | | |
| 2-Nitroaniline | 1420 | ug/kg | BDL | | 2000 | 71 | 45 --- 120 | | |
| 2-Nitrophenol | 1450 | ug/kg | BDL | | 2000 | 72 | 40 --- 110 | | |
| 3 & 4-Methylphenol | 1450 | ug/kg | BDL | | 2000 | 72 | 40 --- 105 | | |
| 3,3'-Dichlorobenzidine | 39.0 | ug/kg | BDL | U | 2000 | 0 | 10 --- 130 | | |
| 3-Nitroaniline | 569 | ug/kg | BDL | | 2000 | 28 | 25 --- 110 | | |
| 4,6-Dinitro-2-methylphenol | 486 | ug/kg | BDL | | 2000 | 24 | 30 --- 135 | | |
| 4-Bromophenyl-phenyl ether | 1520 | ug/kg | BDL | | 2000 | 76 | 45 --- 115 | | |
| 4-Chloro-3-methylphenol | 1380 | ug/kg | BDL | | 2000 | 69 | 45 --- 115 | | |
| 4-Chloroaniline | 194 | ug/kg | BDL | | 2000 | 10 | 10 --- 95 | | |
| 4-Chlorophenyl-phenyl ether | 1580 | ug/kg | BDL | | 2000 | 79 | 45 --- 110 | | |
| 4-Nitroaniline | 819 | ug/kg | BDL | | 2000 | 41 | 35 --- 115 | | |
| 4-Nitrophenol | 1400 | ug/kg | BDL | | 2000 | 70 | 15 --- 140 | | |
| Acenaphthene | 1510 | ug/kg | BDL | | 2000 | 76 | 45 --- 110 | | |
| Acenaphthylene | 1510 | ug/kg | BDL | | 2000 | 76 | 45 --- 105 | | |
| Acetophenone | 1440 | ug/kg | BDL | | 2000 | 72 | 25 --- 96 | | |
| Aniline | 53.2 | ug/kg | BDL | | 2000 | 3 | 14 --- 110 | | |
| Anthracene | 1460 | ug/kg | BDL | | 2000 | 73 | 55 --- 105 | | |
| Azobenzene & 1,2-Diphenylhydra | 3000 | ug/kg | BDL | | 4000 | 75 | 55 --- 115 | | |
| Benzidine | 39.0 | ug/kg | BDL | U | 2000 | 0 | 1 --- 161 | | |
| Benzo(a)anthracene | 1600 | ug/kg | <63.0 | | 2000 | 77 | 50 --- 110 | | |
| Benzo(a)pyrene | 1510 | ug/kg | <59.0 | | 2000 | 73 | 50 --- 110 | | |
| Benzo(b)fluoranthene | 1590 | ug/kg | 86 | | 2000 | 75 | 45 --- 115 | | |
| Benzo(g,h,i)perylene | 1450 | ug/kg | 40 | | 2000 | 70 | 40 --- 125 | | |
| Benzo(k)fluoranthene | 1510 | ug/kg | <59.0 | | 2000 | 73 | 45 --- 125 | | |
| Benzoic acid | 418 | ug/kg | 450 | | 2000 | 0 | 0 --- 110 | | |

