2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 6, 2007

Mr. Anand Helekar
TRC
21 Technology Drive
Irvine, CA 92618

**RE: P2701715**
**WDI**

Dear Mr. Helekar:

Enclosed are the results of the sample(s) submitted to our laboratory on June 11, 2007. For your reference, these analyses have been assigned our service request number P2701715.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 117 pages.

Columbia Analytical Services is certified by the California Department of Health Services, Certificate No. 2380; Arizona Department of Health Services, Certificate No. AZ0694; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661. Please contact me for specific method(s) and analyte(s) corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

**Columbia Analytical Services, Inc.**

Kate Aguilera

Kate Aguilera
Project Manager



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# LABORATORY REPORT

| | | | |
|---|---|---|---|
| Client: | TRC | Date of Report: | 07/06/07 |
| Address: | 21 Technology Drive | Date Received: | 06/11/07 |
| | Irvine, CA 92618 | CAS Project No: | P2701715 |
| Contact: | Mr. Anand Helekar | Purchase Order: | IRV-804334 |

Client Project ID: WDI

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Ten (10) Stainless Steel Summa Canisters labeled:

| | | | |
|---|---|---|---|
| "WDI-IBM-03-6-9-07" | "WDI-IBM-22-6-9-07" | "WDI-IBM-24B-6-9-07" | "WDI-IBM-24B-6-9-07-SC" |
| "WDI-IBM-41-6-10-07" | "WDI-IBM-50-6-10-07" | "WDI-IBM-49-6-10-07" | "WDI-IBM-24-6-10-07" |
| "WDI-IBM-03B-6-10-07" | "WDI-IBM-28-6-10-07" | | |

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The samples were received at the laboratory under chain of custody on June 11, 2007. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

Methane and Total Gaseous Non-Methane Organics as Methane Analysis

The samples were analyzed for methane and total gaseous non-methane organics as methane according to modified EPA Method 25C. The analyses included a single sample injection (method modification) analyzed by gas chromatography using flame ionization detection/total combustion analysis.

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Reviewed and Approved:

Wade Henton
GC-VOA Team Leader
Air Quality Laboratory

Reviewed and Approved:

Chris Parnell
GCMS-VOA Team Leader
Air Quality Laboratory



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CAS Project No: P2701715

Volatile Organic Compound Analysis

The samples were also analyzed by combined gas chromatography/mass spectrometry (GC/MS) in scan mode for volatile organic compounds and in SIM mode for selected volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. However, the method was modified to include pressurization with Helium. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical systems used were comprised of a Hewlett Packard Model 5972 GC/MS/DS, an Agilent Model 5973inert GC/MS/DS and an Agilent 5973N GC/MS/DS each interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column ($RT_x$-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The percent difference CCV report includes both positive and negative percent difference calculations, where positive percent differences correspond to biased low results and negative percent differences to biased high results.

The percent relative standard deviation for the initial calibration for acetone was outside the client specified requirements on the instrument labeled MS8; however, it was within the method requirements.

On June 19, 2007, acetone and vinyl acetate were biased high on the CRQL on the instrument labeled MS2.

On June 20, 2007, acetone and 2-hexanone were biased low on the closing continuing calibration verification on the instrument labeled MS8.

The results of analyses are given in the attached data package. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.



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# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-001

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01117

Date Collected: 6/9/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -3.0 Pf 1 = 3.4
D.F. = 1.55

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **1.9** | 0.78 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.6 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-22-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-002

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00628

Date Collected: 6/9/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -3.5 Pf 1 = 3.5
D.F. = 1.63

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **1.9** | 0.82 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.6 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-003

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00910

Date Collected: 6/9/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -3.3 Pf 1 = 3.6
D.F. = 1.61

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **3.1** | 0.81 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.6 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07-SC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-004

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00917

Date Collected: 6/9/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -3.3 Pf 1 = 3.5
D.F. = 1.60

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **3.1** | 0.80 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.6 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-41-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-005

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01044

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -2.5 Pf 1 = 3.5
D.F. = 1.49

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **1.9** | 0.75 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | **13** | 1.5 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-41-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-005DUP

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01044

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -2.5 Pf 1 = 3.5
D.F. = 1.49

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **1.9** | 0.75 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | **13** | 1.5 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RL Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-50-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-006

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00723

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -5.2 Pf 1 = 3.5
D.F. = 1.92

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **2.0** | 0.96 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.9 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-49-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-007

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00412

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -1.0 Pf 1 = 3.5
D.F. = 1.33

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **2.0** | 0.67 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.3 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-008

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00731

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -3.0 Pf 1 = 3.5
D.F. = 1.56

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **2.0** | 0.78 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.6 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03B-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-009

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00822

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -3.7 Pf 1 = 3.5
D.F. = 1.65

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **2.3** | 0.83 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.7 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-28-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-010

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01258

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

Pi 1 = -1.8 Pf 1 = 3.5
D.F. = 1.41

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | **2.0** | 0.71 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.4 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Method Blank**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070614-MB

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/14/07
Volume(s) Analyzed: 0.50 ml

D.F. = 1.00

| CAS # | Compound | Result ppmV | MRL ppmV | Data Qualifier |
|---|---|---|---|---|
| 74-82-8 | Methane | ND | 0.50 | |
| | Total Gaseous Nonmethane Organics (TGNMO) as Methane | ND | 1.0 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Lab Control Sample**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070614-LCS

## Laboratory Control Sample Summary

Test Code: EPA Method 25C Modified
Instrument ID: HP5890II/GC1/FID/TCA
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/14/07
Volume(s) Analyzed: NA

| **Compound** | Spike Amount LCS ppmV | Result LCS ppmV | **% Recovery LCS** | Acceptance Limits | Data Qualifier |
|---|---|---|---|---|---|
| Methane | 57.5 | 59.0 | 103 | 90-110 | |
| Total Gaseous Nonmethane Organics (TGNMO) as Methane | 345 | 349 | 101 | 90-110 | |

Verified By: Ru Date: 6/26/07

# Response Factor Report GC 01

Method : J:\GC01\METHODS\M102006.M (Chemstation Integrator)
Title : EPA 25C TCA/FID Analysis for TGNMO
Last Update : Mon Oct 23 16:38:21 2006
Response via : Initial Calibration

Calibration Files
1 =10200606.D 2 =10200607.D 3 =10200608.D
4 =10200609.D 5 =10200610.D 6 =10200611.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 6 | Avg | | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | Carbon Monoxide | 5.184 | 5.715 | 5.812 | 6.058 | 6.017 | 6.064 | 5.808 | E3 | 5 |
| 2) | Methane | 6.638 | 6.124 | 6.356 | 6.256 | 6.204 | 6.190 | 6.295 | E3 | 2 |
| 3) | Carbon Dioxide | 5.461 | 7.056 | 6.139 | 6.279 | 6.073 | 6.194 | 6.200 | E3 | 8 |
| 4) | TGNMO-1 | 6.773 | 6.683 | 5.923 | 6.159 | 6.535 | 6.429 | 6.417 | E3 | 5 |
| 5) | TGMNO-2 | 6.773 | 6.683 | 5.923 | 6.159 | 6.535 | 6.429 | 6.417 | E3 | 5 |

10/23/06

(#) = Out of Range

Compound #2: Methane (Page 3)

| Lvl ID | Conc | Response | Lvl ID | Conc | Response |
|---|---|---|---|---|---|
| 1 | 0.550 | 3651 | | | |
| 2 | 4.034 | 24705 | | | |
| 3 | 11.006 | 69950 | | | |
| 4 | 80.680 | 504760 | | | |
| 5 | 2751.710 | 17070304 | | | |
| 6 | 20170.000 | 124856778 | | | |

| | Integration Parameter File | Sum? |
|---|---|---|
| Tgt | | |
| | | ☐ |
| | | ☐ |
| | | ☐ |

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Compound #4: TGHMO-1 (Page 3)

| Lvl ID | Conc | Response | Lvl ID | Conc | Response |
|---|---|---|---|---|---|
| 1 | 0.819 | 5547 | | | |
| 2 | 6.000 | 40100 | | | |
| 3 | 16.371 | 96872 | | | |
| 4 | 120.000 | 739089 | | | |
| 5 | 4072.300 | 26614390 | | | |
| 6 | 29850.000 | 191892442 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | Integration Parameter File | Sum? |
|---|---|---|
| Tgt | | |
| | | ☐ |
| | | ☐ |
| | | ☐ |

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Compound #5: TGdH0-2 (Page 3)

| Lvl ID | Conc | Response | Lvl ID | Conc | Response |
|---|---|---|---|---|---|
| 1 | 0.819 | 5547 | | | |
| 2 | 6.000 | 40100 | | | |
| 3 | 16.371 | 95972 | | | |
| 4 | 120.000 | 739089 | | | |
| 5 | 4072.300 | 26614390 | | | |
| 6 | 29850.000 | 191892442 | | | |

| | Integration Parameter File | Sum? |
|---|---|---|
| Tgt | | |
| | | ☐ |
| | | ☐ |
| | | ☐ |

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Columbia Analytical Services, Inc. - Simi Valley, California

ZW 6/25/07

# Modified EPA Method 25C Report Summary

Job# : TRC P2701715
Analyst : WHH
Method Name : EPA 25C TCA/FID Analysis for TGNMO
Loop Dilution : Normal Loop (NL) = 1.00, Samll Loop (SL) = 7.33

Instrument : GC01/TCD1
Date Analyzed : 6/14/07
Printed : 6/25/07

## Sample Results (ppm)

| Sample ID | Carbon Monoxide | Methane | Carbon Dioxide | TGNMO-1 | TGMNO-2 | Back Filled | Pi1 | Pf1 | Pi2 | Pf2 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1715-001 v | 0.42 | 1.23 | Vent | | | | -3.0 | 3.4 | | |
| 1715-002 v | 0.66 | 1.18 | Vent | | | | -3.5 | 3.5 | | |
| 1715-003 v | 0.79 | 1.95 | Vent | | | | -3.3 | 3.6 | | |
| 1715-004 v | 0.85 | 1.95 | Vent | | | | -3.3 | 3.5 | | |
| 1715-005 v | 0.78 | 1.27 | Vent | 8.98 | | | -2.5 | 3.5 | | |
| 1715-006 v | 0.72 | 1.07 | Vent | | | | -5.2 | 3.5 | | |
| 1715-007 v | 0.99 | 1.49 | Vent | | | | -1.0 | 3.5 | | |
| 1715-008 v | 0.84 | 1.25 | Vent | | | | -3.0 | 3.5 | | |
| 1715-009 v | 0.50 | 1.38 | Vent | 0.74 | | | -3.7 | 3.5 | | |
| 1715-010 v | 0.84 | 1.43 | Vent | | | | -1.8 | 3.5 | | |
| 1715-005 v | 0.78 | 1.27 | Vent | 8.98 | | | -2.5 | 3.5 | | |
| 1715-005dup v | 0.81 | 1.25 | Vent | 8.97 | | | -2.5 | 3.5 | | |

v = Vent $CO_2$
vv = Vent $CO_2$ / $CH_4$
Pressure unit : psig

## Final Sample Results With DF Corrected (ppm as Methane)

| Sample ID | Carbon Monoxide | Methane | Carbon Dioxide | TGNMO (Methane) | TGNMO (Propane) | Loop Dilution | DF | File ID | Time |
|---|---|---|---|---|---|---|---|---|---|
| MDL | 0.099 | 0.19 | 1.80 | 0.48 | 0.16 | | | | |
| MRL | 5.00 | 0.50 | 5.00 | 1.00 | 0.33 | | | | |
| MB | ND | ND | ND | ND | ND | | | 06140702.D | 08:41 |
| 1715-001 v | 0.64 j | 1.90 | Vent | ND | ND | 1.00 | 1.55 | 06140704.D | 09:07 |
| 1715-002 v | 1.07 j | 1.92 | Vent | ND | ND | 1.00 | 1.63 | 06140705.D | 09:19 |
| 1715-003 v | 1.27 j | 3.12 | Vent | ND | ND | 1.00 | 1.61 | 06140706.D | 09:32 |
| 1715-004 v | 1.36 j | 3.12 | Vent | ND | ND | 1.00 | 1.60 | 06140707.D | 09:44 |
| 1715-005 v | 1.16 j | 1.89 | Vent | 13.40 | 4.47 | 1.00 | 1.49 | 06140708.D | 09:57 |
| 1715-006 v | 1.37 j | 2.04 | Vent | ND | ND | 1.00 | 1.92 | 06140712.D | 10:54 |
| 1715-007 v | 1.32 j | 1.97 | Vent | ND | ND | 1.00 | 1.33 | 06140713.D | 11:06 |
| 1715-008 v | 1.31 j | 1.95 | Vent | ND | ND | 1.00 | 1.56 | 06140714.D | 11:26 |
| 1715-009 v | 0.83 j | 2.28 | Vent | ~~1.28 j~~ | 0.41 | 1.00 | 1.65 | 06140715.D | 11:38 |
| 1715-010 v | 1.19 j | 2.02 | Vent | ND | ND | 1.00 | 1.41 | 06140716.D | 11:50 |
| 1715-005 v | 1.16 j | 1.89 | Vent | 13.40 | 4.47 | 1.00 | 1.49 | 06140708.D | 09:57 |
| 1715-005dup v | 1.21 j | 1.86 | Vent | 13.37 | 4.46 | 1.00 | 1.49 | 06140709.D | 10:10 |

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# Modified EPA Method 25C Daily QC Summary

Job# : TRC P2701715
Analyst : WHH
Method Name : EPA 25C TCA/FID Analysis for TGNMO

Instrument : GC01/TCD1
Date Analyzed : 6/14/07
Printed : 6/25/07

## RT Summaries and QC Check (minutes)

| Sample ID | Carbon Monoxide | Methane | Carbon Dioxide | TGNMO-1 | TGMNO-2 | | File ID | Time |
|---|---|---|---|---|---|---|---|---|
| ICAL Mean RT | 1.366 | 1.799 | 3.038 | 4.833 | | | | |
| RT Windows (+/- min ) | 0.030 | 0.031 | 0.038 | 0.030 | | | | |
| STD 100ppm S14-12280601 | 1.389 | 1.815 | 3.041 | 4.849 | | | 06140701.D | 08:29 |
| +/- 0.33min of ICAL Mean RT | Pass | Pass | Pass | Pass | | | | |
| MB | | | | N/A | N/A | | 06140702.D | 08:41 |
| LCS 345ppm S14-04050602 | 1.392 Pass | 1.817 Pass | 3.044 Pass | N/A | N/A | | 06140703.D | 08:54 |
| 1715-001 v | 1.392 Pass | 1.820 Pass | Vent | N/A | N/A | | 06140704.D | 09:07 |
| 1715-002 v | 1.242 Fail | 1.806 Pass | Vent | N/A | N/A | | 06140705.D | 09:19 |
| 1715-003 v | 1.243 Fail | 1.814 Pass | Vent | N/A | N/A | | 06140706.D | 09:32 |
| 1715-004 v | 1.240 Fail | 1.814 Pass | Vent | N/A | N/A | | 06140707.D | 09:44 |
| 1715-005 v | 1.236 Fail | 1.811 Pass | Vent | N/A | N/A | | 06140708.D | 09:57 |
| 1715-005dup v | 1.238 Fail | 1.812 Pass | Vent | N/A | N/A | | 06140709.D | 10:10 |
| STD 100ppm S14-12280601 | 1.389 Pass | 1.816 Pass | 3.042 Pass | N/A | N/A | | 06140711.D | 10:41 |
| 1715-006 v | 1.241 Fail | 1.814 Pass | Vent | N/A | N/A | | 06140712.D | 10:54 |
| 1715-007 v | 1.234 Fail | 1.807 Pass | Vent | N/A | N/A | | 06140713.D | 11:06 |
| 1715-008 v | 1.243 Fail | 1.815 Pass | Vent | N/A | N/A | | 06140714.D | 11:26 |
| 1715-009 v | 1.384 Pass | 1.807 Pass | Vent | N/A | N/A | | 06140715.D | 11:38 |
| 1715-010 v | 1.238 Fail | 1.807 Pass | Vent | N/A | N/A | | 06140716.D | 11:50 |
| STD 100ppm S14-12280601 | 1.397 Pass | 1.824 Pass | 3.050 Pass | N/A | N/A | | 06140723.D | 13:25 |

vv = Vent $CO_2$ / $CH_4$ v = Vent $CO_2$ N/A : Not Applicable

## Continuing Calibration Standards Summary (ppm)

| Sample ID | Carbon Monoxide | Methane | Carbon Dioxide | | | TGMNO | File ID | Time |
|---|---|---|---|---|---|---|---|---|
| ACTUAL | 100.1 | 80.1 | 100.7 | | | 101.2 | | |
| CCV Criteria (+/- %D) | 15.0% | 15.0% | 15.0% | | | 15.0% | | |
| STD 100ppm S14-12280601 | 91.7 Pass | 73.2 Pass | 88.9 Pass | | | 101.3 Pass | 06140701.D | 08:29 |
| STD 100ppm S14-12280601 | 97.3 Pass | 77.0 Pass | 94.1 Pass | | | 107.1 Pass | 06140711.D | 10:41 |
| STD 100ppm S14-12280601 | 97.0 Pass | 77.5 Pass | 94.1 Pass | | | 106.8 Pass | 06140723.D | 13:25 |

## LCS / LCS Dup Summary (ppm, without DF correction)

| Sample ID | Carbon Monoxide | Methane | Carbon Dioxide | | | TGMNO | File ID | Time |
|---|---|---|---|---|---|---|---|---|
| LCS Actual Conc. (ppm) | 57.9 | 57.5 | 57.9 | | | 345.0 | | |
| LCS Criteria (% Range) | 86% -122% | 81% - 118% | 81% - 124% | | | 81% - 116% | | |
| LCS 345ppm S14-04050602 | 61.7 | 59.0 | 59.0 | | | 349.3 | 06140703.D | 08:54 |
| LCS % Recovery | 107% | 103% | 102% | | | 101% | | |
| | Pass | Pass | Pass | | | Pass | | |

## Lab Dup Summary (ppm, without DF correction)

| Sample ID | Carbon Monoxide | Methane | Carbon Dioxide | | | TGMNO | File ID | Time |
|---|---|---|---|---|---|---|---|---|
| 1715-005 v | 0.8 | 1.3 | Vent | | | 9.0 | 06140708.D | 09:57 |
| 1715-005dup v | 0.8 | 1.2 | Vent | | | 9.0 | 06140709.D | 10:10 |
| Duplicate % RPD | 4.0% | 1.6% | | | | 0.2% | | |
| Duplicate Criteria % RPD | 18% | 21% | 25% | | | 14% | | |
| | Pass | Pass | | | | Pass | | |

# Injection Log

Directory: j:\gc01\data\25c\2006_10\20

| ine | Vial | FileName | Multiplier | | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|---|
| | 1 | 10200601.d | 1. | | STD 100/80ppmS14-10110605 | | 20 Oct 106 12::4 |
| | 1 | 10200602.d | 1. | | MB | | 20 Oct 106 12::5 |
| | 1 | 10200603.d | 1. | | Lab Air | | 20 Oct 106 12::0 |
| | 1 | 10200604.d | 1. | | LCS 345ppm | | 20 Oct 106 12::2 |
| | 1 | 10200605.d | 1. | | test low | | 20 Oct 106 13::5 |
| | 1 | 10200606.d | 1. | | STD 25C low level small loop | S14-10110606 | 20 Oct 106 13::0 |
| | 1 | 10200607.d | 1. | | STD 25C low level normal loop | S14-10110606 | 20 Oct 106 13::3 |
| | 1 | 10200608.d | 1. | | STD 25C mid level small loop | S14-10110605 | 20 Oct 106 12::0 |
| | 1 | 10200609.d | 1. | | STD 25C mid level normal loop | S14-10110605 | 20 Oct 106 12::2 |
| 0 | 1 | 10200610.d | 1. | | STD 25C high level small loop | S14-10200601 | 20 Oct 106 12::1 |
| 1 | 1 | 10200611.d | 1. | | STD 25C high level normal loop | S14-10200601 | 20 Oct 106 12::3 |
| 2 | 1 | 10200612.d | 1. | | ICV S14-03270602 | | 20 Oct 106 12::5 |
| 3 | 1 | 10200613.d | 1. | | ICV S14-03270602 | aprox 100/80ppm | 20 Oct 106 12::2 |
| 4 | 1 | 10200614.d | 1. | x | MB electrical noise | | 20 Oct 106 12::3 |
| 5 | 1 | 10200615.d | 1. | | MB good | | 20 Oct 106 12::0 |
| 6 | 1 | 10200616.d | 1. | | MB | | 20 Oct 106 12::2 |

10/23/06

COLUMBIA ANALYTICAL SERVICES
SAMPLE RUN LOG
ID: HP 5890 SERIES II / GC1

DATE: 6 / 14 / 2007 DATA SYSTEM: HP Chemstation ANALYSIS: ___25C ✓25C(MOD.) ___3C ___3C(MOD.)

INJECTOR: PACKED COLUMN
VALVE SYSTEM:
3C ___ REGULAR LOOP (100µL) ___ OTHER _____
25C ___ REGULAR LOOP (500µL) ___ SMALL LOOP (7.33:1)

COLUMN ID's:
___8' X 1/8" CARBOSPHERE
___4' X 1/8" TENAX / HAYSEP Q / CARBOSPHERE

TEMPERATURE PROGRAMMING:
INITIAL AT 50 °C FOR 2 min
RAMP RATE 30 °C/min TO 200 °C HOLD FOR 1 min

CARRIER GAS: He 25.1 mL/min

DETECTOR INFO: HP TCD #1: 260 °C SENSITIVITY: INITIAL HIGH, 1.5 min LOW
HP FID #1: 280 °C POLARITY: INITIAL NEGATIVE, 1.5 min POSITIVE

DATA PATHWAY: J:\GC1\DATA\25C\2007_06\14\ METHOD FILE NAME: J:\GC1\METHODS_____.M

| | DATA FILE HEADER INFO | | CLIENT | ANALYST |
|---|---|---|---|---|
| 01 | std 100 ppm S14-12280601 | | | 2W |
| 02 | MB | | | |
| 03 | LCS 345 ppm S14-04050602 | | | |
| 04 | 1715-001 | ✓ | TRC | |
| 05 | -002 | | | |
| 06 | -003 | | | |
| 07 | -004 | | | |
| 08 | -005 | | | |
| 09 | -005dup | | | |
| 10 | 1742-004 | | [redacted] | |
| 11 | std 100 ppm | | | |
| 12 | 1715-006 | ✓ | TRC | |
| 13 | -007 | | | |
| 14 | -008 | | | |
| 15 | -009 | | | |
| 16 | -010 | | | |
| 17 | wait | | | |
| 18 | 1752-008 | ✓✓ | [redacted] | |
| 19 | -008 | | | |
| 20 | -007 | | | |

| | DATA FILE HEADER INFO | | CLIENT | ANALYST |
|---|---|---|---|---|
| 21 | 1752-009 | ✓ | MWH | 2W |
| 22 | -002 | | | |
| 23 | std 100 ppm S14-12280601 | | | |
| 24 | MB | | | |
| 25 | LCS 345 ppm S14-04050602 | | | |
| 26 | 1752-003 | ✓ | [redacted] | |
| 27 | -004 | | | |
| 28 | -005 | | | |
| 29 | -006 | | | |
| 30 | -007 | | | |
| 31 | -010 | | | |
| 32 | 1753-001 | | | |
| 33 | -002 | | | |
| 34 | -003 | | | |
| 35 | -004 | | | |
| 36 | std 100 ppm | | | |
| 37 | 1753-005 | ✓ | [redacted] | |
| 38 | -006 | | | |
| 39 | -007 | | | |
| 40 | -008 | | | |

back

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# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-001

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01117

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.0 Pf 1 = 3.4
Can D.F. = 1.55

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.6 | ND | 0.75 | |
| 75-01-4 | Vinyl Chloride | ND | 1.6 | ND | 0.61 | |
| 74-83-9 | Bromomethane | ND | 1.6 | ND | 0.40 | |
| 75-00-3 | Chloroethane | ND | 1.6 | ND | 0.59 | |
| 67-64-1 | Acetone | **110** | 7.8 | **45** | 3.3 | **V** |
| 75-69-4 | Trichlorofluoromethane | ND | 1.6 | ND | 0.28 | |
| 75-35-4 | 1,1-Dichloroethene | **1.8** | 1.6 | **0.46** | 0.39 | |
| 75-09-2 | Methylene chloride | **41** | 1.6 | **12** | 0.45 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.6 | ND | 0.20 | |
| 75-15-0 | Carbon Disulfide | ND | 1.6 | ND | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.6 | ND | 0.39 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.6 | ND | 0.38 | |
| 1634-04-4 | Methyl tert-Butyl Ether | **8.0** | 1.6 | **2.2** | 0.43 | |
| 108-05-4 | Vinyl Acetate | ND | 1.6 | ND | 0.44 | |
| 78-93-3 | 2-Butanone (MEK) | **11** | 1.6 | **3.6** | 0.53 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.6 | ND | 0.39 | |
| 67-66-3 | Chloroform | ND | 1.6 | ND | 0.32 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.6 | ND | 0.38 | |
| 71-55-6 | 1,1,1-Trichloroethane | **2.6** | 1.6 | **0.48** | 0.28 | |
| 71-43-2 | Benzene | **3.2** | 1.6 | **1.0** | 0.49 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.6 | ND | 0.25 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.6 | ND | 0.34 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-001

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01117

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.0 Pf 1 = 3.4
Can D.F. = 1.55

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.6 | ND | 0.23 | |
| 79-01-6 | Trichloroethene | **2.6** | 1.6 | **0.48** | 0.29 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.6 | ND | 0.34 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.6 | ND | 0.38 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.6 | ND | 0.34 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.6 | ND | 0.28 | |
| 108-88-3 | Toluene | **64** | 1.6 | **17** | 0.41 | |
| 591-78-6 | 2-Hexanone | **3.0** | 1.6 | **0.74** | 0.38 | **V** |
| 124-48-1 | Dibromochloromethane | ND | 1.6 | ND | 0.18 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.6 | ND | 0.20 | |
| 127-18-4 | Tetrachloroethene | **2.2** | 1.6 | **0.32** | 0.23 | |
| 108-90-7 | Chlorobenzene | ND | 1.6 | ND | 0.34 | |
| 100-41-4 | Ethylbenzene | **11** | 1.6 | **2.4** | 0.36 | |
| 179601-23-1 | *m,p* -Xylenes | **47** | 1.6 | **11** | 0.36 | |
| 75-25-2 | Bromoform | ND | 1.6 | ND | 0.15 | |
| 100-42-5 | Styrene | ND | 1.6 | ND | 0.36 | |
| 95-47-6 | o-Xylene | **17** | 1.6 | **3.9** | 0.36 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.6 | ND | 0.23 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.6 | ND | 0.26 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.6 | ND | 0.26 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.6 | ND | 0.26 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: Re Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-22-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-002

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00628

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.5 Pf 1 = 3.5
Pi 2 = -2.3 Pf 2 = 0.0 Can D.F. = 1.93

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.9 | ND | 0.93 | |
| 75-01-4 | Vinyl Chloride | ND | 1.9 | ND | 0.76 | |
| 74-83-9 | Bromomethane | ND | 1.9 | ND | 0.50 | |
| 75-00-3 | Chloroethane | ND | 1.9 | ND | 0.73 | |
| 67-64-1 | Acetone | **42** | 9.7 | **18** | 4.1 | **M , *** |
| 75-69-4 | Trichlorofluoromethane | ND | 1.9 | ND | 0.34 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.9 | ND | 0.49 | |
| 75-09-2 | Methylene chloride | ND | 1.9 | ND | 0.56 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.9 | ND | 0.25 | |
| 75-15-0 | Carbon Disulfide | ND | 1.9 | ND | 0.62 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.9 | ND | 0.49 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.9 | ND | 0.48 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.9 | ND | 0.54 | |
| 108-05-4 | Vinyl Acetate | ND | 1.9 | ND | 0.55 | |
| 78-93-3 | 2-Butanone (MEK) | **7.0** | 1.9 | **2.4** | 0.65 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.9 | ND | 0.49 | |
| 67-66-3 | Chloroform | ND | 1.9 | ND | 0.40 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.9 | ND | 0.48 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.9 | ND | 0.35 | |
| 71-43-2 | Benzene | **7.2** | 1.9 | **2.3** | 0.60 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.9 | ND | 0.31 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.9 | ND | 0.42 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: Re Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-22-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-002

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00628

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.5 Pf 1 = 3.5
Pi 2 = -2.3 Pf 2 = 0.0 Can D.F. = 1.93

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.9 | ND | 0.29 | |
| 79-01-6 | Trichloroethene | ND | 1.9 | ND | 0.36 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.9 | ND | 0.43 | |
| 108-10-1 | 4-Methyl-2-pentanone | **2.1** | 1.9 | **0.51** | 0.47 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.9 | ND | 0.43 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.9 | ND | 0.35 | |
| 108-88-3 | Toluene | **83** | 1.9 | **22** | 0.51 | |
| 591-78-6 | 2-Hexanone | ND | 1.9 | ND | 0.47 | |
| 124-48-1 | Dibromochloromethane | ND | 1.9 | ND | 0.23 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.9 | ND | 0.25 | |
| 127-18-4 | Tetrachloroethene | ND | 1.9 | ND | 0.28 | |
| 108-90-7 | Chlorobenzene | ND | 1.9 | ND | 0.42 | |
| 100-41-4 | Ethylbenzene | **11** | 1.9 | **2.5** | 0.44 | |
| 179601-23-1 | *m,p* -Xylenes | **55** | 1.9 | **13** | 0.44 | |
| 75-25-2 | Bromoform | ND | 1.9 | ND | 0.19 | |
| 100-42-5 | Styrene | ND | 1.9 | ND | 0.45 | |
| 95-47-6 | o-Xylene | **16** | 1.9 | **3.7** | 0.44 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.9 | ND | 0.28 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.9 | ND | 0.32 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.9 | ND | 0.32 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.9 | ND | 0.32 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-003

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00910

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.3 Pf 1 = 3.6

Can D.F. = 1.61

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.6 | ND | 0.78 | |
| 75-01-4 | Vinyl Chloride | ND | 1.6 | ND | 0.63 | |
| 74-83-9 | Bromomethane | ND | 1.6 | ND | 0.41 | |
| 75-00-3 | Chloroethane | ND | 1.6 | ND | 0.61 | |
| 67-64-1 | Acetone | **75** | 8.1 | **32** | 3.4 | * |
| 75-69-4 | Trichlorofluoromethane | ND | 1.6 | ND | 0.29 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.6 | ND | 0.41 | |
| 75-09-2 | Methylene chloride | **1.7** | 1.6 | **0.48** | 0.46 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.6 | ND | 0.21 | |
| 75-15-0 | Carbon Disulfide | ND | 1.6 | ND | 0.52 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.6 | ND | 0.41 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.6 | ND | 0.40 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.6 | ND | 0.45 | |
| 108-05-4 | Vinyl Acetate | **6.2** | 1.6 | **1.7** | 0.46 | **M** |
| 78-93-3 | 2-Butanone (MEK) | **2.5** | 1.6 | **0.85** | 0.55 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.6 | ND | 0.41 | |
| 67-66-3 | Chloroform | ND | 1.6 | ND | 0.33 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.6 | ND | 0.40 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.6 | ND | 0.30 | |
| 71-43-2 | Benzene | ND | 1.6 | ND | 0.50 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.6 | ND | 0.26 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.6 | ND | 0.35 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-003

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00910

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.3 Pf 1 = 3.6

Can D.F. = 1.61

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.6 | ND | 0.24 | |
| 79-01-6 | Trichloroethene | ND | 1.6 | ND | 0.30 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.6 | ND | 0.35 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.6 | ND | 0.39 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.6 | ND | 0.35 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.6 | ND | 0.30 | |
| 108-88-3 | Toluene | **5.2** | 1.6 | **1.4** | 0.43 | |
| 591-78-6 | 2-Hexanone | ND | 1.6 | ND | 0.39 | |
| 124-48-1 | Dibromochloromethane | ND | 1.6 | ND | 0.19 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.6 | ND | 0.21 | |
| 127-18-4 | Tetrachloroethene | ND | 1.6 | ND | 0.24 | |
| 108-90-7 | Chlorobenzene | ND | 1.6 | ND | 0.35 | |
| 100-41-4 | Ethylbenzene | ND | 1.6 | ND | 0.37 | |
| 179601-23-1 | *m,p* -Xylenes | **2.6** | 1.6 | **0.61** | 0.37 | |
| 75-25-2 | Bromoform | ND | 1.6 | ND | 0.16 | |
| 100-42-5 | Styrene | ND | 1.6 | ND | 0.38 | |
| 95-47-6 | o-Xylene | ND | 1.6 | ND | 0.37 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.6 | ND | 0.23 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.6 | ND | 0.27 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.6 | ND | 0.27 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.6 | ND | 0.27 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07-SC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-004

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00917

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.3 Pf 1 = 3.5
Can D.F. = 1.60

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.6 | ND | 0.78 | |
| 75-01-4 | Vinyl Chloride | ND | 1.6 | ND | 0.63 | |
| 74-83-9 | Bromomethane | ND | 1.6 | ND | 0.41 | |
| 75-00-3 | Chloroethane | ND | 1.6 | ND | 0.61 | |
| 67-64-1 | Acetone | **57** | 8.0 | **24** | 3.4 | * |
| 75-69-4 | Trichlorofluoromethane | ND | 1.6 | ND | 0.28 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.6 | ND | 0.40 | |
| 75-09-2 | Methylene chloride | **1.6** | 1.6 | **0.47** | 0.46 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.6 | ND | 0.21 | |
| 75-15-0 | Carbon Disulfide | ND | 1.6 | ND | 0.51 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.6 | ND | 0.40 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.6 | ND | 0.40 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.6 | ND | 0.44 | |
| 108-05-4 | Vinyl Acetate | **4.9** | 1.6 | **1.4** | 0.45 | **M** |
| 78-93-3 | 2-Butanone (MEK) | **2.5** | 1.6 | **0.84** | 0.54 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.6 | ND | 0.40 | |
| 67-66-3 | Chloroform | ND | 1.6 | ND | 0.33 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.6 | ND | 0.40 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.6 | ND | 0.29 | |
| 71-43-2 | Benzene | ND | 1.6 | ND | 0.50 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.6 | ND | 0.25 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.6 | ND | 0.35 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07-SC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-004

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00917

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.3 Pf 1 = 3.5
Can D.F. = 1.60

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.6 | ND | 0.24 | |
| 79-01-6 | Trichloroethene | ND | 1.6 | ND | 0.30 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.6 | ND | 0.35 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.6 | ND | 0.39 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.6 | ND | 0.35 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.6 | ND | 0.29 | |
| 108-88-3 | Toluene | **5.3** | 1.6 | **1.4** | 0.42 | |
| 591-78-6 | 2-Hexanone | ND | 1.6 | ND | 0.39 | |
| 124-48-1 | Dibromochloromethane | ND | 1.6 | ND | 0.19 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.6 | ND | 0.21 | |
| 127-18-4 | Tetrachloroethene | ND | 1.6 | ND | 0.24 | |
| 108-90-7 | Chlorobenzene | ND | 1.6 | ND | 0.35 | |
| 100-41-4 | Ethylbenzene | ND | 1.6 | ND | 0.37 | |
| 179601-23-1 | *m,p* -Xylenes | **2.6** | 1.6 | **0.61** | 0.37 | |
| 75-25-2 | Bromoform | ND | 1.6 | ND | 0.15 | |
| 100-42-5 | Styrene | ND | 1.6 | ND | 0.38 | |
| 95-47-6 | o-Xylene | ND | 1.6 | ND | 0.37 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.6 | ND | 0.23 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.6 | ND | 0.27 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.6 | ND | 0.27 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.6 | ND | 0.27 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-41-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-005

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01044

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 0.050 Liter(s)

Pi 1 = -2.5 Pf 1 = 3.5

Can D.F. = 1.49

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 30 | ND | 14 | |
| 75-01-4 | Vinyl Chloride | ND | 30 | ND | 12 | |
| 74-83-9 | Bromomethane | ND | 30 | ND | 7.7 | |
| 75-00-3 | Chloroethane | ND | 30 | ND | 11 | |
| 67-64-1 | Acetone | ND | 150 | ND | 63 | V |
| 75-69-4 | Trichlorofluoromethane | ND | 30 | ND | 5.3 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 30 | ND | 7.5 | |
| 75-09-2 | Methylene chloride | ND | 30 | ND | 8.6 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 30 | ND | 3.9 | |
| 75-15-0 | Carbon Disulfide | ND | 30 | ND | 9.6 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 30 | ND | 7.5 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 30 | ND | 7.4 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 30 | ND | 8.3 | |
| 108-05-4 | Vinyl Acetate | ND | 30 | ND | 8.5 | |
| 78-93-3 | 2-Butanone (MEK) | ND | 30 | ND | 10 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 30 | ND | 7.5 | |
| 67-66-3 | Chloroform | ND | 30 | ND | 6.1 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 30 | ND | 7.4 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 30 | ND | 5.5 | |
| 71-43-2 | Benzene | ND | 30 | ND | 9.3 | |
| 56-23-5 | Carbon Tetrachloride | ND | 30 | ND | 4.7 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 30 | ND | 6.5 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-41-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-005

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01044

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 0.050 Liter(s)

Pi 1 = -2.5 Pf 1 = 3.5
Can D.F. = 1.49

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 30 | ND | 4.4 | |
| 79-01-6 | Trichloroethene | ND | 30 | ND | 5.5 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 30 | ND | 6.6 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 30 | ND | 7.3 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 30 | ND | 6.6 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 30 | ND | 5.5 | |
| 108-88-3 | Toluene | **2,600** | 30 | **690** | 7.9 | |
| 591-78-6 | 2-Hexanone | ND | 30 | ND | 7.3 | **V** |
| 124-48-1 | Dibromochloromethane | ND | 30 | ND | 3.5 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 30 | ND | 3.9 | |
| 127-18-4 | Tetrachloroethene | ND | 30 | ND | 4.4 | |
| 108-90-7 | Chlorobenzene | ND | 30 | ND | 6.5 | |
| 100-41-4 | Ethylbenzene | ND | 30 | ND | 6.9 | |
| 179601-23-1 | *m,p* -Xylenes | **48** | 30 | **11** | 6.9 | |
| 75-25-2 | Bromoform | ND | 30 | ND | 2.9 | |
| 100-42-5 | Styrene | ND | 30 | ND | 7.0 | |
| 95-47-6 | o-Xylene | ND | 30 | ND | 6.9 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 30 | ND | 4.3 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 30 | ND | 5.0 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 30 | ND | 5.0 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 30 | ND | 5.0 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: Rcs Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-41-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-005DUP

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01044

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 0.050 Liter(s)

Pi 1 = -2.5 Pf 1 = 3.5

Can D.F. = 1.49

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 30 | ND | 14 | |
| 75-01-4 | Vinyl Chloride | ND | 30 | ND | 12 | |
| 74-83-9 | Bromomethane | ND | 30 | ND | 7.7 | |
| 75-00-3 | Chloroethane | ND | 30 | ND | 11 | |
| 67-64-1 | Acetone | ND | 150 | ND | 63 | V |
| 75-69-4 | Trichlorofluoromethane | ND | 30 | ND | 5.3 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 30 | ND | 7.5 | |
| 75-09-2 | Methylene chloride | ND | 30 | ND | 8.6 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 30 | ND | 3.9 | |
| 75-15-0 | Carbon Disulfide | ND | 30 | ND | 9.6 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 30 | ND | 7.5 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 30 | ND | 7.4 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 30 | ND | 8.3 | |
| 108-05-4 | Vinyl Acetate | ND | 30 | ND | 8.5 | |
| 78-93-3 | 2-Butanone (MEK) | ND | 30 | ND | 10 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 30 | ND | 7.5 | |
| 67-66-3 | Chloroform | ND | 30 | ND | 6.1 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 30 | ND | 7.4 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 30 | ND | 5.5 | |
| 71-43-2 | Benzene | ND | 30 | ND | 9.3 | |
| 56-23-5 | Carbon Tetrachloride | ND | 30 | ND | 4.7 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 30 | ND | 6.5 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-41-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-005DUP

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01044

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 0.050 Liter(s)

Pi 1 = -2.5 Pf 1 = 3.5

Can D.F. = 1.49

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 30 | ND | 4.4 | |
| 79-01-6 | Trichloroethene | ND | 30 | ND | 5.5 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 30 | ND | 6.6 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 30 | ND | 7.3 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 30 | ND | 6.6 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 30 | ND | 5.5 | |
| 108-88-3 | Toluene | **2,600** | 30 | **690** | 7.9 | |
| 591-78-6 | 2-Hexanone | ND | 30 | ND | 7.3 | **V** |
| 124-48-1 | Dibromochloromethane | ND | 30 | ND | 3.5 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 30 | ND | 3.9 | |
| 127-18-4 | Tetrachloroethene | ND | 30 | ND | 4.4 | |
| 108-90-7 | Chlorobenzene | ND | 30 | ND | 6.5 | |
| 100-41-4 | Ethylbenzene | ND | 30 | ND | 6.9 | |
| 179601-23-1 | *m,p* -Xylenes | **48** | 30 | **11** | 6.9 | |
| 75-25-2 | Bromoform | ND | 30 | ND | 2.9 | |
| 100-42-5 | Styrene | ND | 30 | ND | 7.0 | |
| 95-47-6 | o-Xylene | ND | 30 | ND | 6.9 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 30 | ND | 4.3 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 30 | ND | 5.0 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 30 | ND | 5.0 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 30 | ND | 5.0 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-50-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-006

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00723

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -5.2 Pf 1 = 3.5

Can D.F. = 1.92

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.9 | ND | 0.93 | |
| 75-01-4 | Vinyl Chloride | ND | 1.9 | ND | 0.75 | |
| 74-83-9 | Bromomethane | ND | 1.9 | ND | 0.49 | |
| 75-00-3 | Chloroethane | ND | 1.9 | ND | 0.73 | |
| 67-64-1 | Acetone | **16** | 9.6 | **6.7** | 4.0 | **M , V** |
| 75-69-4 | Trichlorofluoromethane | ND | 1.9 | ND | 0.34 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.9 | ND | 0.48 | |
| 75-09-2 | Methylene chloride | ND | 1.9 | ND | 0.55 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.9 | ND | 0.25 | |
| 75-15-0 | Carbon Disulfide | ND | 1.9 | ND | 0.62 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.9 | ND | 0.48 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.9 | ND | 0.47 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.9 | ND | 0.53 | |
| 108-05-4 | Vinyl Acetate | **3.5** | 1.9 | **1.0** | 0.55 | |
| 78-93-3 | 2-Butanone (MEK) | **3.1** | 1.9 | **1.1** | 0.65 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.9 | ND | 0.48 | |
| 67-66-3 | Chloroform | ND | 1.9 | ND | 0.39 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.9 | ND | 0.47 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.9 | ND | 0.35 | |
| 71-43-2 | Benzene | ND | 1.9 | ND | 0.60 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.9 | ND | 0.31 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.9 | ND | 0.42 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-50-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-006

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00723

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -5.2 Pf 1 = 3.5

Can D.F. = 1.92

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.9 | ND | 0.29 | |
| 79-01-6 | Trichloroethene | ND | 1.9 | ND | 0.36 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.9 | ND | 0.42 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.9 | ND | 0.47 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.9 | ND | 0.42 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.9 | ND | 0.35 | |
| 108-88-3 | Toluene | **3.5** | 1.9 | **0.94** | 0.51 | |
| 591-78-6 | 2-Hexanone | ND | 1.9 | ND | 0.47 | **V** |
| 124-48-1 | Dibromochloromethane | ND | 1.9 | ND | 0.23 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.9 | ND | 0.25 | |
| 127-18-4 | Tetrachloroethene | ND | 1.9 | ND | 0.28 | |
| 108-90-7 | Chlorobenzene | ND | 1.9 | ND | 0.42 | |
| 100-41-4 | Ethylbenzene | ND | 1.9 | ND | 0.44 | |
| 179601-23-1 | *m,p* -Xylenes | ND | 1.9 | ND | 0.44 | |
| 75-25-2 | Bromoform | ND | 1.9 | ND | 0.19 | |
| 100-42-5 | Styrene | ND | 1.9 | ND | 0.45 | |
| 95-47-6 | o-Xylene | ND | 1.9 | ND | 0.44 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.9 | ND | 0.28 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.9 | ND | 0.32 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.9 | ND | 0.32 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.9 | ND | 0.32 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-49-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-007

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00412

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.0 Pf 1 = 3.5

Can D.F. = 1.33

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.3 | ND | 0.64 | |
| 75-01-4 | Vinyl Chloride | ND | 1.3 | ND | 0.52 | |
| 74-83-9 | Bromomethane | ND | 1.3 | ND | 0.34 | |
| 75-00-3 | Chloroethane | ND | 1.3 | ND | 0.50 | |
| 67-64-1 | Acetone | **9.0** | 6.7 | **3.8** | 2.8 | **M , V** |
| 75-69-4 | Trichlorofluoromethane | ND | 1.3 | ND | 0.24 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.3 | ND | 0.34 | |
| 75-09-2 | Methylene chloride | ND | 1.3 | ND | 0.38 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.3 | ND | 0.17 | |
| 75-15-0 | Carbon Disulfide | ND | 1.3 | ND | 0.43 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.3 | ND | 0.34 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.3 | ND | 0.33 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.3 | ND | 0.37 | |
| 108-05-4 | Vinyl Acetate | ND | 1.3 | ND | 0.38 | |
| 78-93-3 | 2-Butanone (MEK) | **1.9** | 1.3 | **0.66** | 0.45 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.3 | ND | 0.34 | |
| 67-66-3 | Chloroform | ND | 1.3 | ND | 0.27 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.3 | ND | 0.33 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.3 | ND | 0.24 | |
| 71-43-2 | Benzene | ND | 1.3 | ND | 0.42 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.3 | ND | 0.21 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.3 | ND | 0.29 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-49-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-007

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00412

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.0 Pf 1 = 3.5

Can D.F. = 1.33

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.3 | ND | 0.20 | |
| 79-01-6 | Trichloroethene | ND | 1.3 | ND | 0.25 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.3 | ND | 0.29 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.3 | ND | 0.32 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.3 | ND | 0.29 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.3 | ND | 0.24 | |
| 108-88-3 | Toluene | **4.0** | 1.3 | **1.1** | 0.35 | |
| 591-78-6 | 2-Hexanone | ND | 1.3 | ND | 0.32 | **V** |
| 124-48-1 | Dibromochloromethane | ND | 1.3 | ND | 0.16 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.3 | ND | 0.17 | |
| 127-18-4 | Tetrachloroethene | ND | 1.3 | ND | 0.20 | |
| 108-90-7 | Chlorobenzene | ND | 1.3 | ND | 0.29 | |
| 100-41-4 | Ethylbenzene | ND | 1.3 | ND | 0.31 | |
| 179601-23-1 | *m,p* -Xylenes | **1.6** | 1.3 | **0.37** | 0.31 | |
| 75-25-2 | Bromoform | ND | 1.3 | ND | 0.13 | |
| 100-42-5 | Styrene | ND | 1.3 | ND | 0.31 | |
| 95-47-6 | o-Xylene | ND | 1.3 | ND | 0.31 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.3 | ND | 0.19 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.3 | ND | 0.22 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.3 | ND | 0.22 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.3 | ND | 0.22 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-008

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00731

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.0 Pf 1 = 3.5

Can D.F. = 1.56

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.6 | ND | 0.76 | |
| 75-01-4 | Vinyl Chloride | ND | 1.6 | ND | 0.61 | |
| 74-83-9 | Bromomethane | ND | 1.6 | ND | 0.40 | |
| 75-00-3 | Chloroethane | ND | 1.6 | ND | 0.59 | |
| 67-64-1 | Acetone | **8.2** | 7.8 | **3.4** | 3.3 | * |
| 75-69-4 | Trichlorofluoromethane | ND | 1.6 | ND | 0.28 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.6 | ND | 0.39 | |
| 75-09-2 | Methylene chloride | ND | 1.6 | ND | 0.45 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.6 | ND | 0.20 | |
| 75-15-0 | Carbon Disulfide | ND | 1.6 | ND | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.6 | ND | 0.39 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.6 | ND | 0.39 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.6 | ND | 0.43 | |
| 108-05-4 | Vinyl Acetate | **1.8** | 1.6 | **0.50** | 0.44 | **M** |
| 78-93-3 | 2-Butanone (MEK) | ND | 1.6 | ND | 0.53 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.6 | ND | 0.39 | |
| 67-66-3 | Chloroform | ND | 1.6 | ND | 0.32 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.6 | ND | 0.39 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.6 | ND | 0.29 | |
| 71-43-2 | Benzene | ND | 1.6 | ND | 0.49 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.6 | ND | 0.25 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.6 | ND | 0.34 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-008

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00731

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.0 Pf 1 = 3.5

Can D.F. = 1.56

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.6 | ND | 0.23 | |
| 79-01-6 | Trichloroethene | ND | 1.6 | ND | 0.29 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.6 | ND | 0.34 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.6 | ND | 0.38 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.6 | ND | 0.34 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.6 | ND | 0.29 | |
| 108-88-3 | Toluene | **2.3** | 1.6 | **0.61** | 0.41 | |
| 591-78-6 | 2-Hexanone | ND | 1.6 | ND | 0.38 | |
| 124-48-1 | Dibromochloromethane | ND | 1.6 | ND | 0.18 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.6 | ND | 0.20 | |
| 127-18-4 | Tetrachloroethene | ND | 1.6 | ND | 0.23 | |
| 108-90-7 | Chlorobenzene | ND | 1.6 | ND | 0.34 | |
| 100-41-4 | Ethylbenzene | ND | 1.6 | ND | 0.36 | |
| 179601-23-1 | *m,p*-Xylenes | ND | 1.6 | ND | 0.36 | |
| 75-25-2 | Bromoform | ND | 1.6 | ND | 0.15 | |
| 100-42-5 | Styrene | ND | 1.6 | ND | 0.37 | |
| 95-47-6 | o-Xylene | ND | 1.6 | ND | 0.36 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.6 | ND | 0.23 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.6 | ND | 0.26 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.6 | ND | 0.26 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.6 | ND | 0.26 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03B-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-009