***Matrix Spike Soil***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74114 | Analysis Date: | 3/23/2011 | Prep Batch #: | 36416 | Matrix: | SOIL |
| CTLab #: | 900707 | Analysis Time: | 17:58 | Prep Date/Time: | 03/21/2011 10:30 | Method: | SW8270 |
| Parent Sample #: | 898909 | Analyst: | RPN | Prep Analyst: | hhk | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzyl alcohol | 1420 | ug/kg | BDL | | 2000 | 71 | 20 --- 125 | | |
| Bis(2-chloroethoxy)methane | 1430 | ug/kg | BDL | | 2000 | 72 | 45 --- 110 | | |
| Bis(2-chloroethyl)ether | 1380 | ug/kg | BDL | | 2000 | 69 | 40 --- 105 | | |
| Bis(2-chloroisopropyl)ether | 1400 | ug/kg | BDL | | 2000 | 70 | 20 --- 115 | | |
| Bis(2-ethylhexyl)phthalate | 1680 | ug/kg | <87.0 | | 2000 | 78 | 45 --- 125 | | |
| Butylbenzylphthalate | 1590 | ug/kg | BDL | | 2000 | 80 | 50 --- 125 | | |
| Carbazole | 1590 | ug/kg | BDL | | 2000 | 80 | 45 --- 115 | | |
| Chrysene | 1550 | ug/kg | 74 | | 2000 | 74 | 55 --- 110 | | |
| Di-n-butylphthalate | 1660 | ug/kg | <79.0 | | 2000 | 77 | 55 --- 110 | | |
| Di-n-octylphthalate | 1510 | ug/kg | BDL | | 2000 | 76 | 40 --- 130 | | |
| Dibenzo(a,h)anthracene | 1500 | ug/kg | BDL | | 2000 | 75 | 40 --- 125 | | |
| Dibenzofuran | 1540 | ug/kg | BDL | | 2000 | 77 | 50 --- 105 | | |
| Diethylphthalate | 1600 | ug/kg | BDL | | 2000 | 80 | 50 --- 115 | | |
| Dimethylphthalate | 1600 | ug/kg | BDL | | 2000 | 80 | 50 --- 110 | | |
| Fluoranthene | 1910 | ug/kg | <26.0 | | 2000 | 88 | 55 --- 115 | | |
| Fluorene | 1620 | ug/kg | BDL | | 2000 | 81 | 50 --- 110 | | |
| Hexachlorobenzene | 1530 | ug/kg | BDL | | 2000 | 76 | 45 --- 120 | | |
| Hexachlorobutadiene | 1480 | ug/kg | BDL | | 2000 | 74 | 40 --- 115 | | |
| Hexachlorocyclopentadiene | 934 | ug/kg | BDL | | 2000 | 47 | 30 --- 137 | | |
| Hexachloroethane | 1350 | ug/kg | BDL | | 2000 | 68 | 35 --- 110 | | |
| Indeno(1,2,3-cd)pyrene | 1500 | ug/kg | 39 | | 2000 | 73 | 40 --- 120 | | |
| Isophorone | 1420 | ug/kg | BDL | | 2000 | 71 | 45 --- 110 | | |
| N-Nitroso-di-n-propylamine | 1370 | ug/kg | BDL | | 2000 | 68 | 40 --- 115 | | |
| N-Nitrosodimethylamine | 1380 | ug/kg | BDL | | 2000 | 69 | 20 --- 115 | | |
| N-Nitrosodiphenylamine & Diphn | 2810 | ug/kg | BDL | | 4000 | 70 | 50 --- 115 | | |
| N-Nitrosopyrrolidine | 1480 | ug/kg | BDL | | 2000 | 74 | 59 --- 110 | | |
| Naphthalene | 1500 | ug/kg | BDL | | 2000 | 75 | 40 --- 105 | | |
| Nitrobenzene | 1390 | ug/kg | BDL | | 2000 | 70 | 40 --- 115 | | |
| Pentachlorophenol | 595 | ug/kg | BDL | | 2000 | 30 | 25 --- 120 | | |
| Phenanthrene | 1640 | ug/kg | 76 | | 2000 | 78 | 50 --- 110 | | |
| Phenol | 1320 | ug/kg | BDL | | 2000 | 66 | 40 --- 100 | | |
| Pyrene | 1630 | ug/kg | 90 | | 2000 | 77 | 45 --- 125 | | |
| Pyridine | 39.0 | ug/kg | BDL | U | 2000 | 0 | 16 --- 121 | | |
| Surr: 2,4,6-Tribromophenol | 79.4 | % Recovery | BDL | | 100 | 79.4 | 35 --- 125 | | |
| Surr: 2-Fluorobiphenyl | 85.0 | % Recovery | BDL | | 100 | 85.0 | 45 --- 105 | | |
| Surr: 2-Fluorophenol | 64.5 | % Recovery | BDL | | 100 | 64.5 | 35 --- 105 | | |
| Surr: Nitrobenzene-d5 | 71.7 | % Recovery | BDL | | 100 | 71.7 | 35 --- 100 | | |
| Surr: Phenol-d5 | 73.1 | % Recovery | BDL | | 100 | 73.1 | 40 --- 100 | | |
| Surr: Terphenyl-d14 | 78.7 | % Recovery | BDL | | 100 | 78.7 | 30 --- 125 | | |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74137 | Analysis Date: | 3/28/2011 | Prep Batch #: | 36464 | Matrix: | SOLID |
| CTLab #: | 902131 | Analysis Time: | 09:17 | Prep Date/Time: | 03/23/2011 14:30 | Method: | SW8330B |
| Parent Sample #: | | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 92.6 | % Recovery | | | 100 | 92.6 | 50 --- 150 | | |
| Nitroguanidine | 2.03 | mg/kg | | | 1.96 | 104 | 50 --- 150 | | 30 |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74137 | Analysis Date: | 3/28/2011 | Prep Batch #: | 36464 | Matrix: | SOLID |
| CTLab #: | 902130 | Analysis Time: | 09:10 | Prep Date/Time: | 03/23/2011 14:30 | Method: | SW8330B |
| Parent Sample #: | | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 96.2 | % Recovery | | | 100 | 96.2 | 50 --- 150 | | |
| Nitroguanidine | 0.06 | mg/kg | | U | 0 | | 0.125 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74137 | Analysis Date: | 3/28/2011 | Prep Batch #: | 36464 | Matrix: | SOIL |
| CTLab #: | 902134 | Analysis Time: | 09:41 | Prep Date/Time: | 03/23/2011 14:30 | Method: | SW8330B |
| Parent Sample #: | 902133 | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 106 | % Recovery | | | 100 | 106 | 50 --- 150 | | |
| Nitroguanidine | 2.12 | mg/kg | BDL | | 2.00 | 106 | 50 --- 150 | 4 | 30 |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74137 | Analysis Date: | 3/28/2011 | Prep Batch #: | 36464 | Matrix: | SOIL |
| CTLab #: | 902133 | Analysis Time: | 09:33 | Prep Date/Time: | 03/23/2011 14:30 | Method: | SW8330B |
| Parent Sample #: | 898909 | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 98.6 | % Recovery | | | 100 | 98.6 | 50 --- 150 | | |
| Nitroguanidine | 2.02 | mg/kg | BDL | | 1.98 | 102 | 50 --- 150 | | |