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00822

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.7 Pf 1 = 3.5

Can D.F. = 1.65

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.7 | ND | 0.80 | |
| 75-01-4 | Vinyl Chloride | ND | 1.7 | ND | 0.65 | |
| 74-83-9 | Bromomethane | ND | 1.7 | ND | 0.43 | |
| 75-00-3 | Chloroethane | ND | 1.7 | ND | 0.63 | |
| 67-64-1 | Acetone | **46** | 8.3 | **19** | 3.5 | * |
| 75-69-4 | Trichlorofluoromethane | ND | 1.7 | ND | 0.29 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.7 | ND | 0.42 | |
| 75-09-2 | Methylene chloride | **2.4** | 1.7 | **0.69** | 0.48 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.7 | ND | 0.22 | |
| 75-15-0 | Carbon Disulfide | ND | 1.7 | ND | 0.53 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.7 | ND | 0.42 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.7 | ND | 0.41 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.7 | ND | 0.46 | |
| 108-05-4 | Vinyl Acetate | **6.0** | 1.7 | **1.7** | 0.47 | **M** |
| 78-93-3 | 2-Butanone (MEK) | **4.3** | 1.7 | **1.5** | 0.56 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.7 | ND | 0.42 | |
| 67-66-3 | Chloroform | ND | 1.7 | ND | 0.34 | |
| 107-06-2 | 1,2-Dichloroethane | **4.4** | 1.7 | **1.1** | 0.41 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.7 | ND | 0.30 | |
| 71-43-2 | Benzene | **2.4** | 1.7 | **0.76** | 0.52 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.7 | ND | 0.26 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.7 | ND | 0.36 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03B-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-009

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00822

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.7 Pf 1 = 3.5

Can D.F. = 1.65

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.7 | ND | 0.25 | |
| 79-01-6 | Trichloroethene | ND | 1.7 | ND | 0.31 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.7 | ND | 0.36 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.7 | ND | 0.40 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.7 | ND | 0.36 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.7 | ND | 0.30 | |
| 108-88-3 | Toluene | **23** | 1.7 | **6.2** | 0.44 | |
| 591-78-6 | 2-Hexanone | ND | 1.7 | ND | 0.40 | |
| 124-48-1 | Dibromochloromethane | ND | 1.7 | ND | 0.19 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.7 | ND | 0.21 | |
| 127-18-4 | Tetrachloroethene | ND | 1.7 | ND | 0.24 | |
| 108-90-7 | Chlorobenzene | ND | 1.7 | ND | 0.36 | |
| 100-41-4 | Ethylbenzene | **7.7** | 1.7 | **1.8** | 0.38 | |
| 179601-23-1 | *m,p* -Xylenes | **17** | 1.7 | **4.0** | 0.38 | |
| 75-25-2 | Bromoform | ND | 1.7 | ND | 0.16 | |
| 100-42-5 | Styrene | ND | 1.7 | ND | 0.39 | |
| 95-47-6 | o-Xylene | **6.3** | 1.7 | **1.5** | 0.38 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.7 | ND | 0.24 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.7 | ND | 0.27 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.7 | ND | 0.27 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.7 | ND | 0.27 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03B-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-009DUP

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00822

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.7 Pf 1 = 3.5

Can D.F. = 1.65

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.7 | ND | 0.80 | |
| 75-01-4 | Vinyl Chloride | ND | 1.7 | ND | 0.65 | |
| 74-83-9 | Bromomethane | ND | 1.7 | ND | 0.43 | |
| 75-00-3 | Chloroethane | ND | 1.7 | ND | 0.63 | |
| 67-64-1 | Acetone | **44** | 8.3 | **19** | 3.5 | * |
| 75-69-4 | Trichlorofluoromethane | ND | 1.7 | ND | 0.29 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.7 | ND | 0.42 | |
| 75-09-2 | Methylene chloride | **2.3** | 1.7 | **0.67** | 0.48 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.7 | ND | 0.22 | |
| 75-15-0 | Carbon Disulfide | ND | 1.7 | ND | 0.53 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.7 | ND | 0.42 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.7 | ND | 0.41 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.7 | ND | 0.46 | |
| 108-05-4 | Vinyl Acetate | **5.7** | 1.7 | **1.6** | 0.47 | **M** |
| 78-93-3 | 2-Butanone (MEK) | **4.1** | 1.7 | **1.4** | 0.56 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.7 | ND | 0.42 | |
| 67-66-3 | Chloroform | ND | 1.7 | ND | 0.34 | |
| 107-06-2 | 1,2-Dichloroethane | **4.3** | 1.7 | **1.1** | 0.41 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.7 | ND | 0.30 | |
| 71-43-2 | Benzene | **2.4** | 1.7 | **0.75** | 0.52 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.7 | ND | 0.26 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.7 | ND | 0.36 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: Rcs Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03B-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-009DUP

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00822

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.7 Pf 1 = 3.5

Can D.F. = 1.65

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.7 | ND | 0.25 | |
| 79-01-6 | Trichloroethene | ND | 1.7 | ND | 0.31 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.7 | ND | 0.36 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.7 | ND | 0.40 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.7 | ND | 0.36 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.7 | ND | 0.30 | |
| 108-88-3 | Toluene | **24** | 1.7 | **6.3** | 0.44 | |
| 591-78-6 | 2-Hexanone | ND | 1.7 | ND | 0.40 | |
| 124-48-1 | Dibromochloromethane | ND | 1.7 | ND | 0.19 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.7 | ND | 0.21 | |
| 127-18-4 | Tetrachloroethene | ND | 1.7 | ND | 0.24 | |
| 108-90-7 | Chlorobenzene | ND | 1.7 | ND | 0.36 | |
| 100-41-4 | Ethylbenzene | **7.7** | 1.7 | **1.8** | 0.38 | |
| 179601-23-1 | *m,p* -Xylenes | **17** | 1.7 | **4.0** | 0.38 | |
| 75-25-2 | Bromoform | ND | 1.7 | ND | 0.16 | |
| 100-42-5 | Styrene | ND | 1.7 | ND | 0.39 | |
| 95-47-6 | o-Xylene | **6.4** | 1.7 | **1.5** | 0.38 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.7 | ND | 0.24 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.7 | ND | 0.27 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.7 | ND | 0.27 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.7 | ND | 0.27 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-28-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-010

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01258

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.8 Pf 1 = 3.5

Can D.F. = 1.41

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.4 | ND | 0.68 | |
| 75-01-4 | Vinyl Chloride | ND | 1.4 | ND | 0.55 | |
| 74-83-9 | Bromomethane | ND | 1.4 | ND | 0.36 | |
| 75-00-3 | Chloroethane | ND | 1.4 | ND | 0.53 | |
| 67-64-1 | Acetone | **19** | 7.1 | **7.9** | 3.0 | * |
| 75-69-4 | Trichlorofluoromethane | **2.0** | 1.4 | **0.36** | 0.25 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.4 | ND | 0.36 | |
| 75-09-2 | Methylene chloride | **5.0** | 1.4 | **1.4** | 0.41 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.4 | ND | 0.18 | |
| 75-15-0 | Carbon Disulfide | ND | 1.4 | ND | 0.45 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.4 | ND | 0.36 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.4 | ND | 0.35 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.4 | ND | 0.39 | |
| 108-05-4 | Vinyl Acetate | **5.8** | 1.4 | **1.7** | 0.40 | **M** |
| 78-93-3 | 2-Butanone (MEK) | **5.9** | 1.4 | **2.0** | 0.48 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.4 | ND | 0.36 | |
| 67-66-3 | Chloroform | ND | 1.4 | ND | 0.29 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.4 | ND | 0.35 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.4 | ND | 0.26 | |
| 71-43-2 | Benzene | ND | 1.4 | ND | 0.44 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.4 | ND | 0.22 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.4 | ND | 0.31 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
M = Matrix interference due to coelution with a non-target compound; results may be biased high.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: Re Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-28-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-010

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01258

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.8 Pf 1 = 3.5

Can D.F. = 1.41

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.4 | ND | 0.21 | |
| 79-01-6 | Trichloroethene | ND | 1.4 | ND | 0.26 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.4 | ND | 0.31 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.4 | ND | 0.34 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.4 | ND | 0.31 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.4 | ND | 0.26 | |
| 108-88-3 | Toluene | **4.8** | 1.4 | **1.3** | 0.37 | |
| 591-78-6 | 2-Hexanone | ND | 1.4 | ND | 0.34 | |
| 124-48-1 | Dibromochloromethane | ND | 1.4 | ND | 0.17 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.4 | ND | 0.18 | |
| 127-18-4 | Tetrachloroethene | ND | 1.4 | ND | 0.21 | |
| 108-90-7 | Chlorobenzene | ND | 1.4 | ND | 0.31 | |
| 100-41-4 | Ethylbenzene | ND | 1.4 | ND | 0.32 | |
| 179601-23-1 | *m,p*-Xylenes | **2.8** | 1.4 | **0.64** | 0.32 | |
| 75-25-2 | Bromoform | ND | 1.4 | ND | 0.14 | |
| 100-42-5 | Styrene | ND | 1.4 | ND | 0.33 | |
| 95-47-6 | o-Xylene | ND | 1.4 | ND | 0.32 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.4 | ND | 0.21 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.4 | ND | 0.23 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.4 | ND | 0.23 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.4 | ND | 0.23 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Method Blank**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070619-MB

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.0 | ND | 0.48 | |
| 75-01-4 | Vinyl Chloride | ND | 1.0 | ND | 0.39 | |
| 74-83-9 | Bromomethane | ND | 1.0 | ND | 0.26 | |
| 75-00-3 | Chloroethane | ND | 1.0 | ND | 0.38 | |
| 67-64-1 | Acetone | ND | 5.0 | ND | 2.1 | **V** |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ND | 0.18 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | ND | 0.25 | |
| 75-09-2 | Methylene chloride | ND | 1.0 | ND | 0.29 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.0 | ND | 0.13 | |
| 75-15-0 | Carbon Disulfide | ND | 1.0 | ND | 0.32 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | ND | 0.25 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ND | 0.25 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.0 | ND | 0.28 | |
| 108-05-4 | Vinyl Acetate | ND | 1.0 | ND | 0.28 | |
| 78-93-3 | 2-Butanone (MEK) | ND | 1.0 | ND | 0.34 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | ND | 0.25 | |
| 67-66-3 | Chloroform | ND | 1.0 | ND | 0.20 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ND | 0.25 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ND | 0.18 | |
| 71-43-2 | Benzene | ND | 1.0 | ND | 0.31 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.0 | ND | 0.16 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ND | 0.22 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Method Blank**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070619-MB

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/19/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ND | 0.15 | |
| 79-01-6 | Trichloroethene | ND | 1.0 | ND | 0.19 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ND | 0.22 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.0 | ND | 0.24 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ND | 0.22 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ND | 0.18 | |
| 108-88-3 | Toluene | ND | 1.0 | ND | 0.27 | |
| 591-78-6 | 2-Hexanone | ND | 1.0 | ND | 0.24 | V |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ND | 0.12 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ND | 0.13 | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | ND | 0.15 | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ND | 0.22 | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ND | 0.23 | |
| 179601-23-1 | *m,p* -Xylenes | ND | 1.0 | ND | 0.23 | |
| 75-25-2 | Bromoform | ND | 1.0 | ND | 0.097 | |
| 100-42-5 | Styrene | ND | 1.0 | ND | 0.23 | |
| 95-47-6 | o-Xylene | ND | 1.0 | ND | 0.23 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ND | 0.15 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.0 | ND | 0.17 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | ND | 0.17 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | ND | 0.17 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The client required closing continuing calibration verification standard was outside (biased low) the method limits for this compound.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Method Blank**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070620-MB

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | 1.0 | ND | 0.48 | |
| 75-01-4 | Vinyl Chloride | ND | 1.0 | ND | 0.39 | |
| 74-83-9 | Bromomethane | ND | 1.0 | ND | 0.26 | |
| 75-00-3 | Chloroethane | ND | 1.0 | ND | 0.38 | |
| 67-64-1 | Acetone | ND | 5.0 | ND | 2.1 | * |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ND | 0.18 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | ND | 0.25 | |
| 75-09-2 | Methylene chloride | ND | 1.0 | ND | 0.29 | |
| 76-13-1 | Trichlorotrifluoroethane | ND | 1.0 | ND | 0.13 | |
| 75-15-0 | Carbon Disulfide | ND | 1.0 | ND | 0.32 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | ND | 0.25 | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ND | 0.25 | |
| 1634-04-4 | Methyl tert-Butyl Ether | ND | 1.0 | ND | 0.28 | |
| 108-05-4 | Vinyl Acetate | ND | 1.0 | ND | 0.28 | |
| 78-93-3 | 2-Butanone (MEK) | ND | 1.0 | ND | 0.34 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | ND | 0.25 | |
| 67-66-3 | Chloroform | ND | 1.0 | ND | 0.20 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ND | 0.25 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ND | 0.18 | |
| 71-43-2 | Benzene | ND | 1.0 | ND | 0.31 | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.0 | ND | 0.16 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ND | 0.22 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
* = The %RSD for the initial calibration exceeded client specified requirements.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Method Blank**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070620-MB

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ND | 0.15 | |
| 79-01-6 | Trichloroethene | ND | 1.0 | ND | 0.19 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ND | 0.22 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.0 | ND | 0.24 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ND | 0.22 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ND | 0.18 | |
| 108-88-3 | Toluene | ND | 1.0 | ND | 0.27 | |
| 591-78-6 | 2-Hexanone | ND | 1.0 | ND | 0.24 | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ND | 0.12 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ND | 0.13 | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | ND | 0.15 | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ND | 0.22 | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ND | 0.23 | |
| 179601-23-1 | *m,p* -Xylenes | ND | 1.0 | ND | 0.23 | |
| 75-25-2 | Bromoform | ND | 1.0 | ND | 0.097 | |
| 100-42-5 | Styrene | ND | 1.0 | ND | 0.23 | |
| 95-47-6 | o-Xylene | ND | 1.0 | ND | 0.23 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ND | 0.15 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.0 | ND | 0.17 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | ND | 0.17 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | ND | 0.17 | |

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715

## Surrogate Spike Recovery Results

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin/Chaney Humphrey
Sampling Media: Summa Canister(s)
Test Notes:

Date Collected: 6/9 - 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/19 - 6/20/07

| Client Sample ID | CAS Sample ID | 1,2-Dichloroethane-d4 | | Toluene-d8 | | Bromofluorobenzene | | Data Qualifier |
|---|---|---|---|---|---|---|---|---|
| | | % Recovered | Acceptance Limits | % Recovered | Acceptance Limits | % Recovered | Acceptance Limits | |
| Method Blank | P070619-MB | **94** | 80-120 | **100** | 80-120 | **104** | 80-120 | |
| Method Blank | P070620-MB | **86** | 80-120 | **101** | 80-120 | **108** | 80-120 | |
| Lab Control Sample | P070619-LCS | **99** | 80-120 | **98** | 80-120 | **106** | 80-120 | |
| Lab Control Sample | P070620-LCS | **92** | 80-120 | **101** | 80-120 | **104** | 80-120 | |
| Duplicate Lab Control Sample | P070619-DLCS | **99** | 80-120 | **98** | 80-120 | **106** | 80-120 | |
| Duplicate Lab Control Sample | P070620-DLCS | **92** | 80-120 | **102** | 80-120 | **105** | 80-120 | |
| WDI-IBM-03-6-9-07 | P2701715-001 | **93** | 80-120 | **97** | 80-120 | **106** | 80-120 | |
| WDI-IBM-22-6-9-07 | P2701715-002 | **82** | 80-120 | **103** | 80-120 | **109** | 80-120 | |
| WDI-IBM-24B-6-9-07 | P2701715-003 | **81** | 80-120 | **102** | 80-120 | **109** | 80-120 | |
| WDI-IBM-24B-6-9-07-SC | P2701715-004 | **81** | 80-120 | **102** | 80-120 | **109** | 80-120 | |
| WDI-IBM-41-6-10-07 | P2701715-005 | **99** | 80-120 | **99** | 80-120 | **103** | 80-120 | |
| WDI-IBM-41-6-10-07 | P2701715-005DUP | **98** | 80-120 | **100** | 80-120 | **104** | 80-120 | |
| WDI-IBM-50-6-10-07 | P2701715-006 | **94** | 80-120 | **98** | 80-120 | **106** | 80-120 | |
| WDI-IBM-49-6-10-07 | P2701715-007 | **94** | 80-120 | **98** | 80-120 | **107** | 80-120 | |
| WDI-IBM-24-6-10-07 | P2701715-008 | **87** | 80-120 | **101** | 80-120 | **104** | 80-120 | |
| WDI-IBM-03B-6-10-07 | P2701715-009 | **88** | 80-120 | **101** | 80-120 | **105** | 80-120 | |
| WDI-IBM-03B-6-10-07 | P2701715-009DUP | **85** | 80-120 | **101** | 80-120 | **107** | 80-120 | |
| WDI-IBM-28-6-10-07 | P2701715-010 | **83** | 80-120 | **101** | 80-120 | **108** | 80-120 | |

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Duplicate Lab Control Sample**
**Client Project ID :** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070619-LCS, P070619-DLCS

## Laboratory Control Sample/Duplicate Laboratory Control Sample Summary

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/19/07
Volume(s) Analyzed: NA

| Compound | Spike Amt LCS/DLCS ng | Result LCS ng | Result DLCS ng | % Recovery LCS | % Recovery DLCS | Acceptance Limits | RPD | RPD Limit % | Data Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 24.3 | 22.2 | 22.1 | **91** | **91** | 65-135 | **0** | 35 | |
| Vinyl Chloride | 24.8 | 23.5 | 23.6 | **95** | **95** | 65-135 | **0** | 35 | |
| Bromomethane | 25.0 | 24.4 | 24.8 | **98** | **99** | 65-135 | **1** | 35 | |
| Chloroethane | 25.0 | 23.7 | 24.3 | **95** | **97** | 65-135 | **2** | 35 | |
| Acetone | 26.5 | 23.2 | 23.4 | **88** | **88** | 65-135 | **0** | 35 | |
| Trichlorofluoromethane | 24.3 | 24.8 | 25.2 | **102** | **104** | 65-135 | **2** | 35 | |
| 1,1-Dichloroethene | 27.3 | 27.2 | 27.0 | **100** | **99** | 65-135 | **1** | 35 | |
| Methylene chloride | 26.8 | 25.8 | 25.8 | **96** | **96** | 65-135 | **0** | 35 | |
| Trichlorotrifluoroethane | 27.0 | 27.6 | 27.1 | **102** | **100** | 65-135 | **2** | 35 | |
| Carbon Disulfide | 25.0 | 23.8 | 23.8 | **95** | **95** | 65-135 | **0** | 35 | |
| trans-1,2-Dichloroethene | 26.3 | 26.7 | 26.4 | **102** | **100** | 65-135 | **2** | 35 | |
| 1,1-Dichloroethane | 26.3 | 25.9 | 26.3 | **98** | **100** | 65-135 | **2** | 35 | |
| Methyl tert-Butyl Ether | 26.3 | 26.6 | 26.3 | **101** | **100** | 65-135 | **1** | 35 | |
| Vinyl Acetate | 24.3 | 24.4 | 24.8 | **100** | **102** | 65-135 | **2** | 35 | |
| 2-Butanone (MEK) | 26.8 | 25.8 | 25.1 | **96** | **94** | 65-135 | **2** | 35 | |
| cis-1,2-Dichloroethene | 26.5 | 26.3 | 26.2 | **99** | **99** | 65-135 | **0** | 35 | |
| Chloroform | 30.0 | 28.8 | 28.9 | **96** | **96** | 65-135 | **0** | 35 | |
| 1,2-Dichloroethane | 26.0 | 27.1 | 26.6 | **104** | **102** | 65-135 | **2** | 35 | |
| 1,1,1-Trichloroethane | 26.3 | 27.0 | 26.6 | **103** | **101** | 65-135 | **2** | 35 | |
| Benzene | 26.3 | 24.9 | 25.0 | **95** | **95** | 65-135 | **0** | 35 | |
| Carbon Tetrachloride | 25.8 | 27.4 | 26.6 | **106** | **103** | 65-135 | **3** | 35 | |
| 1,2-Dichloropropane | 26.0 | 25.1 | 25.3 | **97** | **97** | 65-135 | **0** | 35 | |

Verified By: Rec Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Duplicate Lab Control Sample**
**Client Project ID :** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070619-LCS, P070619-DLCS

## Laboratory Control Sample/Duplicate Laboratory Control Sample Summary

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/19/07
Volume(s) Analyzed: NA

| Compound | Spike Amt LCS/DLCS ng | Result LCS ng | Result DLCS ng | % Recovery LCS | % Recovery DLCS | Acceptance Limits | RPD | RPD Limit % | Data Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | 27.5 | 28.0 | 27.8 | **102** | **101** | 65-135 | **1** | 35 | |
| Trichloroethene | 27.3 | 27.9 | 27.6 | **102** | **101** | 65-135 | **1** | 35 | |
| cis-1,3-Dichloropropene | 26.0 | 25.2 | 24.9 | **97** | **96** | 65-135 | **1** | 35 | |
| 4-Methyl-2-pentanone | 26.5 | 26.3 | 26.4 | **99** | **100** | 65-135 | **1** | 35 | |
| trans-1,3-Dichloropropene | 27.8 | 28.5 | 28.3 | **103** | **102** | 65-135 | **1** | 35 | |
| 1,1,2-Trichloroethane | 25.8 | 26.1 | 26.0 | **101** | **101** | 65-135 | **0** | 35 | |
| Toluene | 26.0 | 24.9 | 24.7 | **96** | **95** | 65-135 | **1** | 35 | |
| 2-Hexanone | 26.0 | 24.5 | 24.4 | **94** | **94** | 65-135 | **0** | 35 | |
| Dibromochloromethane | 26.5 | 27.8 | 27.3 | **105** | **103** | 65-135 | **2** | 35 | |
| 1,2-Dibromoethane | 26.0 | 26.1 | 25.9 | **100** | **100** | 65-135 | **0** | 35 | |
| Tetrachloroethene | 25.8 | 26.1 | 25.4 | **101** | **98** | 65-135 | **3** | 35 | |
| Chlorobenzene | 26.0 | 25.5 | 25.3 | **98** | **97** | 65-135 | **1** | 35 | |
| Ethylbenzene | 25.8 | 24.9 | 24.8 | **97** | **96** | 65-135 | **1** | 35 | |
| m,p-Xylenes | 61.5 | 60.4 | 59.8 | **98** | **97** | 65-135 | **1** | 35 | |
| Bromoform | 31.3 | 32.0 | 31.4 | **102** | **100** | 65-135 | **2** | 35 | |
| Styrene | 25.8 | 25.7 | 25.4 | **100** | **98** | 65-135 | **2** | 35 | |
| o-Xylene | 29.0 | 28.4 | 28.0 | **98** | **97** | 65-135 | **1** | 35 | |
| 1,1,2,2-Tetrachloroethane | 29.3 | 28.6 | 28.5 | **98** | **97** | 65-135 | **1** | 35 | |
| 1,3-Dichlorobenzene | 25.3 | 25.6 | 25.3 | **101** | **100** | 65-135 | **1** | 35 | |
| 1,4-Dichlorobenzene | 26.0 | 26.4 | 26.1 | **102** | **100** | 65-135 | **2** | 35 | |
| 1,2-Dichlorobenzene | 25.5 | 26.0 | 25.7 | **102** | **101** | 65-135 | **1** | 35 | |

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Duplicate Lab Control Sample**
**Client Project ID :** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070620-LCS, P070620-DLCS

## Laboratory Control Sample/Duplicate Laboratory Control Sample Summary

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/20/07
Volume(s) Analyzed: NA

| Compound | Spike Amt LCS/DLCS ng | Result LCS ng | Result DLCS ng | % Recovery LCS | % Recovery DLCS | Acceptance Limits | RPD | RPD Limit % | Data Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 24.3 | 22.8 | 22.7 | **94** | **93** | 65-135 | **1** | 35 | |
| Vinyl Chloride | 24.8 | 25.0 | 25.2 | **101** | **102** | 65-135 | **1** | 35 | |
| Bromomethane | 25.0 | 25.7 | 26.1 | **103** | **104** | 65-135 | **1** | 35 | |
| Chloroethane | 25.0 | 25.9 | 26.0 | **104** | **104** | 65-135 | **0** | 35 | |
| Acetone | 26.5 | 20.0 | 20.6 | **75** | **78** | 65-135 | **4** | 35 | |
| Trichlorofluoromethane | 24.3 | 26.5 | 26.9 | **109** | **111** | 65-135 | **2** | 35 | |
| 1,1-Dichloroethene | 27.3 | 28.9 | 29.6 | **106** | **108** | 65-135 | **2** | 35 | |
| Methylene chloride | 26.8 | 26.5 | 26.9 | **99** | **100** | 65-135 | **1** | 35 | |
| Trichlorotrifluoroethane | 27.0 | 29.5 | 30.4 | **109** | **113** | 65-135 | **4** | 35 | |
| Carbon Disulfide | 25.0 | 23.8 | 24.1 | **95** | **96** | 65-135 | **1** | 35 | |
| trans-1,2-Dichloroethene | 26.3 | 27.1 | 27.4 | **103** | **104** | 65-135 | **1** | 35 | |
| 1,1-Dichloroethane | 26.3 | 27.1 | 27.3 | **103** | **104** | 65-135 | **1** | 35 | |
| Methyl tert-Butyl Ether | 26.3 | 27.5 | 27.9 | **105** | **106** | 65-135 | **0.9** | 35 | |
| Vinyl Acetate | 24.3 | 24.1 | 24.6 | **99** | **101** | 65-135 | **2** | 35 | |
| 2-Butanone (MEK) | 26.8 | 24.9 | 25.5 | **93** | **95** | 65-135 | **2** | 35 | |
| cis-1,2-Dichloroethene | 26.5 | 27.1 | 27.5 | **102** | **104** | 65-135 | **2** | 35 | |
| Chloroform | 30.0 | 30.4 | 31.0 | **101** | **103** | 65-135 | **2** | 35 | |
| 1,2-Dichloroethane | 26.0 | 26.1 | 26.3 | **100** | **101** | 65-135 | **1** | 35 | |
| 1,1,1-Trichloroethane | 26.3 | 28.3 | 28.3 | **108** | **108** | 65-135 | **0** | 35 | |
| Benzene | 26.3 | 27.1 | 27.7 | **103** | **105** | 65-135 | **2** | 35 | |
| Carbon Tetrachloride | 25.8 | 28.8 | 29.0 | **112** | **112** | 65-135 | **0** | 35 | |
| 1,2-Dichloropropane | 26.0 | 27.4 | 27.9 | **105** | **107** | 65-135 | **2** | 35 | |