## *Lab Control Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74138 | Analysis Date: | 3/25/2011 | Prep Batch #: | 36463 | Matrix: | SOLID |
| CTLab #: | 902127 | Analysis Time: | 14:45 | Prep Date/Time: | 03/23/2011 13:30 | Method: | SW8330B |
| Parent Sample #: | | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 113 | % Recovery | | | 100 | 113 | 79 --- 120 | | |
| 1,3,5-Trinitrobenzene | 1.89 | mg/kg | | | 2.01 | 94 | 78 --- 121 | | |
| 1,3-Dinitrobenzene | 1.97 | mg/kg | | | 2.01 | 98 | 83 --- 115 | | |
| 2,4,6-Trinitrotoluene | 1.52 | mg/kg | | | 2.01 | 76 | 69 --- 129 | | |
| 2,4-Dinitrotoluene | 1.89 | mg/kg | | | 2.01 | 94 | 80 --- 118 | | |
| 2,6-Dinitrotoluene | 2.22 | mg/kg | | | 2.01 | 110 | 74 --- 122 | | |
| 2-Amino-4,6-dinitrotoluene | 1.82 | mg/kg | | | 2.01 | 91 | 75 --- 118 | | |
| 2-Nitrotoluene | 1.97 | mg/kg | | | 2.01 | 98 | 77 --- 118 | | |
| 3,5-Dinitroaniline | 1.67 | mg/kg | | | 2.01 | 83 | 10 --- 165 | | |
| 3-Nitrotoluene | 2.03 | mg/kg | | | 2.01 | 101 | 75 --- 118 | | |
| 4-Amino-2,6-dinitrotoluene | 1.63 | mg/kg | | | 2.01 | 81 | 75 --- 122 | | |
| 4-Nitrotoluene | 2.04 | mg/kg | | | 2.01 | 101 | 76 --- 118 | | |
| HMX | 1.92 | mg/kg | | | 2.01 | 96 | 71 --- 120 | | |
| Nitrobenzene | 2.06 | mg/kg | | | 2.01 | 102 | 82 --- 116 | | |
| Nitroglycerin | 3.08 | mg/kg | | | 4.02 | 77 | 77 --- 123 | | |
| PETN | 3.51 | mg/kg | | | 4.02 | 87 | 74 --- 123 | | |
| RDX | 1.78 | mg/kg | | | 2.01 | 89 | 63 --- 125 | | |
| Tetryl | 0.454 | mg/kg | | | 2.01 | 23 | 10 --- 165 | | |

## *Method Blank Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74138 | Analysis Date: | 3/25/2011 | Prep Batch #: | 36463 | Matrix: | SOLID |
| CTLab #: | 902126 | Analysis Time: | 14:27 | Prep Date/Time: | 03/23/2011 13:30 | Method: | SW8330B |
| Parent Sample #: | | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 83.3 | % Recovery | | | 100 | 83.3 | 79 --- 120 | | |
| 1,3,5-Trinitrobenzene | 0.09 | mg/kg | | U | 0 | | 0.25 | | |
| 1,3-Dinitrobenzene | 0.09 | mg/kg | | U | 0 | | 0.20 | | |
| 2,4,6-Trinitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.20 | | |
| 2,4-Dinitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.25 | | |
| 2,6-Dinitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.125 | | |
| 2-Amino-4,6-dinitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.125 | | |
| 2-Nitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.25 | | |
| 3,5-Dinitroaniline | 0.09 | mg/kg | | U | 0 | | 0.20 | | |
| 3-Nitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.125 | | |
| 4-Amino-2,6-dinitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.125 | | |
| 4-Nitrotoluene | 0.09 | mg/kg | | U | 0 | | 0.20 | | |
| HMX | 0.09 | mg/kg | | U | 0 | | 0.20 | | |
| Nitrobenzene | 0.09 | mg/kg | | U | 0 | | 0.125 | | |
| Nitroglycerin | 0.09 | mg/kg | | U | 0 | | 1.0 | | |
| PETN | 0.09 | mg/kg | | U | 0 | | 1.0 | | |
| RDX | 0.09 | mg/kg | | U | 0 | | 0.25 | | |
| Tetryl | 0.09 | mg/kg | | U | 0 | | 0.20 | | |

## *Matrix Spike Duplicate Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74138 | Analysis Date: | 3/25/2011 | Prep Batch #: | 36463 | Matrix: | SOIL |
| CTLab #: | 902129 | Analysis Time: | 15:39 | Prep Date/Time: | 03/23/2011 13:30 | Method: | SW8330B |
| Parent Sample #: | 902128 | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 91.4 | % Recovery | BDL | | 100 | 91.4 | 75 --- 127 | | |
| 1,3,5-Trinitrobenzene | 1.52 | mg/kg | BDL | | 2.00 | 76 | 72 --- 121 | 7 | 15 |
| 1,3-Dinitrobenzene | 1.79 | mg/kg | BDL | | 2.00 | 90 | 74 --- 120 | 7 | 20 |
| 2,4,6-Trinitrotoluene | 1.54 | mg/kg | BDL | | 2.00 | 77 | 56 --- 135 | 2 | 28 |
| 2,4-Dinitrotoluene | 1.88 | mg/kg | BDL | | 2.00 | 94 | 64 --- 131 | 13 | 51 |
| 2,6-Dinitrotoluene | 1.67 | mg/kg | BDL | | 2.00 | 84 | 63 --- 131 | 9 | 18 |
| 2-Amino-4,6-dinitrotoluene | 1.50 | mg/kg | BDL | | 2.00 | 75 | 71 --- 118 | 8 | 18 |
| 2-Nitrotoluene | 1.61 | mg/kg | BDL | | 2.00 | 80 | 78 --- 113 | 2 | 13 |
| 3,5-Dinitroaniline | 1.42 | mg/kg | BDL | | 2.00 | 71 | 50 --- 153 | 12 | 30 |
| 3-Nitrotoluene | 1.63 | mg/kg | BDL | | 2.00 | 82 | 74 --- 115 | 2 | 15 |
| 4-Amino-2,6-dinitrotoluene | 1.49 | mg/kg | BDL | | 2.00 | 74 | 72 --- 123 | 4 | 20 |
| 4-Nitrotoluene | 1.48 | mg/kg | BDL | | 2.00 | 74 | 74 --- 125 | 8 | 15 |
| HMX | 1.53 | mg/kg | BDL | | 2.00 | 76 | 59 --- 133 | 10 | 27 |
| Nitrobenzene | 1.66 | mg/kg | BDL | | 2.00 | 83 | 73 --- 120 | 0 | 19 |
| Nitroglycerin | 6.14 | mg/kg | BDL | | 8.02 | 77 | 76 --- 130 | 21 | 18 |
| PETN | 6.11 | mg/kg | BDL | | 8.02 | 76 | 74 --- 123 | 13 | 16 |
| RDX | 1.30 | mg/kg | BDL | | 2.00 | 65 | 55 --- 120 | 11 | 30 |
| Tetryl | 1.09 | mg/kg | BDL | | 2.00 | 54 | 30 --- 155 | 31 | 38 |