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Duplicate Lab Control Sample**
**Client Project ID :** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070620-LCS, P070620-DLCS

## Laboratory Control Sample/Duplicate Laboratory Control Sample Summary

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/20/07
Volume(s) Analyzed: NA

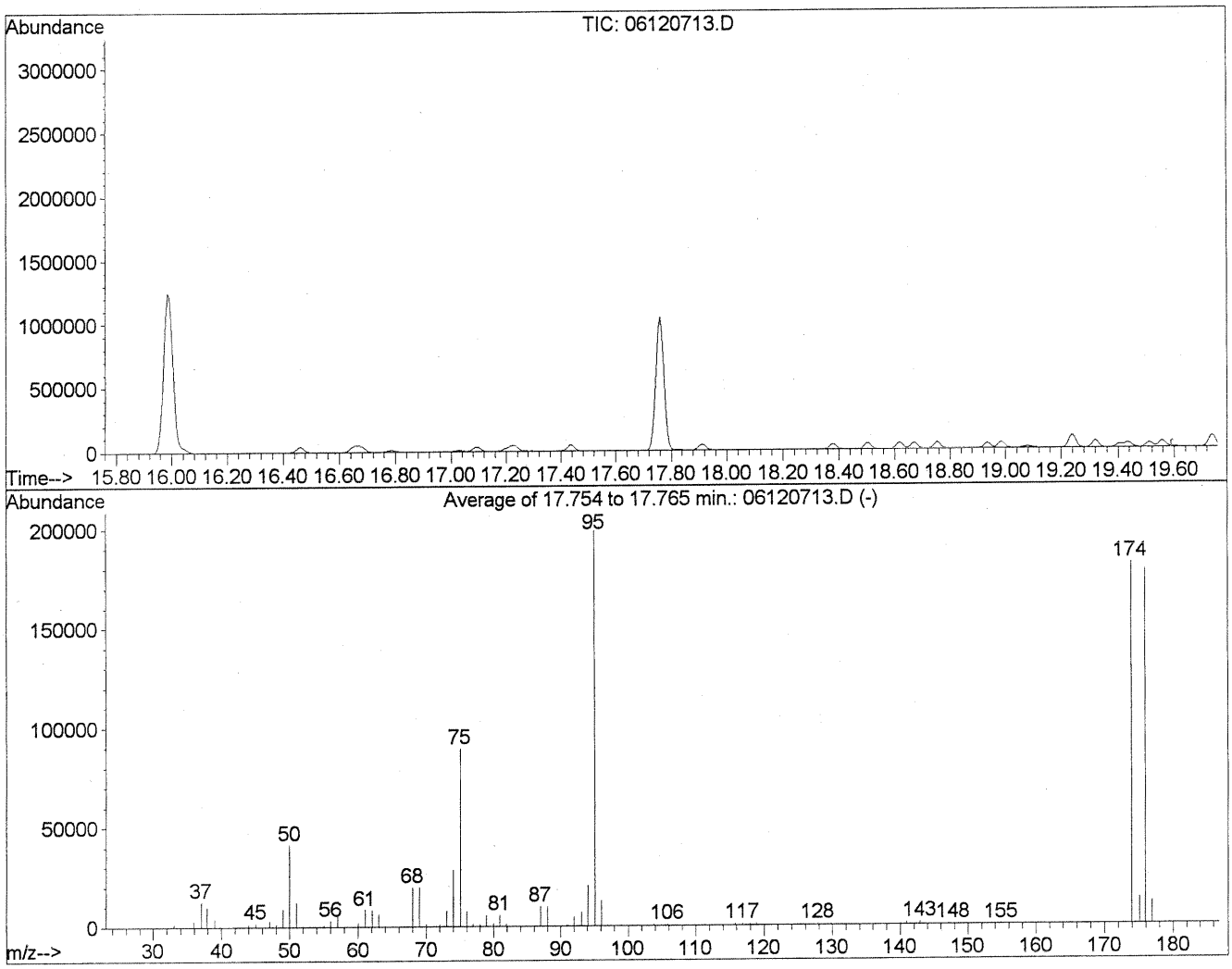
| Compound | Spike Amt LCS/DLCS ng | Result LCS ng | Result DLCS ng | % Recovery LCS | % Recovery DLCS | Acceptance Limits | RPD | RPD Limit % | Data Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | 27.5 | 29.0 | 29.4 | **105** | **107** | 65-135 | **2** | 35 | |
| Trichloroethene | 27.3 | 29.7 | 30.6 | **109** | **112** | 65-135 | **3** | 35 | |
| cis-1,3-Dichloropropene | 26.0 | 26.3 | 26.7 | **101** | **103** | 65-135 | **2** | 35 | |
| 4-Methyl-2-pentanone | 26.5 | 26.6 | 27.1 | **100** | **102** | 65-135 | **2** | 35 | |
| trans-1,3-Dichloropropene | 27.8 | 29.8 | 30.2 | **107** | **109** | 65-135 | **2** | 35 | |
| 1,1,2-Trichloroethane | 25.8 | 28.0 | 28.7 | **109** | **111** | 65-135 | **2** | 35 | |
| Toluene | 26.0 | 28.1 | 28.9 | **108** | **111** | 65-135 | **3** | 35 | |
| 2-Hexanone | 26.0 | 21.7 | 21.9 | **83** | **84** | 65-135 | **1** | 35 | |
| Dibromochloromethane | 26.5 | 30.1 | 31.1 | **114** | **117** | 65-135 | **3** | 35 | |
| 1,2-Dibromoethane | 26.0 | 28.4 | 29.2 | **109** | **112** | 65-135 | **3** | 35 | |
| Tetrachloroethene | 25.8 | 29.0 | 30.0 | **112** | **116** | 65-135 | **4** | 35 | |
| Chlorobenzene | 26.0 | 28.8 | 29.6 | **111** | **114** | 65-135 | **3** | 35 | |
| Ethylbenzene | 25.8 | 28.0 | 28.7 | **109** | **111** | 65-135 | **2** | 35 | |
| m,p-Xylenes | 61.5 | 67.7 | 69.6 | **110** | **113** | 65-135 | **3** | 35 | |
| Bromoform | 31.3 | 35.8 | 36.6 | **114** | **117** | 65-135 | **3** | 35 | |
| Styrene | 25.8 | 29.2 | 30.0 | **113** | **116** | 65-135 | **3** | 35 | |
| o-Xylene | 29.0 | 31.8 | 32.7 | **110** | **113** | 65-135 | **3** | 35 | |
| 1,1,2,2-Tetrachloroethane | 29.3 | 32.0 | 32.7 | **109** | **112** | 65-135 | **3** | 35 | |
| 1,3-Dichlorobenzene | 25.3 | 28.4 | 29.1 | **112** | **115** | 65-135 | **3** | 35 | |
| 1,4-Dichlorobenzene | 26.0 | 29.4 | 30.3 | **113** | **117** | 65-135 | **3** | 35 | |
| 1,2-Dichlorobenzene | 25.5 | 28.7 | 29.3 | **113** | **115** | 65-135 | **2** | 35 | |

Verified By: Rer Date: 6/26/07

BFB

Data File : J:\MS02\DATA\2007_06\12\06120713.D
Acq On : 12 Jun 2007 19:26
Sample : 0.5ng TO-15 ICAL Std
Misc : S15-05250705/S15-05250703
MS Integration Params: rteint.p
Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD

Vial: 1
Operator: CJP/ST
Inst : MS 02
Multiplr: 1.00




AutoFind: Scans 2491, 2492, 2493; Background Corrected with Scan 2481

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 20.8 | 41312 | PASS |
| 75 | 95 | 30 | 66 | 44.9 | 89307 | PASS |
| 96 | 95 | 5 | 9 | 6.5 | 12977 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 91.2 | 181525 | PASS |
| 175 | 174 | 4 | 9 | 7.4 | 13362 | PASS |
| 176 | 174 | 93 | 101 | 98.1 | 178027 | PASS |
| 177 | 176 | 5 | 9 | 6.4 | 11399 | PASS |

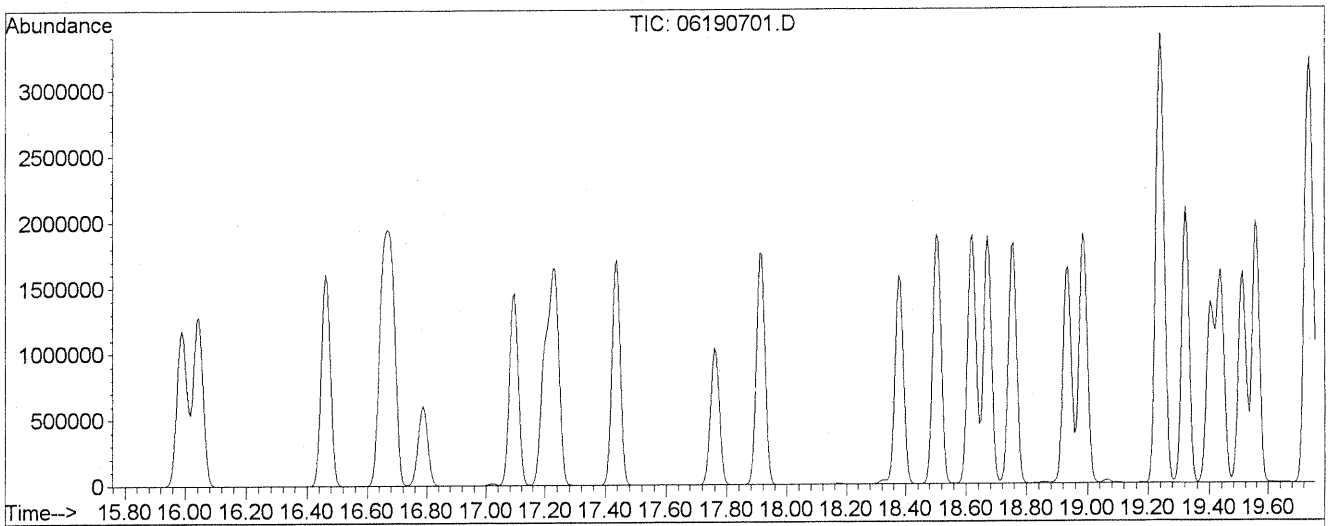
06120713.D R2061207.M Wed Jun 13 11:16:20 2007

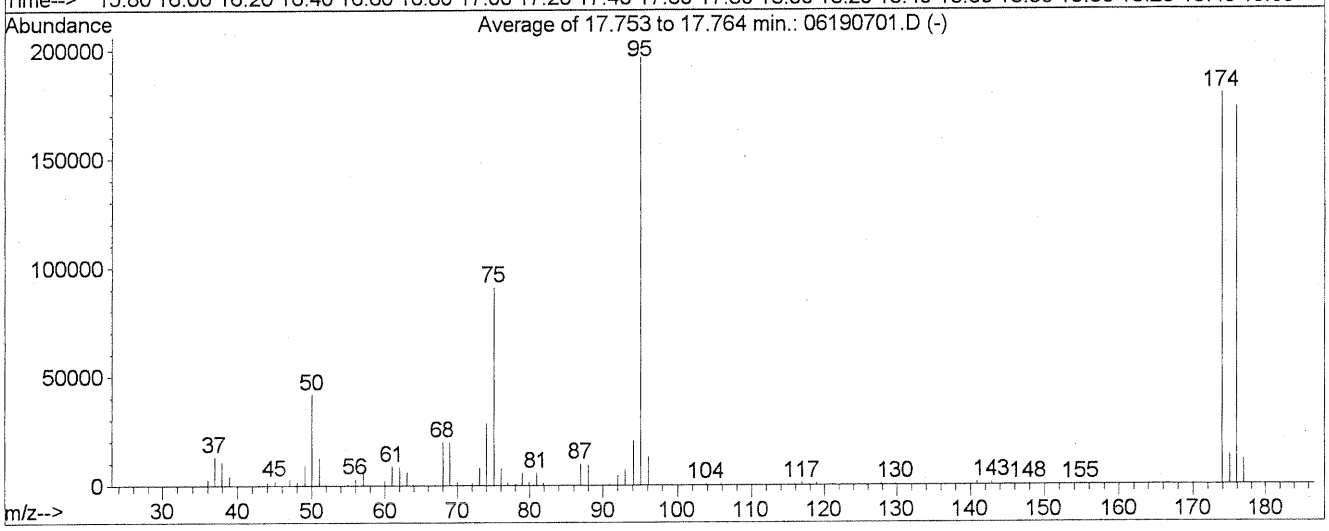
8 6/13/07 Bos/Bs7

BFB

Data File : J:\MS02\DATA\2007_06\19\06190701.D
Acq On : 19 Jun 2007 9:41
Sample : 25ng TO-15 CCV Std
Misc : S15-06180707/S15-05240704
MS Integration Params: rteint.p
Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00




AutoFind: Scans 2492, 2493, 2494; Background Corrected with Scan 2482

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 21.3 | 41805 | PASS |
| 75 | 95 | 30 | 66 | 46.3 | 90949 | PASS |
| 96 | 95 | 5 | 9 | 6.6 | 13038 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 91.4 | 179627 | PASS |
| 175 | 174 | 4 | 9 | 7.3 | 13186 | PASS |
| 176 | 174 | 93 | 101 | 96.4 | 173184 | PASS |
| 177 | 176 | 5 | 9 | 6.6 | 11369 | PASS |



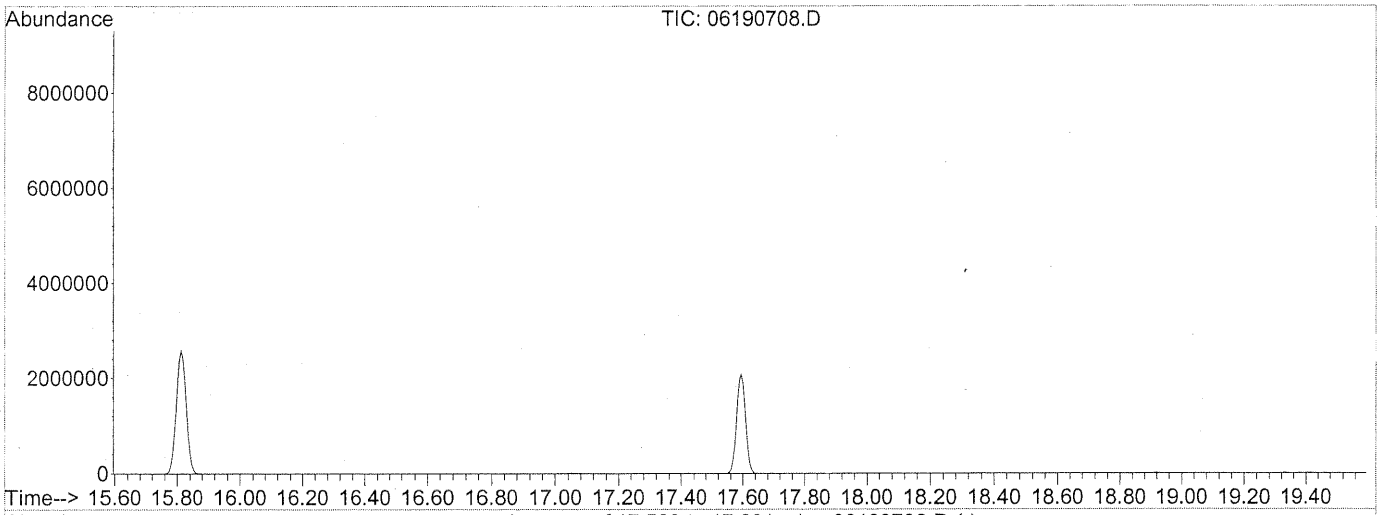
06190701.D R2061207.M Tue Jun 19 11:11:31 2007

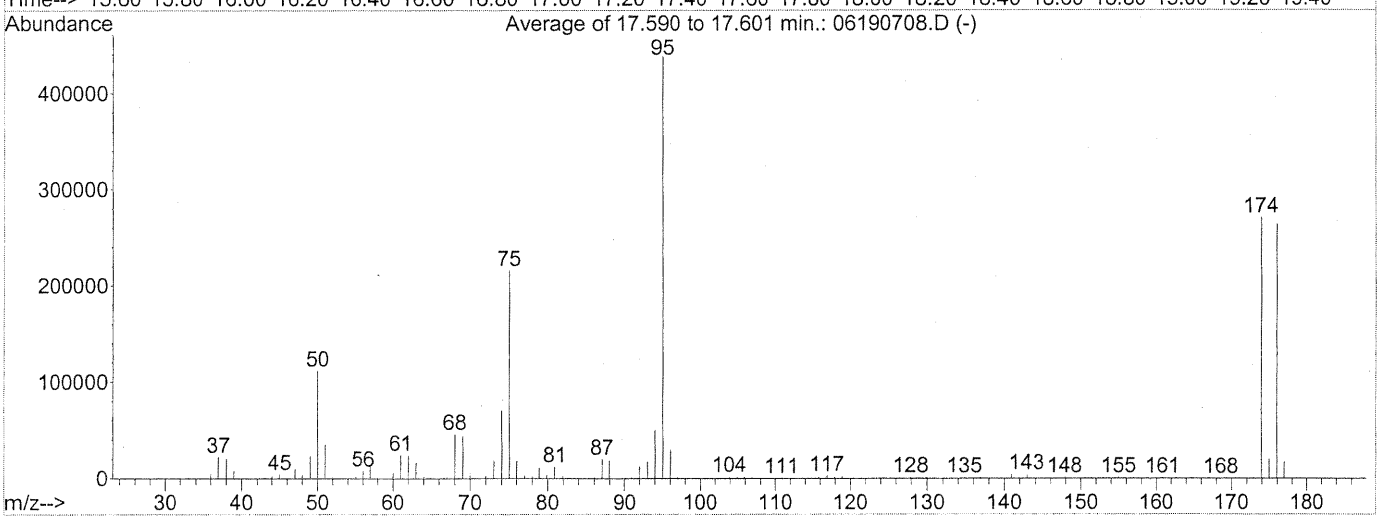
8 6/19/07
6/19/07

Data Path : J:\MS08\Data\2007_06\19\
Data File : 06190708.D
Acq On : 19 Jun 2007 19:06
Operator : SC
Sample : 25ng BFB STD
Misc : S15-06190701
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS08\METHODS\R8061907.M
Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
Last Update : Fri Jun 08 09:59:48 2007




AutoFind: Scans 2499, 2500, 2501; Background Corrected with Scan 2489

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 25.4 | 111370 | PASS |
| 75 | 95 | 30 | 66 | 49.2 | 215744 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 438122 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 29237 | PASS |
| 173 | 174 | 0.00 | 2 | 0.3 | 679 | PASS |
| 174 | 95 | 50 | 120 | 61.8 | 270634 | PASS |
| 175 | 174 | 4 | 9 | 7.2 | 19493 | PASS |
| 176 | 174 | 93 | 101 | 97.5 | 263850 | PASS |
| 177 | 176 | 5 | 9 | 6.4 | 16979 | PASS |

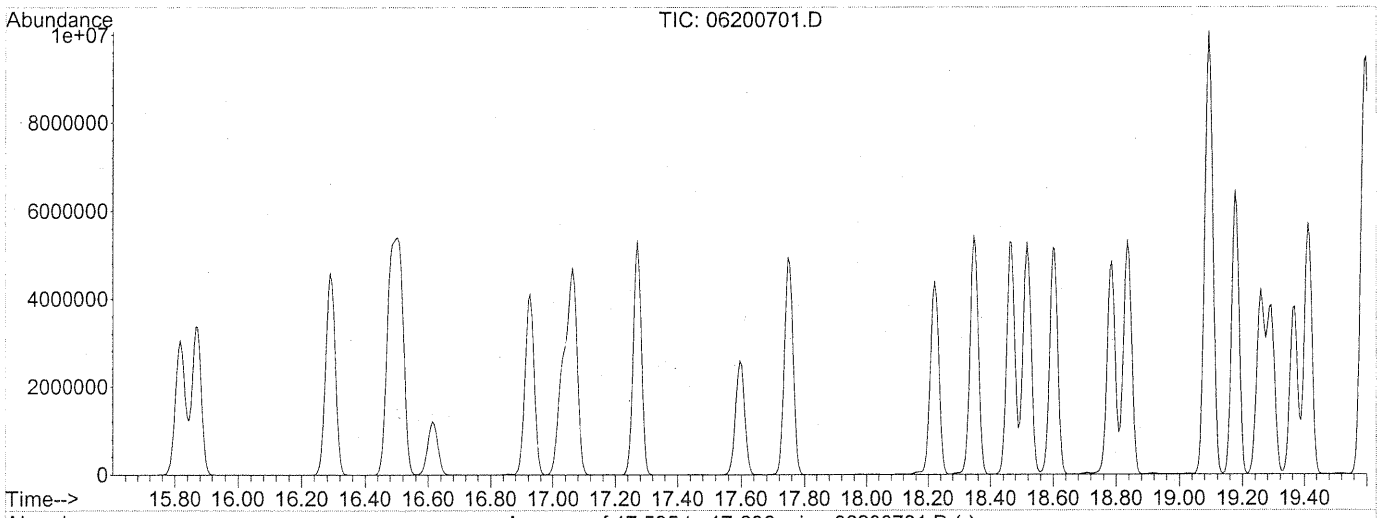
LM 6/20/07

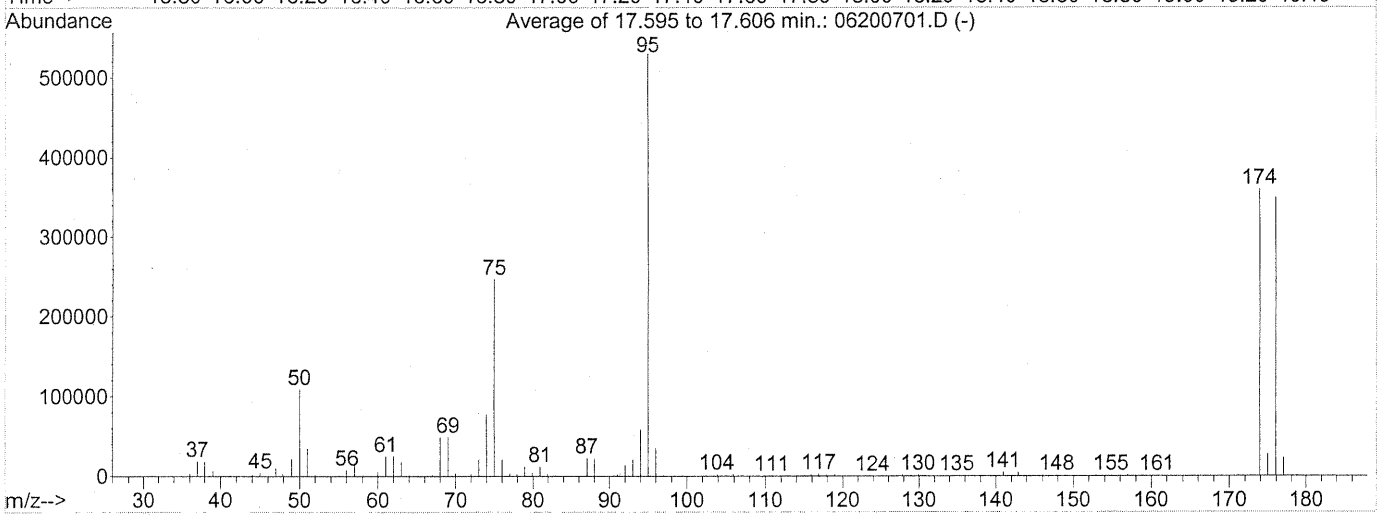
60

Data Path : J:\MS08\Data\2007_06\20\
Data File : 06200701.D
Acq On : 20 Jun 2007 10:30
Operator : AB
Sample : 25ng TO-15 CCV STD
Misc : S15-06190701/06060701
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS08\METHODS\R8061907.M
Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
Last Update : Wed Jun 20 09:06:46 2007




AutoFind: Scans 2500, 2501, 2502; Background Corrected with Scan 2488

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 20.5 | 108341 | PASS |
| 75 | 95 | 30 | 66 | 46.6 | 246592 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 529728 | PASS |
| 96 | 95 | 5 | 9 | 6.6 | 34800 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 67.8 | 358954 | PASS |
| 175 | 174 | 4 | 9 | 7.6 | 27197 | PASS |
| 176 | 174 | 93 | 101 | 97.1 | 348544 | PASS |
| 177 | 176 | 5 | 9 | 6.4 | 22392 | PASS |

JG 6/20/07

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Response Factor Report MS 02

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:36:26 2007
Response via : Initial Calibration

Calibration Files
0.5 =06120713.D 1 =06120714.D 5 =06120715.D
25 =06120716.D 50 =06120717.D 100 =06120718.D

| | | Compound | 0.5 | 1 | 5 | 25 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | IR | Bromochloromethane (I | ----------ISTD---------- | | | | | | | |
| 2) | T | Propene | 1.783 | 1.584 | 1.441 | 1.409 | 1.406 | 1.425 | 1.508 | 9.97 |
| 3) | T | Dichlorodifluoromet | 2.907 | 2.668 | 2.489 | 2.489 | 2.458 | 2.484 | 2.583 | 6.82 |
| 4) | T | Chloromethane | 2.501 | 2.688 | 2.483 | 2.477 | 2.292 | 2.353 | 2.466 | 5.55 |
| 5) | T | Freon 114 | 1.061 | 0.914 | 0.828 | 0.854 | 0.733 | 0.703 | 0.849 | 15.32 |
| 6) | T | Vinyl Chloride | 2.000 | 1.631 | 1.468 | 1.789 | 1.635 | 1.532 | 1.676 | 11.50 |
| 7) | T | 1,3-Butadiene | 1.529 | 1.449 | 1.403 | 1.423 | 1.452 | 1.469 | 1.454 | 2.99 |
| 8) | T | Bromomethane | 1.443 | 1.328 | 1.266 | 1.327 | 1.367 | 1.427 | 1.359 | 4.92 |
| 9) | T | Chloroethane | 1.223 | 1.152 | 1.115 | 1.096 | 1.110 | 1.151 | 1.141 | 4.03 |
| 10) | T | Ethanol | 0.820 | 0.835 | 0.811 | 0.810 | 0.854 | 0.970 | 0.850 | 7.18 |
| 11) | T | Acetonitrile | 2.974 | 2.700 | 2.471 | 2.817 | 2.955 | 3.213 | 2.855 | 8.93 |
| 12) | T | Acrolein | 0.863 | 0.839 | 0.786 | 0.816 | 0.840 | 0.890 | 0.839 | 4.31 |
| 13) | T | Acetone | | 1.737 | 1.422 | 1.039 | 1.101 | 1.204 | 1.301 | 21.85 |
| 14) | T | Trichlorofluorometh | 1.757 | 1.644 | 1.612 | 1.666 | 1.694 | 1.740 | 1.686 | 3.32 |
| 15) | T | Isopropanol | 4.676 | 4.182 | 2.886 | 3.793 | 3.417 | 2.992 | 3.658 | 19.05 |
| 16) | T | Acrylonitrile | 1.618 | 1.636 | 1.654 | 1.839 | 1.886 | 2.005 | 1.773 | 9.02 |
| 17) | T | 1,1-Dichloroethene | 1.277 | 1.196 | 1.159 | 1.163 | 1.153 | 1.173 | 1.187 | 3.94 |
| 18) | T | tert-Butanol | 4.098 | 3.749 | 3.316 | 3.253 | 3.211 | 3.161 | 3.465 | 10.84 |
| 19) | T | Methylene Chloride | 1.525 | 1.425 | 1.345 | 1.352 | 1.347 | 1.382 | 1.396 | 5.01 |
| 20) | T | Allyl Chloride | 1.745 | 1.679 | 1.704 | 1.890 | 1.957 | 2.103 | 1.846 | 9.01 |
| 21) | T | Trichlorotrifluoroe | 1.110 | 1.091 | 1.034 | 1.045 | 1.032 | 1.043 | 1.059 | 3.12 |
| 22) | T | Carbon Disulfide | 6.732 | 5.743 | 5.069 | 5.128 | 5.093 | 5.236 | 5.500 | 11.89 |
| 23) | T | trans-1,2-Dichloroe | 1.998 | 1.966 | 1.959 | 2.017 | 2.026 | 2.112 | 2.013 | 2.76 |
| 24) | T | 1,1-Dichloroethane | 2.226 | 2.094 | 1.951 | 1.939 | 1.895 | 1.840 | 1.991 | 7.16 |
| 25) | T | Methyl tert-Butyl E | 4.039 | 3.763 | 3.615 | 3.561 | 3.493 | 3.490 | 3.660 | 5.77 |
| 26) | T | Vinyl Acetate | 0.266 | 0.278 | 0.266 | 0.233 | 0.213 | 0.181 | 0.239 | 15.72 |
| 27) | T | 2-Butanone | 0.937 | 0.877 | 0.852 | 0.848 | 0.855 | 0.886 | 0.876 | 3.80 |
| 28) | T | cis-1,2-Dichloroeth | 1.949 | 1.865 | 1.822 | 1.866 | 1.890 | 1.970 | 1.894 | 2.96 |
| 29) | T | Diisopropyl Ether | 0.991 | 0.946 | 0.926 | 0.927 | 0.898 | 0.854 | 0.924 | 4.96 |
| 30) | T | Ethyl Acetate | 0.466 | 0.471 | 0.453 | 0.444 | 0.421 | 0.390 | 0.441 | 6.95 |
| 31) | T | n-Hexane | 2.336 | 2.172 | 2.079 | 2.051 | 2.003 | 1.968 | 2.101 | 6.41 |
| 32) | T | Chloroform | 1.973 | 1.824 | 1.636 | 1.706 | 1.691 | 1.732 | 1.760 | 6.86 |
| 33) | S | 1,2-Dichloroethane- | 1.427 | 1.432 | 1.360 | 1.451 | 1.502 | 1.615 | 1.465 | 5.91 |
| 34) | T | Tetrahydrofuran | 1.005 | 0.876 | 0.813 | 0.803 | 0.764 | 0.652 | 0.819 | 14.35 |
| 35) | T | Ethyl tert-Butyl Et | 1.474 | 1.410 | 1.364 | 1.389 | 1.338 | 1.328 | 1.384 | 3.89 |
| 36) | T | 1,2-Dichloroethane | 1.880 | 1.801 | 1.715 | 1.797 | 1.775 | 1.806 | 1.796 | 2.97 |
| 37) | IR | 1,4-Difluorobenzene ( | ----------ISTD---------- | | | | | | | |
| 38) | T | 1,1,1-Trichloroetha | 0.514 | 0.493 | 0.472 | 0.483 | 0.479 | 0.493 | 0.489 | 3.04 |
| 39) | T | Isopropyl Acetate | 0.267 | 0.267 | 0.252 | 0.253 | 0.246 | 0.245 | 0.255 | 3.82 |
| 40) | T | 1-Butanol | | 0.359 | 0.238 | 0.285 | 0.281 | 0.278 | 0.288 | 15.13 |
| 41) | T | Benzene | 1.564 | 1.385 | 1.266 | 1.243 | 1.231 | 1.225 | 1.319 | 10.14 |
| 42) | T | Carbon Tetrachlorid | 0.292 | 0.299 | 0.330 | 0.379 | 0.383 | 0.393 | 0.346 | 12.97 |

(#) = Out of Range

Response Factor Report MS 02

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:36:26 2007
Response via : Initial Calibration

Calibration Files
0.5 =06120713.D 1 =06120714.D 5 =06120715.D
25 =06120716.D 50 =06120717.D 100 =06120718.D

| | | Compound | 0.5 | 1 | 5 | 25 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 43) | T | Cyclohexane | 0.557 | 0.497 | 0.461 | 0.459 | 0.446 | 0.439 | 0.476 | 9.32 |
| 44) | T | tert-Amyl Methyl Et | 1.069 | 1.005 | 0.965 | 0.986 | 0.979 | 0.979 | 0.997 | 3.75 |
| 45) | T | 1,2-Dichloropropane | 0.387 | 0.375 | 0.353 | 0.355 | 0.352 | 0.357 | 0.363 | 3.95 |
| 46) | T | Bromodichloromethan | 0.441 | 0.427 | 0.424 | 0.430 | 0.425 | 0.415 | 0.427 | 2.02 |
| 47) | T | Trichloroethene | 0.399 | 0.381 | 0.364 | 0.360 | 0.346 | 0.329 | 0.363 | 6.83 |
| 48) | T | 1,4-Dioxane | 0.278 | 0.258 | 0.249 | 0.249 | 0.241 | 0.230 | 0.251 | 6.56 |
| 49) | T | Isooctane | 1.642 | 1.536 | 1.433 | 1.414 | 1.339 | 1.258 | 1.437 | 9.54 |
| 50) | T | Methyl Methacrylate | 0.145 | 0.147 | 0.153 | 0.158 | 0.156 | 0.157 | 0.153 | 3.69 |
| 51) | T | n-Heptane | 0.382 | 0.355 | 0.339 | 0.333 | 0.321 | 0.310 | 0.340 | 7.55 |
| 52) | T | cis-1,3-Dichloropro | 0.577 | 0.568 | 0.556 | 0.557 | 0.536 | 0.512 | 0.551 | 4.33 |
| 53) | T | 4-Methyl-2-pentanon | 0.378 | 0.360 | 0.350 | 0.329 | 0.313 | 0.293 | 0.337 | 9.31 |
| 54) | T | trans-1,3-Dichlorop | 0.511 | 0.488 | 0.489 | 0.515 | 0.515 | 0.528 | 0.508 | 3.19 |
| 55) | T | 1,1,2-Trichloroetha | 0.357 | 0.341 | 0.333 | 0.334 | 0.330 | 0.328 | 0.337 | 3.12 |
| 56) | I | Chlorobenzene-d5 (IS3 | ----------ISTD---------- | | | | | | | |
| 57) | S | Toluene-d8 (SS2) | 2.381 | 2.377 | 2.307 | 2.305 | 2.295 | 2.297 | 2.327 | 1.74 |
| 58) | T | Toluene | 3.547 | 3.192 | 2.885 | 2.710 | 2.482 | 2.180 | 2.833 | 17.34 |
| 59) | T | 2-Hexanone | 2.652 | 2.441 | 2.286 | 2.115 | 1.976 | 1.829 | 2.217 | 13.73 |
| 60) | T | Dibromochloromethan | 0.949 | 0.925 | 0.890 | 0.907 | 0.851 | 0.794 | 0.886 | 6.32 |
| 61) | T | 1,2-Dibromoethane | 1.041 | 0.996 | 0.948 | 0.936 | 0.880 | 0.817 | 0.936 | 8.56 |
| 62) | T | Butyl Acetate | 2.863 | 2.615 | 2.447 | 2.333 | 2.170 | 2.010 | 2.406 | 12.77 |
| 63) | T | n-Octane | 0.922 | 0.791 | 0.700 | 0.661 | 0.595 | 0.513 | 0.697 | 20.80 |
| 64) | T | Tetrachloroethene | 1.042 | 0.987 | 0.901 | 0.861 | 0.787 | 0.703 | 0.880 | 14.26 |
| 65) | T | Chlorobenzene | 2.361 | 2.174 | 1.973 | 1.905 | 1.740 | 1.548 | 1.950 | 15.00 |
| 66) | T | Ethylbenzene | 3.989 | 3.717 | 3.374 | 3.181 | 2.882 | 2.513 | 3.276 | 16.49 |
| 67) | T | m- & p-Xylene | 2.589 | 2.375 | 2.157 | 1.982 | 1.740 | 1.446 | 2.048 | 20.41 |
| 68) | T | Bromoform | 0.689 | 0.662 | 0.666 | 0.676 | 0.633 | 0.578 | 0.651 | 6.15 |
| 69) | T | Styrene | 2.315 | 2.193 | 2.067 | 1.953 | 1.760 | 1.532 | 1.970 | 14.61 |
| 70) | T | o-Xylene | 2.865 | 2.557 | 2.306 | 2.158 | 1.910 | 1.591 | 2.231 | 20.36 |
| 71) | T | n-Nonane | 2.204 | 1.992 | 1.804 | 1.716 | 1.519 | 1.298 | 1.756 | 18.48 |
| 72) | T | 1,1,2,2-Tetrachloro | 1.455 | 1.369 | 1.276 | 1.209 | 1.086 | 0.915 | 1.219 | 16.07 |
| 73) | S | Bromofluorobenzene | 0.792 | 0.790 | 0.806 | 0.805 | 0.791 | 0.787 | 0.795 | 1.01 |
| 74) | T | Cumene | 3.612 | 3.310 | 3.035 | 2.934 | 2.604 | 2.226 | 2.954 | 16.72 |
| 75) | T | alpha-Pinene | 1.902 | 1.816 | 1.680 | 1.606 | 1.435 | 1.223 | 1.610 | 15.54 |
| 76) | T | n-Propylbenzene | 4.702 | 4.367 | 4.030 | 3.849 | 3.399 | 2.858 | 3.868 | 17.20 |
| 77) | T | 3-Ethyltoluene | 3.816 | 3.703 | 3.312 | 3.192 | 2.758 | 2.316 | 3.183 | 17.89 |
| 78) | T | 4-Ethyltoluene | 3.672 | 3.331 | 3.151 | 2.852 | 2.532 | 2.061 | 2.933 | 19.76 |
| 79) | T | 1,3,5-Trimethylbenz | 3.225 | 2.959 | 2.712 | 2.518 | 2.186 | 1.828 | 2.571 | 19.84 |
| 80) | T | alpha-Methylstyrene | 0.851 | 0.822 | 0.796 | 0.744 | 0.657 | 0.573 | 0.740 | 14.41 |
| 81) | T | 2-Ethyltoluene | 3.914 | 3.707 | 3.368 | 3.208 | 2.806 | 2.309 | 3.219 | 18.33 |
| 82) | T | 1,2,4-Trimethylbenz | 3.210 | 2.952 | 2.685 | 2.340 | 1.911 | 1.451 | 2.425 | 27.24 |
| 83) | T | n-Decane | 2.170 | 2.019 | 1.835 | 1.699 | 1.468 | 1.194 | 1.731 | 20.75 |
| 84) | T | Benzyl Chloride | 2.590 | 2.505 | 2.465 | 2.337 | 2.092 | 1.791 | 2.297 | 13.16 |
| 85) | T | 1,3-Dichlorobenzene | 1.996 | 1.876 | 1.742 | 1.626 | 1.434 | 1.175 | 1.641 | 18.31 |

(#) = Out of Range

Response Factor Report MS 02

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:36:26 2007
Response via : Initial Calibration

Calibration Files
0.5 =06120713.D 1 =06120714.D 5 =06120715.D
25 =06120716.D 50 =06120717.D 100 =06120718.D

| | | Compound | 0.5 | 1 | 5 | 25 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 86) | T | 1,4-Dichlorobenzene | 2.004 | 1.873 | 1.718 | 1.618 | 1.414 | 1.176 | 1.634 | 18.55 |
| 87) | T | sec-Butylbenzene | 4.282 | 3.968 | 3.611 | 3.407 | 2.915 | 2.309 | 3.415 | 20.98 |
| 88) | T | p-Isopropyltoluene | 3.512 | 3.294 | 3.008 | 2.696 | 2.179 | 1.596 | 2.714 | 26.55 |
| 89) | T | 1,2,3-Trimethylbenz | 3.016 | 2.796 | 2.536 | 2.324 | 1.906 | 1.440 | 2.336 | 24.98 |
| 90) | T | 1,2-Dichlorobenzene | 1.872 | 1.779 | 1.624 | 1.478 | 1.249 | 0.978 | 1.497 | 22.50 |
| 91) | T | d-Limonene | 1.378 | 1.299 | 1.231 | 1.077 | 0.899 | 0.712 | 1.099 | 23.21 |
| 92) | T | 1,2-Dibromo-3-Chlor | 0.614 | 0.606 | 0.621 | 0.659 | 0.611 | 0.557 | 0.611 | 5.32 |
| 93) | T | n-Undecane | 2.240 | 2.100 | 1.917 | 1.768 | 1.536 | 1.226 | 1.798 | 20.78 |
| 94) | T | 1,2,4-Trichlorobenz | 0.332 | 0.352 | 0.360 | 0.341 | 0.311 | 0.268 | 0.328 | 10.26 |
| 95) | T | Naphthalene | 3.682 | 3.480 | 3.501 | 3.481 | 3.163 | 2.650 | 3.326 | 11.16 |
| 96) | T | n-Dodecane | 1.892 | 1.857 | 1.700 | 1.505 | 1.335 | 1.084 | 1.562 | 20.20 |
| 97) | T | Hexachloro-1,3-buta | 0.738 | 0.724 | 0.668 | 0.630 | 0.581 | 0.502 | 0.641 | 13.98 |

(#) = Out of Range

# Evaluate Continuing Calibration Report

Data Path : J:\MS08\Data\2007_06\20\
Data File : 06200701.D
Acq On : 20 Jun 2007 10:30
Operator : AB
Sample : 25ng TO-15 CCV STD
Misc : S15-06190701/06060701
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 11:04:07 2007
Quant Method : J:\MS08\METHODS\R8061907.M
Quant Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
QLast Update : Wed Jun 20 09:06:46 2007
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | IR | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 136 | 0.01 |
| 2 | T | Propene | 3.575 | 2.365 | 33.8# | 107 | 0.00 |
| 3 | T | Dichlorodifluoromethane | 4.170 | 3.841 | 7.9 | 123 | 0.00 |
| 4 | T | Chloromethane | 4.758 | 4.357 | 8.4 | 111 | 0.00 |
| 5 | T | Freon 114 | 1.340 | 1.381 | -3.1 | 139 | 0.00 |
| 6 | T | Vinyl Chloride | 3.929 | 3.480 | 11.4 | 116 | 0.00 |
| 7 | T | 1,3-Butadiene | 3.086 | 2.805 | 9.1 | 114 | 0.00 |
| 8 | T | Bromomethane | 1.436 | 1.417 | 1.3 | 131 | 0.00 |
| 9 | T | Chloroethane | 1.679 | 1.545 | 8.0 | 122 | 0.00 |
| 10 | T | Ethanol | 2.012 | 1.622 | 19.4 | 104 | 0.01 |
| 11 | T | Acetonitrile | 5.525 | 4.654 | 15.8 | 111 | 0.01 |
| 12 | T | Acrolein | 1.751 | 1.829 | -4.5 | 127 | 0.01 |
| 13 | T | Acetone | 3.156 | 2.253 | 28.6 | 125 | 0.01 |
| 14 | T | Trichlorofluoromethane | 3.344 | 3.346 | -0.1 | 137 | 0.00 |
| 15 | T | Isopropanol | 7.488 | 6.727 | 10.2 | 113 | 0.01 |
| 16 | T | Acrylonitrile | 4.032 | 3.761 | 6.7 | 120 | 0.00 |
| 17 | T | 1,1-Dichloroethene | 1.810 | 1.791 | 1.0 | 133 | 0.00 |
| 18 | T | tert-Butanol | 7.739 | 6.733 | 13.0 | 121 | 0.01 |
| 19 | T | Methylene Chloride | 2.052 | 1.866 | 9.1 | 130 | 0.01 |
| 20 | T | Allyl Chloride | 2.592 | 2.419 | 6.7 | 124 | 0.01 |
| 21 | T | Trichlorotrifluoroethane | 1.197 | 1.235 | -3.2 | 142 | 0.01 |
| 22 | T | Carbon Disulfide | 8.271 | 7.037 | 14.9 | 128 | 0.00 |
| 23 | T | trans-1,2-Dichloroethene | 4.041 | 3.733 | 7.6 | 123 | 0.01 |
| 24 | T | 1,1-Dichloroethane | 4.473 | 4.187 | 6.4 | 123 | 0.00 |
| 25 | T | Methyl tert-Butyl Ether | 5.901 | 5.511 | 6.6 | 124 | 0.00 |
| 26 | T | Vinyl Acetate | 0.365 | 0.397 | -8.8 | 136 | 0.01 |
| 27 | T | 2-Butanone | 1.493 | 1.276 | 14.5 | 125 | 0.01 |
| 28 | T | cis-1,2-Dichloroethene | 3.707 | 3.390 | 8.6 | 121 | 0.00 |
| 29 | T | Diisopropyl Ether | 1.606 | 1.549 | 3.5 | 131 | 0.00 |
| 30 | T | Ethyl Acetate | 1.106 | 0.909 | 17.8 | 121 | 0.00 |
| 31 | T | n-Hexane | 5.388 | 4.784 | 11.2 | 121 | 0.00 |
| 32 | T | Chloroform | 3.087 | 2.953 | 4.3 | 128 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4(SS1) | 2.563 | 2.262 | 11.7 | 118 | 0.01 |
| 34 | T | Tetrahydrofuran | 1.311 | 1.232 | 6.0 | 123 | 0.00 |
| 35 | T | Ethyl tert-Butyl Ether | 2.330 | 2.281 | 2.1 | 129 | 0.00 |
| 36 | T | 1,2-Dichloroethane | 3.498 | 3.084 | 11.8 | 117 | 0.00 |
| 37 | IR | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 134 | 0.00 |
| 38 | T | 1,1,1-Trichloroethane | 0.611 | 0.605 | 1.0 | 128 | 0.00 |
| 39 | T | Isopropyl Acetate | 0.387 | 0.368 | 4.9 | 123 | 0.00 |
| 40 | T | 1-Butanol | 0.525 | 0.523 | 0.4 | 121 | 0.00 |
| 41 | T | Benzene | 1.606 | 1.516 | 5.6 | 126 | 0.00 |
| 42 | T | Carbon Tetrachloride | 0.478 | 0.488 | -2.1 | 132 | 0.00 |
| 43 | T | Cyclohexane | 0.623 | 0.603 | 3.2 | 130 | 0.00 |
| 44 | T | tert-Amyl Methyl Ether | 1.169 | 1.123 | 3.9 | 125 | 0.00 |
| 45 | T | 1,2-Dichloropropane | 0.552 | 0.526 | 4.7 | 123 | 0.00 |
| 46 | T | Bromodichloromethane | 0.526 | 0.516 | 1.9 | 124 | 0.00 |
| 47 | T | Trichloroethene | 0.326 | 0.337 | -3.4 | 137 | 0.00 |
| 48 | T | 1,4-Dioxane | 0.339 | 0.296 | 12.7 | 128 | 0.00 |
| 49 | T | Isooctane | 2.635 | 2.480 | 5.9 | 120 | 0.00 |
| 50 | T | Methyl Methacrylate | 0.146 | 0.154 | -5.5 | 136 | 0.00 |
| 51 | T | n-Heptane | 0.434 | 0.406 | 6.5 | 124 | 0.00 |

6/20/02

Evaluate Continuing Calibration Report

Data Path : J:\MS08\Data\2007_06\20\
Data File : 06200701.D
Acq On : 20 Jun 2007 10:30
Operator : AB
Sample : 25ng TO-15 CCV STD
Misc : S15-06190701/06060701
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 11:04:07 2007
Quant Method : J:\MS08\METHODS\R8061907.M
Quant Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
QLast Update : Wed Jun 20 09:06:46 2007
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | T | cis-1,3-Dichloropropene | 0.673 | 0.646 | 4.0 | 122 | 0.00 |
| 53 | T | 4-Methyl-2-pentanone | 0.603 | 0.530 | 12.1 | 119 | 0.00 |
| 54 | T | trans-1,3-Dichloropropene | 0.616 | 0.597 | 3.1 | 122 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.376 | 0.374 | 0.5 | 129 | 0.00 |
| 56 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 125 | 0.00 |
| 57 | S | Toluene-d8 (SS2) | 2.194 | 2.263 | -3.1 | 130 | 0.00 |
| 58 | T | Toluene | 2.792 | 2.865 | -2.6 | 128 | 0.00 |
| 59 | T | 2-Hexanone | 2.881 | 2.110 | 26.8 | 105 | 0.00 |
| 60 | T | Dibromochloromethane | 0.622 | 0.684 | -10.0 | 132 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.685 | 0.716 | -4.5 | 129 | 0.00 |
| 62 | T | Butyl Acetate | 3.014 | 2.413 | 19.9 | 105 | 0.00 |
| 63 | T | n-Octane | 0.960 | 0.947 | 1.4 | 119 | 0.00 |
| 64 | T | Tetrachloroethene | 0.580 | 0.643 | -10.9 | 139 | 0.00 |
| 65 | T | Chlorobenzene | 1.603 | 1.693 | -5.6 | 131 | 0.00 |
| 66 | T | Ethylbenzene | 3.219 | 3.309 | -2.8 | 126 | 0.00 |
| 67 | T | m- & p-Xylene | 2.092 | 2.162 | -3.3 | 126 | 0.00 |
| 68 | T | Bromoform | 0.400 | 0.460 | -15.0 | 136 | 0.00 |
| 69 | T | Styrene | 1.716 | 1.826 | -6.4 | 129 | 0.00 |
| 70 | T | o-Xylene | 2.280 | 2.338 | -2.5 | 125 | 0.00 |
| 71 | T | n-Nonane | 2.130 | 1.935 | 9.2 | 106 | 0.00 |
| 72 | T | 1,1,2,2-Tetrachloroethane | 1.079 | 1.098 | -1.8 | 122 | 0.00 |
| 73 | S | Bromofluorobenzene (SS3) | 0.566 | 0.608 | -7.4 | 136 | 0.00 |
| 74 | T | Cumene | 2.666 | 2.823 | -5.9 | 127 | 0.00 |
| 75 | T | alpha-Pinene | 1.597 | 1.675 | -4.9 | 125 | 0.00 |
| 76 | T | n-Propylbenzene | 3.818 | 3.967 | -3.9 | 123 | 0.00 |
| 77 | T | 3-Ethyltoluene | 2.859 | 3.000 | -4.9 | 123 | 0.00 |
| 78 | T | 4-Ethyltoluene | 2.684 | 2.828 | -5.4 | 130 | 0.00 |
| 79 | T | 1,3,5-Trimethylbenzene | 2.403 | 2.486 | -3.5 | 127 | 0.00 |
| 80 | T | alpha-Methylstyrene | 1.232 | 1.323 | -7.4 | 128 | 0.00 |
| 81 | T | 2-Ethyltoluene | 2.926 | 3.062 | -4.6 | 125 | 0.00 |
| 82 | T | 1,2,4-Trimethylbenzene | 2.390 | 2.445 | -2.3 | 124 | 0.00 |
| 83 | T | n-Decane | 2.352 | 2.326 | 1.1 | 115 | 0.00 |
| 84 | T | Benzyl Chloride | 2.461 | 2.596 | -5.5 | 120 | 0.00 |
| 85 | T | 1,3-Dichlorobenzene | 1.192 | 1.272 | -6.7 | 129 | 0.00 |
| 86 | T | 1,4-Dichlorobenzene | 1.168 | 1.248 | -6.8 | 129 | 0.00 |
| 87 | T | sec-Butylbenzene | 3.142 | 3.307 | -5.3 | 124 | 0.00 |
| 88 | T | p-Isopropyltoluene | 2.464 | 2.660 | -8.0 | 125 | 0.00 |
| 89 | T | 1,2,3-Trimethylbenzene | 2.305 | 2.410 | -4.6 | 123 | 0.00 |
| 90 | T | 1,2-Dichlorobenzene | 1.112 | 1.172 | -5.4 | 127 | 0.00 |
| 91 | T | d-Limonene | 1.135 | 1.128 | 0.6 | 116 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.379 | 0.437 | -15.3 | 125 | 0.00 |
| 93 | T | n-Undecane | 2.406 | 2.422 | -0.7 | 113 | 0.00 |
| 94 | T | 1,2,4-Trichlorobenzene | 0.242 | 0.264 | -9.1 | 127 | 0.00 |
| 95 | T | Naphthalene | 2.872 | 3.141 | -9.4 | 122 | 0.00 |
| 96 | T | n-Dodecane | 2.350 | 2.389 | -1.7 | 113 | 0.00 |
| 97 | T | Hexachloro-1,3-butadiene | 0.496 | 0.540 | -8.9 | 129 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