## *Matrix Spike Soil*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analytical Run #: | 74138 | Analysis Date: | 3/25/2011 | Prep Batch #: | 36463 | Matrix: | SOIL |
| CTLab #: | 902128 | Analysis Time: | 15:21 | Prep Date/Time: | 03/23/2011 13:30 | Method: | SW8330B |
| Parent Sample #: | 898909 | Analyst: | | Prep Analyst: | RED | | |

| Analyte | QC sample result | Units | Parent sample result | Qualifier(s) | Spike Amount Added | % Recovery | Control Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 99.7 | % Recovery | BDL | | 100 | 99.7 | 75 --- 127 | | |
| 1,3,5-Trinitrobenzene | 1.63 | mg/kg | BDL | | 1.99 | 82 | 72 --- 121 | | |
| 1,3-Dinitrobenzene | 1.66 | mg/kg | BDL | | 1.99 | 83 | 74 --- 120 | | |
| 2,4,6-Trinitrotoluene | 1.56 | mg/kg | BDL | | 1.99 | 78 | 56 --- 135 | | |
| 2,4-Dinitrotoluene | 2.14 | mg/kg | BDL | | 1.99 | 108 | 64 --- 131 | | |
| 2,6-Dinitrotoluene | 1.52 | mg/kg | BDL | | 1.99 | 76 | 63 --- 131 | | |
| 2-Amino-4,6-dinitrotoluene | 1.62 | mg/kg | BDL | | 1.99 | 81 | 71 --- 118 | | |
| 2-Nitrotoluene | 1.56 | mg/kg | BDL | | 1.99 | 78 | 78 --- 113 | | |
| 3,5-Dinitroaniline | 1.59 | mg/kg | BDL | | 1.99 | 80 | 50 --- 153 | | |
| 3-Nitrotoluene | 1.66 | mg/kg | BDL | | 1.99 | 83 | 74 --- 115 | | |
| 4-Amino-2,6-dinitrotoluene | 1.54 | mg/kg | BDL | | 1.99 | 77 | 72 --- 123 | | |
| 4-Nitrotoluene | 1.59 | mg/kg | BDL | | 1.99 | 80 | 74 --- 125 | | |
| HMX | 1.69 | mg/kg | BDL | | 1.99 | 85 | 59 --- 133 | | |
| Nitrobenzene | 1.65 | mg/kg | BDL | | 1.99 | 83 | 73 --- 120 | | |
| Nitroglycerin | 7.52 | mg/kg | BDL | | 7.97 | 94 | 76 --- 130 | | |
| PETN | 6.90 | mg/kg | BDL | | 7.97 | 87 | 74 --- 123 | | |
| RDX | 1.44 | mg/kg | BDL | | 1.99 | 72 | 55 --- 120 | | |
| Tetryl | 1.48 | mg/kg | BDL | | 1.99 | 74 | 30 --- 155 | | |

CT LABORATORIES
delivering more than data from your environmental analyses

# Sample Condition Report

Folder #: 83966
Client: USACE - LOUISVILLE

Print Date / Time: 03/09/2011 11:56
Received Date / Time / By: 03/09/2011 1130 JLS

Project Name: RAVENNA - GROUP 2 ORE PILES
Project #: W912QR-10-D-0024

Log-In Date / Time / By: 03/09/2011 1156 JLS
PM: PML

Coolers: 3734,3728
Custody Seals Present : **Y**

Temperature: 1.8,2.1 C On Ice: **Y**
COC Present:? **Y** Complete? **Y**

Seal Intact? **Y**
Ship Method: FEDEX EXPRESS
Adequate Packaging: **Y**

Numbers: DATED AND SIGNED
Tracking Number: 873123757558,873123757547
Temp Blank Enclosed? **Y**