BS 6/20/07

# Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190701.D
Acq On : 19 Jun 2007 9:41
Sample : 25ng TO-15 CCV Std
Misc : S15-06180707/S15-05240704
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:36:26 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | IR | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 85 | 0.00 |
| 2 | T | Propene | 1.508 | 1.454 | 3.6 | 88 | 0.00 |
| 3 | T | Dichlorodifluoromethane | 2.583 | 2.648 | -2.5 | 90 | 0.00 |
| 4 | T | Chloromethane | 2.466 | 2.317 | 6.0 | 79 | 0.00 |
| 5 | T | Freon 114 | 0.849 | 0.958 | -12.8 | 95 | 0.00 |
| 6 | T | Vinyl Chloride | 1.676 | 1.755 | -4.7 | 83 | 0.00 |
| 7 | T | 1,3-Butadiene | 1.454 | 1.434 | 1.4 | 86 | 0.00 |
| 8 | T | Bromomethane | 1.359 | 1.366 | -0.5 | 87 | 0.00 |
| 9 | T | Chloroethane | 1.141 | 1.114 | 2.4 | 86 | 0.00 |
| 10 | T | Ethanol | 0.850 | 0.833 | 2.0 | 87 | 0.00 |
| 11 | T | Acetonitrile | 2.855 | 2.796 | 2.1 | 84 | 0.00 |
| 12 | T | Acrolein | 0.839 | 0.808 | 3.7 | 84 | 0.00 |
| 13 | T | Acetone | 1.301 | 1.081 | 16.9 | 88 | 0.00 |
| 14 | T | Trichlorofluoromethane | 1.686 | 1.791 | -6.2 | 91 | 0.00 |
| 15 | T | Isopropanol | 3.658 | 3.932 | -7.5 | 88 | 0.00 |
| 16 | T | Acrylonitrile | 1.773 | 1.820 | -2.7 | 84 | 0.00 |
| 17 | T | 1,1-Dichloroethene | 1.187 | 1.201 | -1.2 | 88 | 0.00 |
| 18 | T | tert-Butanol | 3.465 | 3.481 | -0.5 | 91 | 0.00 |
| 19 | T | Methylene Chloride | 1.396 | 1.370 | 1.9 | 86 | 0.00 |
| 20 | T | Allyl Chloride | 1.846 | 1.898 | -2.8 | 85 | 0.00 |
| 21 | T | Trichlorotrifluoroethane | 1.059 | 1.070 | -1.0 | 87 | 0.00 |
| 22 | T | Carbon Disulfide | 5.500 | 5.266 | 4.3 | 87 | 0.00 |
| 23 | T | trans-1,2-Dichloroethene | 2.013 | 2.072 | -2.9 | 87 | 0.00 |
| 24 | T | 1,1-Dichloroethane | 1.991 | 2.054 | -3.2 | 90 | 0.00 |
| 25 | T | Methyl tert-Butyl Ether | 3.660 | 3.740 | -2.2 | 89 | 0.00 |
| 26 | T | Vinyl Acetate | 0.239 | 0.267 | -11.7 | 97 | 0.00 |
| 27 | T | 2-Butanone | 0.876 | 0.872 | 0.5 | 87 | 0.00 |
| 28 | T | cis-1,2-Dichloroethene | 1.894 | 1.920 | -1.4 | 87 | 0.00 |
| 29 | T | Diisopropyl Ether | 0.924 | 0.965 | -4.4 | 88 | 0.00 |
| 30 | T | Ethyl Acetate | 0.441 | 0.449 | -1.8 | 86 | 0.00 |
| 31 | T | n-Hexane | 2.101 | 2.081 | 1.0 | 86 | 0.00 |
| 32 | T | Chloroform | 1.760 | 1.845 | -4.8 | 92 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 (SS1) | 1.465 | 1.498 | -2.3 | 88 | 0.00 |
| 34 | T | Tetrahydrofuran | 0.819 | 0.851 | -3.9 | 90 | 0.00 |
| 35 | T | Ethyl tert-Butyl Ether | 1.384 | 1.445 | -4.4 | 88 | 0.00 |
| 36 | T | 1,2-Dichloroethane | 1.796 | 1.919 | -6.8 | 91 | 0.00 |
| 37 | IR | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 85 | 0.00 |
| 38 | T | 1,1,1-Trichloroethane | 0.489 | 0.509 | -4.1 | 89 | 0.00 |
| 39 | T | Isopropyl Acetate | 0.255 | 0.257 | -0.8 | 86 | 0.00 |
| 40 | T | 1-Butanol | 0.288 | 0.288 | 0.0 | 85 | 0.00 |

(#) = Out of Range



JS 6/19/07 JS 6/19/07

Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190701.D
Acq On : 19 Jun 2007 9:41
Sample : 25ng TO-15 CCV Std
Misc : S15-06180707/S15-05240704
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:36:26 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 41 | T | Benzene | 1.319 | 1.277 | 3.2 | 87 | 0.00 |
| 42 | T | Carbon Tetrachloride | 0.346 | 0.371 | -7.2 | 83 | 0.00 |
| 43 | T | Cyclohexane | 0.476 | 0.470 | 1.3 | 87 | 0.00 |
| 44 | T | tert-Amyl Methyl Ether | 0.997 | 1.025 | -2.8 | 88 | 0.00 |
| 45 | T | 1,2-Dichloropropane | 0.363 | 0.358 | 1.4 | 85 | 0.00 |
| 46 | T | Bromodichloromethane | 0.427 | 0.453 | -6.1 | 89 | 0.00 |
| 47 | T | Trichloroethene | 0.363 | 0.376 | -3.6 | 88 | 0.00 |
| 48 | T | 1,4-Dioxane | 0.251 | 0.257 | -2.4 | 87 | 0.00 |
| 49 | T | Isooctane | 1.437 | 1.424 | 0.9 | 85 | 0.00 |
| 50 | T | Methyl Methacrylate | 0.153 | 0.165 | -7.8 | 88 | 0.00 |
| 51 | T | n-Heptane | 0.340 | 0.339 | 0.3 | 86 | 0.00 |
| 52 | T | cis-1,3-Dichloropropene | 0.551 | 0.574 | -4.2 | 87 | 0.00 |
| 53 | T | 4-Methyl-2-pentanone | 0.337 | 0.333 | 1.2 | 86 | 0.00 |
| 54 | T | trans-1,3-Dichloropropene | 0.508 | 0.533 | -4.9 | 87 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.337 | 0.343 | -1.8 | 87 | 0.00 |
| 56 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 86 | 0.00 |
| 57 | S | Toluene-d8 (SS2) | 2.327 | 2.278 | 2.1 | 85 | 0.00 |
| 58 | T | Toluene | 2.833 | 2.765 | 2.4 | 88 | 0.00 |
| 59 | T | 2-Hexanone | 2.217 | 2.102 | 5.2 | 86 | 0.00 |
| 60 | T | Dibromochloromethane | 0.886 | 0.933 | -5.3 | 89 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.936 | 0.953 | -1.8 | 88 | 0.00 |
| 62 | T | Butyl Acetate | 2.406 | 2.264 | 5.9 | 84 | 0.00 |
| 63 | T | n-Octane | 0.697 | 0.693 | 0.6 | 90 | 0.00 |
| 64 | T | Tetrachloroethene | 0.880 | 0.887 | -0.8 | 89 | 0.00 |
| 65 | T | Chlorobenzene | 1.950 | 1.918 | 1.6 | 87 | 0.00 |
| 66 | T | Ethylbenzene | 3.276 | 3.236 | 1.2 | 88 | 0.00 |
| 67 | T | m- & p-Xylene | 2.048 | 2.022 | 1.3 | 88 | 0.00 |
| 68 | T | Bromoform | 0.651 | 0.697 | -7.1 | 89 | 0.00 |
| 69 | T | Styrene | 1.970 | 1.943 | 1.4 | 86 | 0.00 |
| 70 | T | o-Xylene | 2.231 | 2.192 | 1.7 | 88 | 0.00 |
| 71 | T | n-Nonane | 1.756 | 1.668 | 5.0 | 84 | 0.00 |
| 72 | T | 1,1,2,2-Tetrachloroethane | 1.219 | 1.208 | 0.9 | 86 | 0.00 |
| 73 | S | Bromofluorobenzene (SS3) | 0.795 | 0.835 | -5.0 | 89 | 0.00 |
| 74 | T | Cumene | 2.954 | 2.970 | -0.5 | 87 | 0.00 |
| 75 | T | alpha-Pinene | 1.610 | 1.612 | -0.1 | 87 | 0.00 |
| 76 | T | n-Propylbenzene | 3.868 | 3.877 | -0.2 | 87 | 0.00 |
| 77 | T | 3-Ethyltoluene | 3.183 | 3.142 | 1.3 | 85 | 0.00 |
| 78 | T | 4-Ethyltoluene | 2.933 | 2.957 | -0.8 | 89 | 0.00 |
| 79 | T | 1,3,5-Trimethylbenzene | 2.571 | 2.521 | 1.9 | 86 | 0.00 |
| 80 | T | alpha-Methylstyrene | 0.740 | 0.712 | 3.8 | 82 | 0.00 |

(#) = Out of Range



8r 6/19/07 6/19/07

Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190701.D
Acq On : 19 Jun 2007 9:41
Sample : 25ng TO-15 CCV Std
Misc : S15-06180707/S15-05240704
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:36:26 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 81 | T | 2-Ethyltoluene | 3.219 | 3.213 | 0.2 | 86 | 0.00 |
| 82 | T | 1,2,4-Trimethylbenzene | 2.425 | 2.368 | 2.4 | 87 | 0.00 |
| 83 | T | n-Decane | 1.731 | 1.666 | 3.8 | 84 | 0.00 |
| 84 | T | Benzyl Chloride | 2.297 | 2.314 | -0.7 | 85 | 0.00 |
| 85 | T | 1,3-Dichlorobenzene | 1.641 | 1.650 | -0.5 | 87 | 0.00 |
| 86 | T | 1,4-Dichlorobenzene | 1.634 | 1.640 | -0.4 | 87 | 0.00 |
| 87 | T | sec-Butylbenzene | 3.415 | 3.384 | 0.9 | 86 | 0.00 |
| 88 | T | p-Isopropyltoluene | 2.714 | 2.731 | -0.6 | 87 | 0.00 |
| 89 | T | 1,2,3-Trimethylbenzene | 2.336 | 2.335 | 0.0 | 87 | 0.00 |
| 90 | T | 1,2-Dichlorobenzene | 1.497 | 1.507 | -0.7 | 88 | 0.00 |
| 91 | T | d-Limonene | 1.099 | 1.039 | 5.5 | 83 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.611 | 0.673 | -10.1 | 88 | 0.00 |
| 93 | T | n-Undecane | 1.798 | 1.720 | 4.3 | 84 | 0.00 |
| 94 | T | 1,2,4-Trichlorobenzene | 0.328 | 0.348 | -6.1 | 88 | 0.00 |
| 95 | T | Naphthalene | 3.326 | 3.490 | -4.9 | 86 | 0.00 |
| 96 | T | n-Dodecane | 1.562 | 1.481 | 5.2 | 85 | 0.00 |
| 97 | T | Hexachloro-1,3-butadiene | 0.641 | 0.654 | -2.0 | 89 | 0.00 |

8/5 6/19/07

(#) = Out of Range SPCC's out = 0 CCC's out = 0 6/19/07

# Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190705.D
Acq On : 19 Jun 2007 12:30
Sample : 1ng CRQL Std
Misc : S15-06180707/S15-05250703
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:56:47 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | IR | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 89 | -0.02 |
| 2 | T | Propene | 1.508 | 1.751 | -16.1 | 99 | 0.02 |
| 3 | T | Dichlorodifluoromethane | 2.583 | 3.017 | -16.8 | 101 | 0.01 |
| 4 | T | Chloromethane | 2.466 | 2.546 | -3.2 | 85 | 0.02 |
| 5 | T | Freon 114 | 0.849 | 1.092 | -28.6 | 107 | 0.01 |
| 6 | T | Vinyl Chloride | 1.676 | 1.663 | 0.8 | 91 | 0.01 |
| 7 | T | 1,3-Butadiene | 1.454 | 1.481 | -1.9 | 91 | 0.00 |
| 8 | T | Bromomethane | 1.359 | 1.458 | -7.3 | 98 | 0.00 |
| 9 | T | Chloroethane | 1.141 | 1.189 | -4.2 | 92 | 0.00 |
| 10 | T | Ethanol | 0.850 | 0.939 | -10.5 | 100 | 0.00 |
| 11 | T | Acetonitrile | 2.855 | 2.898 | -1.5 | 96 | 0.00 |
| 12 | T | Acrolein | 0.839 | 0.872 | -3.9 | 93 | 0.00 |
| 13 | T | Acetone | 1.301 | 2.250 | -72.9# | 115 | 0.00 |
| 14 | T | Trichlorofluoromethane | 1.686 | 1.918 | -13.8 | 104 | 0.00 |
| 15 | T | Isopropanol | 3.658 | 6.085 | -66.3# | 130 | -0.03 |
| 16 | T | Acrylonitrile | 1.773 | 1.689 | 4.7 | 92 | 0.00 |
| 17 | T | 1,1-Dichloroethene | 1.187 | 1.248 | -5.1 | 93 | 0.00 |
| 18 | T | tert-Butanol | 3.465 | 4.057 | -17.1 | 97 | -0.04 |
| 19 | T | Methylene Chloride | 1.396 | 1.485 | -6.4 | 93 | 0.00 |
| 20 | T | Allyl Chloride | 1.846 | 1.750 | 5.2 | 93 | 0.00 |
| 21 | T | Trichlorotrifluoroethane | 1.059 | 1.147 | -8.3 | 94 | 0.00 |
| 22 | T | Carbon Disulfide | 5.500 | 6.145 | -11.7 | 95 | 0.00 |
| 23 | T | trans-1,2-Dichloroethene | 2.013 | 2.045 | -1.6 | 93 | 0.00 |
| 24 | T | 1,1-Dichloroethane | 1.991 | 2.365 | -18.8 | 101 | -0.02 |
| 25 | T | Methyl tert-Butyl Ether | 3.660 | 3.936 | -7.5 | 93 | 0.00 |
| 26 | T | Vinyl Acetate | 0.239 | 0.325 | -36.0# | 104 | 0.00 |
| 27 | T | 2-Butanone | 0.876 | 0.959 | -9.5 | 98 | -0.01 |
| 28 | T | cis-1,2-Dichloroethene | 1.894 | 1.878 | 0.8 | 90 | -0.02 |
| 29 | T | Diisopropyl Ether | 0.924 | 0.959 | -3.8 | 90 | -0.01 |
| 30 | T | Ethyl Acetate | 0.441 | 0.471 | -6.8 | 89 | -0.01 |
| 31 | T | n-Hexane | 2.101 | 2.300 | -9.5 | 94 | 0.00 |
| 32 | T | Chloroform | 1.760 | 2.051 | -16.5 | 100 | -0.03 |
| 33 | S | 1,2-Dichloroethane-d4 (SS1) | 1.465 | 1.456 | 0.6 | 91 | -0.02 |
| 34 | T | Tetrahydrofuran | 0.819 | 0.896 | -9.4 | 91 | 0.00 |
| 35 | T | Ethyl tert-Butyl Ether | 1.384 | 1.485 | -7.3 | 94 | 0.00 |
| 36 | T | 1,2-Dichloroethane | 1.796 | 1.913 | -6.5 | 95 | -0.02 |
| 37 | IR | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 89 | -0.01 |
| 38 | T | 1,1,1-Trichloroethane | 0.489 | 0.516 | -5.5 | 93 | -0.01 |
| 39 | T | Isopropyl Acetate | 0.255 | 0.260 | -2.0 | 86 | 0.00 |
| 40 | T | 1-Butanol | 0.288 | 0.398 | -38.2# | 98 | 0.01 |

(#) = Out of Range



6/19/07
6/19/07

# Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190705.D
Acq On : 19 Jun 2007 12:30
Sample : 1ng CRQL Std
Misc : S15-06180707/S15-05250703
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:56:47 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 41 | T | Benzene | 1.319 | 1.430 | -8.4 | 92 | -0.01 |
| 42 | T | Carbon Tetrachloride | 0.346 | 0.226 | 34.7# | 67 | 0.00 |
| 43 | T | Cyclohexane | 0.476 | 0.518 | -8.8 | 93 | 0.00 |
| 44 | T | tert-Amyl Methyl Ether | 0.997 | 1.053 | -5.6 | 93 | -0.01 |
| 45 | T | 1,2-Dichloropropane | 0.363 | 0.377 | -3.9 | 89 | -0.01 |
| 46 | T | Bromodichloromethane | 0.427 | 0.427 | 0.0 | 89 | -0.01 |
| 47 | T | Trichloroethene | 0.363 | 0.403 | -11.0 | 94 | -0.01 |
| 48 | T | 1,4-Dioxane | 0.251 | 0.275 | -9.6 | 94 | -0.02 |
| 49 | T | Isooctane | 1.437 | 1.560 | -8.6 | 90 | 0.00 |
| 50 | T | Methyl Methacrylate | 0.153 | 0.157 | -2.6 | 95 | 0.00 |
| 51 | T | n-Heptane | 0.340 | 0.367 | -7.9 | 92 | 0.00 |
| 52 | T | cis-1,3-Dichloropropene | 0.551 | 0.571 | -3.6 | 89 | 0.00 |
| 53 | T | 4-Methyl-2-pentanone | 0.337 | 0.370 | -9.8 | 91 | 0.00 |
| 54 | T | trans-1,3-Dichloropropene | 0.508 | 0.485 | 4.5 | 88 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.337 | 0.356 | -5.6 | 93 | 0.00 |
| 56 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 57 | S | Toluene-d8 (SS2) | 2.327 | 2.352 | -1.1 | 89 | -0.01 |
| 58 | T | Toluene | 2.833 | 3.311 | -16.9 | 94 | -0.01 |
| 59 | T | 2-Hexanone | 2.217 | 2.481 | -11.9 | 92 | 0.00 |
| 60 | T | Dibromochloromethane | 0.886 | 0.932 | -5.2 | 91 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.936 | 1.022 | -9.2 | 93 | 0.00 |
| 62 | T | Butyl Acetate | 2.406 | 2.603 | -8.2 | 90 | 0.00 |
| 63 | T | n-Octane | 0.697 | 0.799 | -14.6 | 91 | 0.00 |
| 64 | T | Tetrachloroethene | 0.880 | 1.035 | -17.6 | 95 | 0.00 |
| 65 | T | Chlorobenzene | 1.950 | 2.228 | -14.3 | 93 | 0.00 |
| 66 | T | Ethylbenzene | 3.276 | 3.732 | -13.9 | 91 | 0.00 |
| 67 | T | m- & p-Xylene | 2.048 | 2.417 | -18.0 | 92 | 0.00 |
| 68 | T | Bromoform | 0.651 | 0.669 | -2.8 | 91 | 0.00 |
| 69 | T | Styrene | 1.970 | 2.191 | -11.2 | 90 | 0.00 |
| 70 | T | o-Xylene | 2.231 | 2.619 | -17.4 | 92 | 0.00 |
| 71 | T | n-Nonane | 1.756 | 1.997 | -13.7 | 90 | 0.00 |
| 72 | T | 1,1,2,2-Tetrachloroethane | 1.219 | 1.370 | -12.4 | 90 | 0.00 |
| 73 | S | Bromofluorobenzene (SS3) | 0.795 | 0.822 | -3.4 | 94 | 0.00 |
| 74 | T | Cumene | 2.954 | 3.365 | -13.9 | 92 | 0.00 |
| 75 | T | alpha-Pinene | 1.610 | 1.832 | -13.8 | 91 | 0.00 |
| 76 | T | n-Propylbenzene | 3.868 | 4.398 | -13.7 | 91 | 0.00 |
| 77 | T | 3-Ethyltoluene | 3.183 | 3.679 | -15.6 | 90 | 0.00 |
| 78 | T | 4-Ethyltoluene | 2.933 | 3.556 | -21.2 | 96 | 0.00 |
| 79 | T | 1,3,5-Trimethylbenzene | 2.571 | 3.049 | -18.6 | 93 | 0.00 |
| 80 | T | alpha-Methylstyrene | 0.740 | 0.828 | -11.9 | 91 | 0.00 |

(#) = Out of Range



6/19/07
6/19/07

# Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190705.D
Acq On : 19 Jun 2007 12:30
Sample : 1ng CRQL Std
Misc : S15-06180707/S15-05250703
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:56:47 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 81 | T | 2-Ethyltoluene | 3.219 | 3.788 | -17.7 | 92 | 0.00 |
| 82 | T | 1,2,4-Trimethylbenzene | 2.425 | 3.044 | -25.5 | 93 | 0.00 |
| 83 | T | n-Decane | 1.731 | 1.953 | -12.8 | 87 | 0.00 |
| 84 | T | Benzyl Chloride | 2.297 | 2.541 | -10.6 | 92 | 0.00 |
| 85 | T | 1,3-Dichlorobenzene | 1.641 | 1.945 | -18.5 | 94 | 0.00 |
| 86 | T | 1,4-Dichlorobenzene | 1.634 | 1.927 | -17.9 | 93 | 0.00 |
| 87 | T | sec-Butylbenzene | 3.415 | 4.020 | -17.7 | 91 | 0.00 |
| 88 | T | p-Isopropyltoluene | 2.714 | 3.384 | -24.7 | 93 | 0.00 |
| 89 | T | 1,2,3-Trimethylbenzene | 2.336 | 2.871 | -22.9 | 93 | 0.00 |
| 90 | T | 1,2-Dichlorobenzene | 1.497 | 1.853 | -23.8 | 94 | 0.00 |
| 91 | T | d-Limonene | 1.099 | 1.279 | -16.4 | 89 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.611 | 0.661 | -8.2 | 99 | 0.00 |
| 93 | T | n-Undecane | 1.798 | 2.051 | -14.1 | 88 | 0.00 |
| 94 | T | 1,2,4-Trichlorobenzene | 0.328 | 0.390 | -18.9 | 100 | 0.00 |
| 95 | T | Naphthalene | 3.326 | 4.028 | -21.1 | 104 | 0.00 |
| 96 | T | n-Dodecane | 1.562 | 2.241 | -43.5# | 109 | 0.00 |
| 97 | T | Hexachloro-1,3-butadiene | 0.641 | 0.755 | -17.8 | 94 | 0.00 |

SR 6/19/07

(#) = Out of Range SPCC's out = 0 CCC's out = 0

# Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190715.D  Vial: 1
Acq On : 19 Jun 2007 20:29  Operator: CH/ST
Sample : 25ng TO-15 CCV Std  Inst : MS 02
Misc : S15-06180707/S15-05240704  Multiplr: 1.00
MS Integration Params: rteint.p

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:56:47 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | IR | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 86 | 0.00 |
| 2 | T | Propene | 1.508 | 1.336 | 11.4 | 82 | 0.00 |
| 3 | T | Dichlorodifluoromethane | 2.583 | 2.523 | 2.3 | 87 | 0.00 |
| 4 | T | Chloromethane | 2.466 | 2.397 | 2.8 | 83 | 0.00 |
| 5 | T | Freon 114 | 0.849 | 0.935 | -10.1 | 94 | 0.00 |
| 6 | T | Vinyl Chloride | 1.676 | 1.606 | 4.2 | 77 | 0.00 |
| 7 | T | 1,3-Butadiene | 1.454 | 1.393 | 4.2 | 84 | 0.00 |
| 8 | T | Bromomethane | 1.359 | 1.376 | -1.3 | 89 | 0.00 |
| 9 | T | Chloroethane | 1.141 | 1.051 | 7.9 | 83 | 0.00 |
| 10 | T | Ethanol | 0.850 | 0.825 | 2.9 | 88 | 0.00 |
| 11 | T | Acetonitrile | 2.855 | 2.649 | 7.2 | 81 | 0.00 |
| 12 | T | Acrolein | 0.839 | 0.785 | 6.4 | 83 | 0.00 |
| 13 | T | Acetone | 1.301 | 1.015 | 22.0 | 84 | 0.00 |
| 14 | T | Trichlorofluoromethane | 1.686 | 1.738 | -3.1 | 90 | 0.00 |
| 15 | T | Isopropanol | 3.658 | 3.758 | -2.7 | 85 | 0.00 |
| 16 | T | Acrylonitrile | 1.773 | 1.767 | 0.3 | 83 | 0.00 |
| 17 | T | 1,1-Dichloroethene | 1.187 | 1.175 | 1.0 | 87 | 0.00 |
| 18 | T | tert-Butanol | 3.465 | 3.306 | 4.6 | 88 | 0.00 |
| 19 | T | Methylene Chloride | 1.396 | 1.345 | 3.7 | 86 | 0.00 |
| 20 | T | Allyl Chloride | 1.846 | 1.822 | 1.3 | 83 | 0.00 |
| 21 | T | Trichlorotrifluoroethane | 1.059 | 1.073 | -1.3 | 89 | 0.00 |
| 22 | T | Carbon Disulfide | 5.500 | 5.107 | 7.1 | 86 | 0.00 |
| 23 | T | trans-1,2-Dichloroethene | 2.013 | 2.022 | -0.4 | 86 | 0.00 |
| 24 | T | 1,1-Dichloroethane | 1.991 | 1.981 | 0.5 | 88 | 0.00 |
| 25 | T | Methyl tert-Butyl Ether | 3.660 | 3.627 | 0.9 | 88 | 0.00 |
| 26 | T | Vinyl Acetate | 0.239 | 0.247 | -3.3 | 92 | 0.00 |
| 27 | T | 2-Butanone | 0.876 | 0.846 | 3.4 | 86 | 0.00 |
| 28 | T | cis-1,2-Dichloroethene | 1.894 | 1.872 | 1.2 | 87 | 0.00 |
| 29 | T | Diisopropyl Ether | 0.924 | 0.944 | -2.2 | 88 | 0.00 |
| 30 | T | Ethyl Acetate | 0.441 | 0.445 | -0.9 | 87 | 0.00 |
| 31 | T | n-Hexane | 2.101 | 2.020 | 3.9 | 85 | 0.00 |
| 32 | T | Chloroform | 1.760 | 1.794 | -1.9 | 91 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 (SS1) | 1.465 | 1.485 | -1.4 | 88 | 0.00 |
| 34 | T | Tetrahydrofuran | 0.819 | 0.792 | 3.3 | 85 | 0.00 |
| 35 | T | Ethyl tert-Butyl Ether | 1.384 | 1.403 | -1.4 | 87 | 0.00 |
| 36 | T | 1,2-Dichloroethane | 1.796 | 1.868 | -4.0 | 90 | 0.00 |
| 37 | IR | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 86 | 0.00 |
| 38 | T | 1,1,1-Trichloroethane | 0.489 | 0.501 | -2.5 | 89 | 0.00 |
| 39 | T | Isopropyl Acetate | 0.255 | 0.251 | 1.6 | 85 | 0.00 |
| 40 | T | 1-Butanol | 0.288 | 0.284 | 1.4 | 85 | 0.00 |

(#) = Out of Range



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gs 6/20/07
MS 6/20/07

Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190715.D
Acq On : 19 Jun 2007 20:29
Sample : 25ng TO-15 CCV Std
Misc : S15-06180707/S15-05240704
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:56:47 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 41 | T | Benzene | 1.319 | 1.255 | 4.9 | 86 | 0.00 |
| 42 | T | Carbon Tetrachloride | 0.346 | 0.353 | -2.0 | 80 | 0.00 |
| 43 | T | Cyclohexane | 0.476 | 0.463 | 2.7 | 86 | 0.00 |
| 44 | T | tert-Amyl Methyl Ether | 0.997 | 1.005 | -0.8 | 87 | 0.00 |
| 45 | T | 1,2-Dichloropropane | 0.363 | 0.353 | 2.8 | 85 | 0.00 |
| 46 | T | Bromodichloromethane | 0.427 | 0.441 | -3.3 | 88 | 0.00 |
| 47 | T | Trichloroethene | 0.363 | 0.371 | -2.2 | 88 | 0.00 |
| 48 | T | 1,4-Dioxane | 0.251 | 0.253 | -0.8 | 87 | 0.00 |
| 49 | T | Isooctane | 1.437 | 1.401 | 2.5 | 85 | 0.00 |
| 50 | T | Methyl Methacrylate | 0.153 | 0.163 | -6.5 | 89 | 0.00 |
| 51 | T | n-Heptane | 0.340 | 0.335 | 1.5 | 86 | 0.00 |
| 52 | T | cis-1,3-Dichloropropene | 0.551 | 0.565 | -2.5 | 87 | 0.00 |
| 53 | T | 4-Methyl-2-pentanone | 0.337 | 0.327 | 3.0 | 85 | 0.00 |
| 54 | T | trans-1,3-Dichloropropene | 0.508 | 0.521 | -2.6 | 87 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.337 | 0.340 | -0.9 | 87 | 0.00 |
| 56 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 86 | 0.00 |
| 57 | S | Toluene-d8 (SS2) | 2.327 | 2.299 | 1.2 | 86 | 0.00 |
| 58 | T | Toluene | 2.833 | 2.763 | 2.5 | 88 | 0.00 |
| 59 | T | 2-Hexanone | 2.217 | 2.087 | 5.9 | 85 | 0.00 |
| 60 | T | Dibromochloromethane | 0.886 | 0.935 | -5.5 | 89 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.936 | 0.961 | -2.7 | 88 | 0.00 |
| 62 | T | Butyl Acetate | 2.406 | 2.254 | 6.3 | 83 | 0.00 |
| 63 | T | n-Octane | 0.697 | 0.660 | 5.3 | 86 | 0.00 |
| 64 | T | Tetrachloroethene | 0.880 | 0.895 | -1.7 | 89 | 0.00 |
| 65 | T | Chlorobenzene | 1.950 | 1.951 | -0.1 | 88 | 0.00 |
| 66 | T | Ethylbenzene | 3.276 | 3.250 | 0.8 | 88 | 0.00 |
| 67 | T | m- & p-Xylene | 2.048 | 2.033 | 0.7 | 88 | 0.00 |
| 68 | T | Bromoform | 0.651 | 0.702 | -7.8 | 89 | 0.00 |
| 69 | T | Styrene | 1.970 | 1.966 | 0.2 | 87 | 0.00 |
| 70 | T | o-Xylene | 2.231 | 2.213 | 0.8 | 88 | 0.00 |
| 71 | T | n-Nonane | 1.756 | 1.670 | 4.9 | 84 | 0.00 |
| 72 | T | 1,1,2,2-Tetrachloroethane | 1.219 | 1.222 | -0.2 | 87 | 0.00 |
| 73 | S | Bromofluorobenzene (SS3) | 0.795 | 0.832 | -4.7 | 89 | 0.00 |
| 74 | T | Cumene | 2.954 | 3.015 | -2.1 | 88 | 0.00 |
| 75 | T | alpha-Pinene | 1.610 | 1.622 | -0.7 | 87 | 0.00 |
| 76 | T | n-Propylbenzene | 3.868 | 3.921 | -1.4 | 88 | 0.00 |
| 77 | T | 3-Ethyltoluene | 3.183 | 3.227 | -1.4 | 87 | 0.00 |
| 78 | T | 4-Ethyltoluene | 2.933 | 2.969 | -1.2 | 90 | 0.00 |
| 79 | T | 1,3,5-Trimethylbenzene | 2.571 | 2.575 | -0.2 | 88 | 0.00 |
| 80 | T | alpha-Methylstyrene | 0.740 | 0.740 | 0.0 | 86 | 0.00 |

(#) = Out of Range



BS 6/20/07
BS 6/20/07

Evaluate Continuing Calibration Report

Data File : J:\MS02\DATA\2007_06\19\06190715.D
Acq On : 19 Jun 2007 20:29
Sample : 25ng TO-15 CCV Std
Misc : S15-06180707/S15-05240704
MS Integration Params: rteint.p

Vial: 1
Operator: CH/ST
Inst : MS 02
Multiplr: 1.00

Method : J:\MS02\METHODS\R2061207.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD
Last Update : Wed Jun 13 10:56:47 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 81 | T | 2-Ethyltoluene | 3.219 | 3.292 | -2.3 | 88 | 0.00 |
| 82 | T | 1,2,4-Trimethylbenzene | 2.425 | 2.425 | 0.0 | 89 | 0.00 |
| 83 | T | n-Decane | 1.731 | 1.674 | 3.3 | 85 | 0.00 |
| 84 | T | Benzyl Chloride | 2.297 | 2.338 | -1.8 | 86 | 0.00 |
| 85 | T | 1,3-Dichlorobenzene | 1.641 | 1.689 | -2.9 | 89 | 0.00 |
| 86 | T | 1,4-Dichlorobenzene | 1.634 | 1.675 | -2.5 | 89 | 0.00 |
| 87 | T | sec-Butylbenzene | 3.415 | 3.474 | -1.7 | 88 | 0.00 |
| 88 | T | p-Isopropyltoluene | 2.714 | 2.788 | -2.7 | 89 | 0.00 |
| 89 | T | 1,2,3-Trimethylbenzene | 2.336 | 2.401 | -2.8 | 89 | 0.00 |
| 90 | T | 1,2-Dichlorobenzene | 1.497 | 1.541 | -2.9 | 90 | 0.00 |
| 91 | T | d-Limonene | 1.099 | 1.059 | 3.6 | 85 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.611 | 0.683 | -11.8 | 89 | 0.00 |
| 93 | T | n-Undecane | 1.798 | 1.775 | 1.3 | 86 | 0.00 |
| 94 | T | 1,2,4-Trichlorobenzene | 0.328 | 0.362 | -10.4 | 91 | 0.00 |
| 95 | T | Naphthalene | 3.326 | 3.627 | -9.0 | 90 | 0.00 |
| 96 | T | n-Dodecane | 1.562 | 1.622 | -3.8 | 93 | 0.00 |
| 97 | T | Hexachloro-1,3-butadiene | 0.641 | 0.680 | -6.1 | 93 | 0.00 |

SR 6/20/07
6/20/07

Response Factor Report MS08

Method Path : J:\MS08\METHODS\
Method File : R8061907.M
Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
Last Update : Wed Jun 20 09:06:46 2007
Response Via : Initial Calibration

Calibration Files
0.5 =06190709.D 1 =06190710.D 5 =06190711.D 25 =06190712.D
50 =06190713.D 100 =06190714.D =

| | | Compound | 0.5 | 1 | 5 | 25 | 50 | 100 | Avg | | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | IR | Bromochloromethane (I | ----------ISTD---------- | | | | | | | | |
| 2) | T | Propene | 5.605 | 4.199 | 3.207 | 3.018 | 2.765 | 2.657 | 3.575 | | 31.78 |
| 3) | T | Dichlorodifluorom | 4.565 | 4.408 | 4.209 | 4.245 | 3.933 | 3.662 | 4.170 | | 7.83 |
| 4) | T | Chloromethane | 5.569 | 5.458 | 4.854 | 5.344 | 4.640 | 2.681 | 4.758 | | 22.70 |
| 5) | T | Freon 114 | 1.463 | 1.331 | 1.329 | 1.358 | 1.302 | 1.260 | 1.340 | | 5.12 |
| 6) | T | Vinyl Chloride | 4.096 | 4.010 | 4.097 | 4.081 | 3.795 | 3.496 | 3.929 | | 6.14 |
| 7) | T | 1,3-Butadiene | 3.139 | 2.964 | 3.048 | 3.347 | 3.150 | 2.871 | 3.086 | | 5.37 |
| 8) | T | Bromomethane | 1.521 | 1.485 | 1.419 | 1.468 | 1.394 | 1.329 | 1.436 | | 4.84 |
| 9) | T | Chloroethane | 1.779 | 1.745 | 1.707 | 1.724 | 1.616 | 1.505 | 1.679 | | 6.03 |
| 10) | T | Ethanol | 2.413 | 2.065 | 1.891 | 2.125 | 1.879 | 1.697 | 2.012 | | 12.33 |
| 11) | T | Acetonitrile | 6.541 | 5.993 | 5.562 | 5.694 | 4.952 | 4.405 | 5.525 | | 13.70 |
| 12) | T | Acrolein | 1.824 | 1.684 | 1.542 | 1.968 | 1.798 | 1.693 | 1.751 | | 8.32 |
| 13) | T | Acetone | 4.534 | 4.401 | 3.418 | 2.451 | 2.122 | 2.009 | 3.156 | | 35.84 |
| 14) | T | Trichlorofluorome | 3.561 | 3.471 | 3.364 | 3.335 | 3.206 | 3.124 | 3.344 | | 4.85 |
| 15) | T | Isopropanol | 8.548 | 8.366 | 7.350 | 8.119 | 6.947 | 5.602 | 7.488 | | 14.83 |
| 16) | T | Acrylonitrile | 4.210 | 4.110 | 3.984 | 4.255 | 3.926 | 3.707 | 4.032 | | 5.04 |
| 17) | T | 1,1-Dichloroethen | 1.984 | 1.831 | 1.842 | 1.827 | 1.720 | 1.656 | 1.810 | | 6.24 |
| 18) | T | tert-Butanol | 8.813 | 8.424 | 8.255 | 7.605 | 6.990 | 6.347 | 7.739 | | 12.13 |
| 19) | T | Methylene Chlorid | 2.478 | 2.272 | 1.985 | 1.955 | 1.840 | 1.781 | 2.052 | | 13.12 |
| 20) | T | Allyl Chloride | 2.705 | 2.617 | 2.377 | 2.659 | 2.570 | 2.623 | 2.592 | | 4.43 |
| 21) | T | Trichlorotrifluor | 1.294 | 1.228 | 1.198 | 1.181 | 1.146 | 1.134 | 1.197 | | 4.91 |
| 22) | T | Carbon Disulfide | 1.068 | 0.937 | 0.841 | 0.751 | 0.701 | 0.665 | 0.827 | E1 | 18.57 |
| 23) | T | trans-1,2-Dichlor | 4.265 | 4.197 | 4.074 | 4.145 | 3.870 | 3.696 | 4.041 | | 5.36 |
| 24) | T | 1,1-Dichloroethan | 5.006 | 4.749 | 4.408 | 4.636 | 4.184 | 3.856 | 4.473 | | 9.25 |
| 25) | T | Methyl tert-Butyl | 6.379 | 6.149 | 6.013 | 6.029 | 5.571 | 5.263 | 5.901 | | 6.93 |
| 26) | T | Vinyl Acetate | 0.294 | 0.346 | 0.361 | 0.398 | 0.395 | 0.395 | 0.365 | | 11.12 |
| 27) | T | 2-Butanone | 1.661 | 1.707 | 1.693 | 1.390 | 1.291 | 1.216 | 1.493 | | 14.73 |
| 28) | T | cis-1,2-Dichloroe | 3.909 | 3.821 | 3.748 | 3.828 | 3.559 | 3.375 | 3.707 | | 5.43 |
| 29) | T | Diisopropyl Ether | 1.771 | 1.676 | 1.600 | 1.608 | 1.524 | 1.455 | 1.606 | | 6.92 |
| 30) | T | Ethyl Acetate | 1.281 | 1.251 | 1.241 | 1.024 | 0.953 | 0.887 | 1.106 | | 15.54 |
| 31) | T | n-Hexane | 5.998 | 5.657 | 5.450 | 5.387 | 5.054 | 4.783 | 5.388 | | 7.98 |
| 32) | T | Chloroform | 3.227 | 3.194 | 3.126 | 3.149 | 2.975 | 2.851 | 3.087 | | 4.69 |
| 33) | S | 1,2-Dichloroethan | 2.596 | 2.638 | 2.605 | 2.602 | 2.520 | 2.418 | 2.563 | | 3.17 |
| 34) | T | Tetrahydrofuran | 1.370 | 1.354 | 1.335 | 1.359 | 1.264 | 1.183 | 1.311 | | 5.58 |
| 35) | T | Ethyl tert-Butyl | 2.416 | 2.423 | 2.313 | 2.399 | 2.259 | 2.167 | 2.330 | | 4.40 |
| 36) | T | 1,2-Dichloroethan | 3.773 | 3.628 | 3.577 | 3.590 | 3.330 | 3.088 | 3.498 | | 7.05 |
| 37) | IR | 1,4-Difluorobenzene ( | ----------ISTD---------- | | | | | | | | |
| 38) | T | 1,1,1-Trichloroet | 0.637 | 0.607 | 0.599 | 0.630 | 0.607 | 0.584 | 0.611 | | 3.22 |
| 39) | T | Isopropyl Acetate | 0.390 | 0.400 | 0.392 | 0.400 | 0.382 | 0.361 | 0.387 | | 3.81 |
| 40) | T | 1-Butanol | 0.504 | 0.496 | 0.494 | 0.577 | 0.552 | 0.527 | 0.525 | | 6.37 |
| 41) | T | Benzene | 1.797 | 1.685 | 1.592 | 1.612 | 1.519 | 1.431 | 1.606 | | 7.92 |
| 42) | T | Carbon Tetrachlor | 0.468 | 0.480 | 0.460 | 0.496 | 0.488 | 0.475 | 0.478 | | 2.72 |
| 43) | T | Cyclohexane | 0.720 | 0.611 | 0.614 | 0.621 | 0.597 | 0.571 | 0.623 | | 8.21 |
| 44) | T | tert-Amyl Methyl | 1.218 | 1.212 | 1.153 | 1.206 | 1.145 | 1.078 | 1.169 | | 4.63 |
| 45) | T | 1,2-Dichloropropa | 0.582 | 0.546 | 0.552 | 0.573 | 0.542 | 0.515 | 0.552 | | 4.28 |
| 46) | T | Bromodichlorometh | 0.527 | 0.528 | 0.522 | 0.556 | 0.524 | 0.499 | 0.526 | | 3.47 |
| 47) | T | Trichloroethene | 0.327 | 0.348 | 0.322 | 0.329 | 0.319 | 0.308 | 0.326 | | 4.11 |
| 48) | T | 1,4-Dioxane | 0.399 | 0.384 | 0.372 | 0.308 | 0.293 | 0.277 | 0.339 | | 15.44 |
| 49) | T | Isooctane | 2.754 | 2.714 | 2.638 | 2.771 | 2.607 | 2.328 | 2.635 | | 6.20 |
| 50) | T | Methyl Methacryla | 0.135 | 0.147 | 0.147 | 0.152 | 0.148 | 0.146 | 0.146 | | 3.90 |
| 51) | T | n-Heptane | 0.496 | 0.435 | 0.431 | 0.439 | 0.413 | 0.391 | 0.434 | | 8.06 |
| 52) | T | cis-1,3-Dichlorop | 0.696 | 0.681 | 0.667 | 0.710 | 0.664 | 0.618 | 0.673 | | 4.75 |
| 53) | T | 4-Methyl-2-pentan | 0.658 | 0.635 | 0.639 | 0.598 | 0.567 | 0.524 | 0.603 | | 8.42 |
| 54) | T | trans-1,3-Dichlor | 0.620 | 0.607 | 0.609 | 0.654 | 0.617 | 0.587 | 0.616 | | 3.59 |
| 55) | T | 1,1,2-Trichloroet | 0.377 | 0.388 | 0.375 | 0.387 | 0.370 | 0.359 | 0.376 | | 2.92 |
| 56) | I | Chlorobenzene-d5 (IS3 | ----------ISTD---------- | | | | | | | | |
| 57) | S | Toluene-d8 (SS2) | 2.183 | 2.198 | 2.169 | 2.174 | 2.203 | 2.239 | 2.194 | | 1.16 |

Response Factor Report MS08

Method Path : J:\MS08\METHODS\
Method File : R8061907.M
Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
Last Update : Wed Jun 20 09:06:46 2007
Response Via : Initial Calibration

Calibration Files
0.5 =06190709.D 1 =06190710.D 5 =06190711.D 25 =06190712.D
50 =06190713.D 100 =06190714.D =