Notes: SAMPLES REC'D IN GOOD CONDITION ON ICE
1 CUSTODY SEAL INTACT ON EACH COOLER. BOTH DATED 3/8/11 AND SIGNED BY D KINDER

| Sample ID / Description | Container Type | Cond. Code | pH OK? | Tests | Filtered? |
|---|---|---|---|---|---|
| **898909** DL2SS-001M-0001-SO | | | | | |
| | SOLIDS | 1 | | %SOL,CR6,HG,ICP,K,NA | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 1** | | | | |
| **898909** DL2SS-001M-0001-SO | | | | | |
| | UNPRES GL | 1 | | 8270,EXPL,NC,PCB,PEST | |
| | **Total # of Containers of Type ( *UNPRES GL* ) = 1** | | | | |
| **898909** DL2SS-001M-0001-SO | | | | | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | **Total # of Containers of Type ( *FOR LABEL ONLY* ) = 2** | | | | |
| **898914** DL2SS-002M-0001-SO | | | | | |
| | SOLIDS | 1 | | %SOL,CR6,HG,ICP,K,NA | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 1** | | | | |
| **898914** DL2SS-002M-0001-SO | | | | | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | **Total # of Containers of Type ( *FOR LABEL ONLY* ) = 2** | | | | |
| **898915** DL2SS-003M-0001-SO | | | | | |
| | SOLIDS | 1 | | %SOL,CR6,HG,ICP,K,NA | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 1** | | | | |
| **898915** DL2SS-003M-0001-SO | | | | | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | **Total # of Containers of Type ( *FOR LABEL ONLY* ) = 2** | | | | |

| Sample ID / Description | Container Type | Cond. Code | pH OK? | Tests | Filtered? |
|---|---|---|---|---|---|
| **898916** DL2SS-001M-0002-SO | | | | | |
| | SOLIDS | 1 | | %SOL,CR6,HG,ICP,K,NA | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 1** | | | | |
| **898916** DL2SS-001M-0002-SO | | | | | |
| | UNPRES GL | 1 | | 8270,EXPL,NC,PCB,PEST | |
| | **Total # of Containers of Type ( *UNPRES GL* ) = 1** | | | | |
| **898916** DL2SS-001M-0002-SO | | | | | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | **Total # of Containers of Type ( *FOR LABEL ONLY* ) = 2** | | | | |
| **898917** DL2SS-004M-0001-SO | | | | | |
| | SOLIDS | 1 | | %SOL,CR6,HG,ICP,K,NA | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 1** | | | | |
| **898917** DL2SS-004M-0001-SO | | | | | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | **Total # of Containers of Type ( *FOR LABEL ONLY* ) = 2** | | | | |
| **898918** DL2SS-005M-0001-SO | | | | | |
| | SOLIDS | 1 | | %SOL,CR6,HG,ICP,K,NA | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 1** | | | | |
| **898918** DL2SS-005M-0001-SO | | | | | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | FOR LABEL ONLY | 1 | | SOIL PREP/MIX | |
| | **Total # of Containers of Type ( *FOR LABEL ONLY* ) = 2** | | | | |
| **898919** DL2SS-006-0001-SO | | | | | |
| | SOLIDS | 1 | | %SOL | |
| | SOLIDS | 1 | | %SOL | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 2** | | | | |
| **898919** DL2SS-006-0001-SO | | | | | |
| | MEOH TARED | 1 | | VOC | |
| | MEOH TARED | 1 | | VOC | |
| | MEOH TARED | 1 | | VOC | |
| | MEOH TARED | 1 | | VOC | |
| | **Total # of Containers of Type ( *MEOH TARED* ) = 4** | | | | |
| **898920** DL2SS-006-0002-SO | | | | | |
| | SOLIDS | 1 | | %SOL | |
| | **Total # of Containers of Type ( *SOLIDS* ) = 1** | | | | |
| **898920** DL2SS-006-0002-SO | | | | | |
| | MEOH TARED | 1 | | VOC | |
| | MEOH TARED | 1 | | VOC | |
| | **Total # of Containers of Type ( *MEOH TARED* ) = 2** | | | | |

| *Condition Code* | *Condition Description* |
| --- | --- |
| 1 | Sample Received OK |