| | | Compound | 0.5 | 1 | 5 | 25 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 58) | T | Toluene | 3.030 | 2.938 | 2.791 | 2.794 | 2.678 | 2.520 | 2.792 | 6.50 |
| 59) | T | 2-Hexanone | 3.567 | 3.428 | 3.468 | 2.500 | 2.279 | 2.041 | 2.881 | 23.69 |
| 60) | T | Dibromochlorometh | 0.640 | 0.588 | 0.608 | 0.644 | 0.630 | 0.622 | 0.622 | 3.39 |
| 61) | T | 1,2-Dibromoethane | 0.733 | 0.687 | 0.670 | 0.693 | 0.675 | 0.654 | 0.685 | 3.92 |
| 62) | T | Butyl Acetate | 3.472 | 3.439 | 3.390 | 2.861 | 2.602 | 2.317 | 3.014 | 16.32 |
| 63) | T | n-Octane | 1.000 | 0.983 | 0.949 | 0.992 | 0.947 | 0.889 | 0.960 | 4.32 |
| 64) | T | Tetrachloroethene | 0.612 | 0.594 | 0.556 | 0.578 | 0.572 | 0.568 | 0.580 | 3.42 |
| 65) | T | Chlorobenzene | 1.712 | 1.672 | 1.571 | 1.617 | 1.557 | 1.491 | 1.603 | 5.03 |
| 66) | T | Ethylbenzene | 3.499 | 3.317 | 3.211 | 3.284 | 3.121 | 2.882 | 3.219 | 6.45 |
| 67) | T | m- & p-Xylene | 2.226 | 2.187 | 2.093 | 2.137 | 2.035 | 1.874 | 2.092 | 6.04 |
| 68) | T | Bromoform | 0.359 | 0.382 | 0.396 | 0.424 | 0.420 | 0.420 | 0.400 | 6.57 |
| 69) | T | Styrene | 1.777 | 1.689 | 1.702 | 1.772 | 1.714 | 1.638 | 1.716 | 3.06 |
| 70) | T | o-Xylene | 2.444 | 2.326 | 2.270 | 2.329 | 2.228 | 2.084 | 2.280 | 5.29 |
| 71) | T | n-Nonane | 2.215 | 2.198 | 2.186 | 2.274 | 2.076 | 1.829 | 2.130 | 7.55 |
| 72) | T | 1,1,2,2-Tetrachlo | 1.126 | 1.077 | 1.086 | 1.122 | 1.064 | 1.000 | 1.079 | 4.26 |
| 73) | S | Bromofluorobenzen | 0.556 | 0.555 | 0.553 | 0.558 | 0.579 | 0.593 | 0.566 | 2.94 |
| 74) | T | Cumene | 2.783 | 2.706 | 2.634 | 2.765 | 2.644 | 2.463 | 2.666 | 4.36 |
| 75) | T | alpha-Pinene | 1.618 | 1.595 | 1.592 | 1.671 | 1.600 | 1.508 | 1.597 | 3.30 |
| 76) | T | n-Propylbenzene | 3.980 | 3.924 | 3.831 | 4.037 | 3.770 | 3.366 | 3.818 | 6.33 |
| 77) | T | 3-Ethyltoluene | 2.913 | 2.867 | 2.810 | 3.048 | 2.843 | 2.674 | 2.859 | 4.30 |
| 78) | T | 4-Ethyltoluene | 2.852 | 2.720 | 2.677 | 2.718 | 2.665 | 2.474 | 2.684 | 4.57 |
| 79) | T | 1,3,5-Trimethylbe | 2.552 | 2.468 | 2.368 | 2.450 | 2.353 | 2.227 | 2.403 | 4.69 |
| 80) | T | alpha-Methylstyre | 1.230 | 1.205 | 1.218 | 1.295 | 1.245 | 1.196 | 1.232 | 2.89 |
| 81) | T | 2-Ethyltoluene | 3.052 | 2.959 | 2.868 | 3.057 | 2.908 | 2.716 | 2.926 | 4.38 |
| 82) | T | 1,2,4-Trimethylbe | 2.555 | 2.466 | 2.397 | 2.456 | 2.333 | 2.130 | 2.390 | 6.16 |
| 83) | T | n-Decane | 2.410 | 2.339 | 2.345 | 2.521 | 2.360 | 2.139 | 2.352 | 5.29 |
| 84) | T | Benzyl Chloride | 2.380 | 2.403 | 2.405 | 2.692 | 2.537 | 2.351 | 2.461 | 5.28 |
| 85) | T | 1,3-Dichlorobenze | 1.218 | 1.202 | 1.167 | 1.234 | 1.194 | 1.137 | 1.192 | 2.95 |
| 86) | T | 1,4-Dichlorobenze | 1.225 | 1.134 | 1.150 | 1.208 | 1.165 | 1.125 | 1.168 | 3.48 |
| 87) | T | sec-Butylbenzene | 3.210 | 3.178 | 3.097 | 3.342 | 3.160 | 2.867 | 3.142 | 5.01 |
| 88) | T | p-Isopropyltoluen | 2.490 | 2.470 | 2.455 | 2.652 | 2.487 | 2.229 | 2.464 | 5.51 |
| 89) | T | 1,2,3-Trimethylbe | 2.364 | 2.304 | 2.273 | 2.447 | 2.315 | 2.126 | 2.305 | 4.62 |
| 90) | T | 1,2-Dichlorobenze | 1.163 | 1.128 | 1.110 | 1.153 | 1.096 | 1.022 | 1.112 | 4.57 |
| 91) | T | d-Limonene | 1.113 | 1.160 | 1.164 | 1.215 | 1.139 | 1.016 | 1.135 | 5.93 |
| 92) | T | 1,2-Dibromo-3-Chl | 0.317 | 0.332 | 0.366 | 0.435 | 0.421 | 0.403 | 0.379 | 12.75 |
| 93) | T | n-Undecane | 2.317 | 2.377 | 2.424 | 2.688 | 2.477 | 2.155 | 2.406 | 7.36 |
| 94) | T | 1,2,4-Trichlorobe | 0.232 | 0.231 | 0.237 | 0.259 | 0.251 | 0.240 | 0.242 | 4.57 |
| 95) | T | Naphthalene | 2.704 | 2.720 | 2.756 | 3.207 | 3.056 | 2.786 | 2.872 | 7.28 |
| 96) | T | n-Dodecane | 2.258 | 2.267 | 2.329 | 2.650 | 2.460 | 2.137 | 2.350 | 7.69 |
| 97) | T | Hexachloro-1,3-bu | 0.504 | 0.450 | 0.486 | 0.522 | 0.511 | 0.500 | 0.496 | 5.11 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data Path : J:\MS08\Data\2007_06\20\
Data File : 06200703.D
Acq On : 20 Jun 2007 12:05
Operator : AB
Sample : 1.0ng CRQL std
Misc : S15-06190701/S15-05250702
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 13:01:01 2007
Quant Method : J:\MS08\METHODS\R8061907.M
Quant Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
QLast Update : Wed Jun 20 09:06:46 2007
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | IR | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 130 | -0.02 |
| 2 | T | Propene | 3.575 | 3.013 | 15.7 | 93 | 0.02 |
| 3 | T | Dichlorodifluoromethane | 4.170 | 4.004 | 4.0 | 118 | 0.02 |
| 4 | T | Chloromethane | 4.758 | 4.660 | 2.1 | 111 | 0.00 |
| 5 | T | Freon 114 | 1.340 | 1.373 | -2.5 | 134 | 0.01 |
| 6 | T | Vinyl Chloride | 3.929 | 3.588 | 8.7 | 117 | 0.00 |
| 7 | T | 1,3-Butadiene | 3.086 | 2.718 | 11.9 | 119 | 0.00 |
| 8 | T | Bromomethane | 1.436 | 1.448 | -0.8 | 127 | 0.00 |
| 9 | T | Chloroethane | 1.679 | 1.592 | 5.2 | 119 | 0.00 |
| 10 | T | Ethanol | 2.012 | 1.698 | 15.6 | 107 | -0.02 |
| 11 | T | Acetonitrile | 5.525 | 4.683 | 15.2 | 102 | -0.01 |
| 12 | T | Acrolein | 1.751 | 1.699 | 3.0 | 131 | 0.00 |
| 13 | T | Acetone | 3.156 | 4.046 | -28.2 | 120 | 0.00 |
| 14 | T | Trichlorofluoromethane | 3.344 | 3.409 | -1.9 | 128 | 0.00 |
| 15 | T | Isopropanol | 7.488 | 6.988 | 6.7 | 109 | -0.03 |
| 16 | T | Acrylonitrile | 4.032 | 3.666 | 9.1 | 116 | -0.02 |
| 17 | T | 1,1-Dichloroethene | 1.810 | 1.763 | 2.6 | 125 | 0.00 |
| 18 | T | tert-Butanol | 7.739 | 7.608 | 1.7 | 118 | -0.02 |
| 19 | T | Methylene Chloride | 2.052 | 2.056 | -0.2 | 118 | -0.02 |
| 20 | T | Allyl Chloride | 2.592 | 2.381 | 8.1 | 119 | -0.01 |
| 21 | T | Trichlorotrifluoroethane | 1.197 | 1.236 | -3.3 | 131 | 0.00 |
| 22 | T | Carbon Disulfide | 8.271 | 9.124 | -10.3 | 127 | 0.00 |
| 23 | T | trans-1,2-Dichloroethene | 4.041 | 3.764 | 6.9 | 117 | -0.01 |
| 24 | T | 1,1-Dichloroethane | 4.473 | 4.372 | 2.3 | 120 | -0.02 |
| 25 | T | Methyl tert-Butyl Ether | 5.901 | 5.684 | 3.7 | 120 | 0.00 |
| 26 | T | Vinyl Acetate | 0.365 | 0.324 | 11.2 | 122 | -0.01 |
| 27 | T | 2-Butanone | 1.493 | 1.599 | -7.1 | 122 | 0.00 |
| 28 | T | cis-1,2-Dichloroethene | 3.707 | 3.437 | 7.3 | 117 | -0.02 |
| 29 | T | Diisopropyl Ether | 1.606 | 1.513 | 5.8 | 118 | -0.01 |
| 30 | T | Ethyl Acetate | 1.106 | 1.141 | -3.2 | 119 | 0.00 |
| 31 | T | n-Hexane | 5.388 | 4.966 | 7.8 | 114 | 0.00 |
| 32 | T | Chloroform | 3.087 | 2.940 | 4.8 | 120 | -0.03 |
| 33 | S | 1,2-Dichloroethane-d4(SS1) | 2.563 | 2.345 | 8.5 | 116 | -0.01 |
| 34 | T | Tetrahydrofuran | 1.311 | 1.275 | 2.7 | 123 | 0.00 |
| 35 | T | Ethyl tert-Butyl Ether | 2.330 | 2.283 | 2.0 | 123 | 0.00 |
| 36 | T | 1,2-Dichloroethane | 3.498 | 3.142 | 10.2 | 113 | -0.02 |
| 37 | IR | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 127 | -0.01 |
| 38 | T | 1,1,1-Trichloroethane | 0.611 | 0.603 | 1.3 | 126 | -0.01 |
| 39 | T | Isopropyl Acetate | 0.387 | 0.372 | 3.9 | 118 | 0.00 |
| 40 | T | 1-Butanol | 0.525 | 0.466 | 11.2 | 119 | 0.00 |
| 41 | T | Benzene | 1.606 | 1.586 | 1.2 | 119 | -0.01 |
| 42 | T | Carbon Tetrachloride | 0.478 | 0.464 | 2.9 | 122 | -0.01 |
| 43 | T | Cyclohexane | 0.623 | 0.616 | 1.1 | 127 | -0.02 |
| 44 | T | tert-Amyl Methyl Ether | 1.169 | 1.105 | 5.5 | 115 | 0.00 |
| 45 | T | 1,2-Dichloropropane | 0.552 | 0.521 | 5.6 | 121 | -0.01 |
| 46 | T | Bromodichloromethane | 0.526 | 0.503 | 4.4 | 121 | -0.01 |
| 47 | T | Trichloroethene | 0.326 | 0.326 | 0.0 | 118 | -0.01 |
| 48 | T | 1,4-Dioxane | 0.339 | 0.375 | -10.6 | 123 | 0.00 |
| 49 | T | Isooctane | 2.635 | 2.501 | 5.1 | 117 | 0.00 |
| 50 | T | Methyl Methacrylate | 0.146 | 0.145 | 0.7 | 125 | 0.00 |
| 51 | T | n-Heptane | 0.434 | 0.411 | 5.3 | 119 | 0.00 |

AB 6/20/07

Evaluate Continuing Calibration Report

Data Path : J:\MS08\Data\2007_06\20\
Data File : 06200703.D
Acq On : 20 Jun 2007 12:05
Operator : AB
Sample : 1.0ng CRQL std
Misc : S15-06190701/S15-05250702
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 13:01:01 2007
Quant Method : J:\MS08\METHODS\R8061907.M
Quant Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
QLast Update : Wed Jun 20 09:06:46 2007
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | T | cis-1,3-Dichloropropene | 0.673 | 0.637 | 5.3 | 118 | 0.00 |
| 53 | T | 4-Methyl-2-pentanone | 0.603 | 0.582 | 3.5 | 116 | 0.00 |
| 54 | T | trans-1,3-Dichloropropene | 0.616 | 0.567 | 8.0 | 118 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.376 | 0.358 | 4.8 | 117 | -0.01 |
| 56 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 124 | 0.00 |
| 57 | S | Toluene-d8 (SS2) | 2.194 | 2.242 | -2.2 | 126 | 0.00 |
| 58 | T | Toluene | 2.792 | 2.868 | -2.7 | 121 | 0.00 |
| 59 | T | 2-Hexanone | 2.881 | 2.897 | -0.6 | 104 | 0.00 |
| 60 | T | Dibromochloromethane | 0.622 | 0.627 | -0.8 | 132 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.685 | 0.669 | 2.3 | 120 | 0.00 |
| 62 | T | Butyl Acetate | 3.014 | 2.975 | 1.3 | 107 | 0.00 |
| 63 | T | n-Octane | 0.960 | 0.944 | 1.7 | 119 | 0.00 |
| 64 | T | Tetrachloroethene | 0.580 | 0.624 | -7.6 | 130 | 0.00 |
| 65 | T | Chlorobenzene | 1.603 | 1.680 | -4.8 | 124 | 0.00 |
| 66 | T | Ethylbenzene | 3.219 | 3.325 | -3.3 | 124 | 0.00 |
| 67 | T | m- & p-Xylene | 2.092 | 2.188 | -4.6 | 124 | -0.02 |
| 68 | T | Bromoform | 0.400 | 0.394 | 1.5 | 127 | 0.00 |
| 69 | T | Styrene | 1.716 | 1.735 | -1.1 | 127 | 0.00 |
| 70 | T | o-Xylene | 2.280 | 2.306 | -1.1 | 123 | 0.00 |
| 71 | T | n-Nonane | 2.130 | 1.908 | 10.4 | 107 | 0.00 |
| 72 | T | 1,1,2,2-Tetrachloroethane | 1.079 | 1.063 | 1.5 | 122 | 0.00 |
| 73 | S | Bromofluorobenzene (SS3) | 0.566 | 0.595 | -5.1 | 132 | 0.00 |
| 74 | T | Cumene | 2.666 | 2.725 | -2.2 | 124 | 0.00 |
| 75 | T | alpha-Pinene | 1.597 | 1.585 | 0.8 | 123 | 0.00 |
| 76 | T | n-Propylbenzene | 3.818 | 3.877 | -1.5 | 122 | 0.00 |
| 77 | T | 3-Ethyltoluene | 2.859 | 2.914 | -1.9 | 126 | 0.00 |
| 78 | T | 4-Ethyltoluene | 2.684 | 2.775 | -3.4 | 126 | 0.00 |
| 79 | T | 1,3,5-Trimethylbenzene | 2.403 | 2.436 | -1.4 | 122 | 0.00 |
| 80 | T | alpha-Methylstyrene | 1.232 | 1.228 | 0.3 | 126 | 0.00 |
| 81 | T | 2-Ethyltoluene | 2.926 | 2.948 | -0.8 | 123 | 0.00 |
| 82 | T | 1,2,4-Trimethylbenzene | 2.390 | 2.449 | -2.5 | 123 | -0.01 |
| 83 | T | n-Decane | 2.352 | 2.244 | 4.6 | 119 | 0.00 |
| 84 | T | Benzyl Chloride | 2.461 | 2.314 | 6.0 | 119 | 0.00 |
| 85 | T | 1,3-Dichlorobenzene | 1.192 | 1.237 | -3.8 | 127 | 0.00 |
| 86 | T | 1,4-Dichlorobenzene | 1.168 | 1.213 | -3.9 | 132 | 0.00 |
| 87 | T | sec-Butylbenzene | 3.142 | 3.169 | -0.9 | 123 | 0.00 |
| 88 | T | p-Isopropyltoluene | 2.464 | 2.536 | -2.9 | 127 | 0.00 |
| 89 | T | 1,2,3-Trimethylbenzene | 2.305 | 2.303 | 0.1 | 124 | 0.00 |
| 90 | T | 1,2-Dichlorobenzene | 1.112 | 1.161 | -4.4 | 127 | 0.00 |
| 91 | T | d-Limonene | 1.135 | 1.087 | 4.2 | 116 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.379 | 0.333 | 12.1 | 124 | 0.00 |
| 93 | T | n-Undecane | 2.406 | 2.286 | 5.0 | 119 | 0.00 |
| 94 | T | 1,2,4-Trichlorobenzene | 0.242 | 0.243 | -0.4 | 130 | 0.00 |
| 95 | T | Naphthalene | 2.872 | 2.821 | 1.8 | 128 | 0.00 |
| 96 | T | n-Dodecane | 2.350 | 2.153 | 8.4 | 117 | 0.00 |
| 97 | T | Hexachloro-1,3-butadiene | 0.496 | 0.521 | -5.0 | 143 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

AS 6/20/07

Evaluate Continuing Calibration Report

Data Path : J:\MS08\Data\2007_06\20\
Data File : 06200714.D
Acq On : 20 Jun 2007 20:28
Operator : AB
Sample : 25ng TO-15 CCV STD
Misc : S15-06190701/06060701

ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 09:34:43 2007
Quant Method : J:\MS08\METHODS\R8061907.M
Quant Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
QLast Update : Wed Jun 20 09:06:46 2007
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | IR | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 143 | 0.00 |
| 2 | T | Propene | 3.575 | 2.181 | 39.0# | 103 | 0.00 |
| 3 | T | Dichlorodifluoromethane | 4.170 | 3.603 | 13.6 | 121 | 0.00 |
| 4 | T | Chloromethane | 4.758 | 4.086 | 14.1 | 109 | 0.00 |
| 5 | T | Freon 114 | 1.340 | 1.272 | 5.1 | 134 | 0.00 |
| 6 | T | Vinyl Chloride | 3.929 | 3.154 | 19.7 | 110 | 0.00 |
| 7 | T | 1,3-Butadiene | 3.086 | 2.428 | 21.3 | 103 | 0.00 |
| 8 | T | Bromomethane | 1.436 | 1.211 | 15.7 | 118 | 0.00 |
| 9 | T | Chloroethane | 1.679 | 1.327 | 21.0 | 110 | 0.00 |
| 10 | T | Ethanol | 2.012 | 1.417 | 29.6 | 95 | 0.00 |
| 11 | T | Acetonitrile | 5.525 | 4.331 | 21.6 | 108 | 0.00 |
| 12 | T | Acrolein | 1.751 | 1.730 | 1.2 | 125 | 0.00 |
| 13 | T | Acetone | 3.156 | 2.165 | 31.4# | 126 | 0.00 |
| 14 | T | Trichlorofluoromethane | 3.344 | 3.165 | 5.4 | 135 | 0.00 |
| 15 | T | Isopropanol | 7.488 | 6.222 | 16.9 | 109 | 0.00 |
| 16 | T | Acrylonitrile | 4.032 | 3.577 | 11.3 | 120 | 0.00 |
| 17 | T | 1,1-Dichloroethene | 1.810 | 1.708 | 5.6 | 133 | 0.00 |
| 18 | T | tert-Butanol | 7.739 | 6.351 | 17.9 | 119 | 0.00 |
| 19 | T | Methylene Chloride | 2.052 | 1.799 | 12.3 | 131 | 0.00 |
| 20 | T | Allyl Chloride | 2.592 | 2.187 | 15.6 | 117 | 0.00 |
| 21 | T | Trichlorotrifluoroethane | 1.197 | 1.188 | 0.8 | 143 | 0.00 |
| 22 | T | Carbon Disulfide | 8.271 | 6.693 | 19.1 | 127 | 0.00 |
| 23 | T | trans-1,2-Dichloroethene | 4.041 | 3.567 | 11.7 | 123 | 0.00 |
| 24 | T | 1,1-Dichloroethane | 4.473 | 3.950 | 11.7 | 122 | 0.00 |
| 25 | T | Methyl tert-Butyl Ether | 5.901 | 5.292 | 10.3 | 125 | 0.00 |
| 26 | T | Vinyl Acetate | 0.365 | 0.389 | -6.6 | 139 | 0.00 |
| 27 | T | 2-Butanone | 1.493 | 1.211 | 18.9 | 124 | 0.00 |
| 28 | T | cis-1,2-Dichloroethene | 3.707 | 3.238 | 12.7 | 121 | 0.00 |
| 29 | T | Diisopropyl Ether | 1.606 | 1.500 | 6.6 | 133 | 0.00 |
| 30 | T | Ethyl Acetate | 1.106 | 0.870 | 21.3 | 121 | 0.00 |
| 31 | T | n-Hexane | 5.388 | 4.565 | 15.3 | 121 | 0.00 |
| 32 | T | Chloroform | 3.087 | 2.799 | 9.3 | 127 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4(SS1) | 2.563 | 2.201 | 14.1 | 121 | 0.00 |
| 34 | T | Tetrahydrofuran | 1.311 | 1.171 | 10.7 | 123 | 0.00 |
| 35 | T | Ethyl tert-Butyl Ether | 2.330 | 2.198 | 5.7 | 131 | 0.00 |
| 36 | T | 1,2-Dichloroethane | 3.498 | 2.896 | 17.2 | 115 | 0.00 |
| 37 | IR | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 138 | 0.00 |
| 38 | T | 1,1,1-Trichloroethane | 0.611 | 0.592 | 3.1 | 130 | 0.00 |
| 39 | T | Isopropyl Acetate | 0.387 | 0.359 | 7.2 | 124 | 0.00 |
| 40 | T | 1-Butanol | 0.525 | 0.506 | 3.6 | 121 | 0.00 |
| 41 | T | Benzene | 1.606 | 1.466 | 8.7 | 125 | 0.00 |
| 42 | T | Carbon Tetrachloride | 0.478 | 0.473 | 1.0 | 132 | 0.00 |
| 43 | T | Cyclohexane | 0.623 | 0.587 | 5.8 | 130 | 0.00 |
| 44 | T | tert-Amyl Methyl Ether | 1.169 | 1.099 | 6.0 | 126 | 0.00 |
| 45 | T | 1,2-Dichloropropane | 0.552 | 0.511 | 7.4 | 123 | 0.00 |
| 46 | T | Bromodichloromethane | 0.526 | 0.500 | 4.9 | 124 | 0.00 |
| 47 | T | Trichloroethene | 0.326 | 0.332 | -1.8 | 139 | 0.00 |
| 48 | T | 1,4-Dioxane | 0.339 | 0.288 | 15.0 | 129 | 0.00 |
| 49 | T | Isooctane | 2.635 | 2.393 | 9.2 | 119 | 0.00 |
| 50 | T | Methyl Methacrylate | 0.146 | 0.151 | -3.4 | 137 | 0.00 |

6/21/07

Evaluate Continuing Calibration Report

Data Path : J:\MS08\Data\2007_06\20\
Data File : 06200714.D
Acq On : 20 Jun 2007 20:28
Operator : AB
Sample : 25ng TO-15 CCV STD
Misc : S15-06190701/06060701

ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 09:34:43 2007
Quant Method : J:\MS08\METHODS\R8061907.M
Quant Title : TO-15 Tekmar AutoCan/HP 6890/HP 5973 MSD
QLast Update : Wed Jun 20 09:06:46 2007
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 51 | T | n-Heptane | 0.434 | 0.397 | 8.5 | 125 | 0.00 |
| 52 | T | cis-1,3-Dichloropropene | 0.673 | 0.635 | 5.6 | 123 | 0.00 |
| 53 | T | 4-Methyl-2-pentanone | 0.603 | 0.512 | 15.1 | 118 | 0.00 |
| 54 | T | trans-1,3-Dichloropropene | 0.616 | 0.584 | 5.2 | 123 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.376 | 0.366 | 2.7 | 130 | 0.00 |
| 56 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 129 | 0.00 |
| 57 | S | Toluene-d8 (SS2) | 2.194 | 2.267 | -3.3 | 135 | 0.00 |
| 58 | T | Toluene | 2.792 | 2.798 | -0.2 | 130 | 0.00 |
| 59 | T | 2-Hexanone | 2.881 | 1.969 | 31.7# | 102 | 0.00 |
| 60 | T | Dibromochloromethane | 0.622 | 0.667 | -7.2 | 134 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.685 | 0.702 | -2.5 | 131 | 0.00 |
| 62 | T | Butyl Acetate | 3.014 | 2.245 | 25.5 | 102 | 0.00 |
| 63 | T | n-Octane | 0.960 | 0.914 | 4.8 | 119 | 0.00 |
| 64 | T | Tetrachloroethene | 0.580 | 0.638 | -10.0 | 143 | 0.00 |
| 65 | T | Chlorobenzene | 1.603 | 1.652 | -3.1 | 132 | 0.00 |
| 66 | T | Ethylbenzene | 3.219 | 3.218 | 0.0 | 127 | 0.00 |
| 67 | T | m- & p-Xylene | 2.092 | 2.108 | -0.8 | 128 | 0.00 |
| 68 | T | Bromoform | 0.400 | 0.451 | -12.7 | 138 | 0.00 |
| 69 | T | Styrene | 1.716 | 1.785 | -4.0 | 130 | 0.00 |
| 70 | T | o-Xylene | 2.280 | 2.297 | -0.7 | 128 | 0.00 |
| 71 | T | n-Nonane | 2.130 | 1.803 | 15.4 | 103 | 0.00 |
| 72 | T | 1,1,2,2-Tetrachloroethane | 1.079 | 1.077 | 0.2 | 124 | 0.00 |
| 73 | S | Bromofluorobenzene (SS3) | 0.566 | 0.617 | -9.0 | 143 | 0.00 |
| 74 | T | Cumene | 2.666 | 2.778 | -4.2 | 130 | 0.00 |
| 75 | T | alpha-Pinene | 1.597 | 1.645 | -3.0 | 127 | 0.00 |
| 76 | T | n-Propylbenzene | 3.818 | 3.898 | -2.1 | 125 | 0.00 |
| 77 | T | 3-Ethyltoluene | 2.859 | 2.962 | -3.6 | 126 | 0.00 |
| 78 | T | 4-Ethyltoluene | 2.684 | 2.774 | -3.4 | 132 | 0.00 |
| 79 | T | 1,3,5-Trimethylbenzene | 2.403 | 2.446 | -1.8 | 129 | 0.00 |
| 80 | T | alpha-Methylstyrene | 1.232 | 1.296 | -5.2 | 130 | 0.00 |
| 81 | T | 2-Ethyltoluene | 2.926 | 3.027 | -3.5 | 128 | 0.00 |
| 82 | T | 1,2,4-Trimethylbenzene | 2.390 | 2.398 | -0.3 | 126 | 0.00 |
| 83 | T | n-Decane | 2.352 | 2.264 | 3.7 | 116 | 0.00 |
| 84 | T | Benzyl Chloride | 2.461 | 2.542 | -3.3 | 122 | 0.00 |
| 85 | T | 1,3-Dichlorobenzene | 1.192 | 1.251 | -4.9 | 131 | 0.00 |
| 86 | T | 1,4-Dichlorobenzene | 1.168 | 1.224 | -4.8 | 131 | 0.00 |
| 87 | T | sec-Butylbenzene | 3.142 | 3.254 | -3.6 | 126 | 0.00 |
| 88 | T | p-Isopropyltoluene | 2.464 | 2.611 | -6.0 | 127 | 0.00 |
| 89 | T | 1,2,3-Trimethylbenzene | 2.305 | 2.366 | -2.6 | 125 | 0.00 |
| 90 | T | 1,2-Dichlorobenzene | 1.112 | 1.152 | -3.6 | 129 | 0.00 |
| 91 | T | d-Limonene | 1.135 | 1.104 | 2.7 | 118 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.379 | 0.428 | -12.9 | 127 | 0.00 |
| 93 | T | n-Undecane | 2.406 | 2.352 | 2.2 | 113 | 0.00 |
| 94 | T | 1,2,4-Trichlorobenzene | 0.242 | 0.258 | -6.6 | 129 | 0.00 |
| 95 | T | Naphthalene | 2.872 | 3.093 | -7.7 | 125 | 0.00 |
| 96 | T | n-Dodecane | 2.350 | 2.333 | 0.7 | 114 | 0.00 |
| 97 | T | Hexachloro-1,3-butadiene | 0.496 | 0.532 | -7.3 | 132 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715

## Internal Standard Area and RT Summary

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Humphrey
Sampling Media: Summa Canister(s)
Test Notes:

Lab File ID: 06190701.D
Date Analyzed: 06/19/07
Time Analyzed: 09:41

| | | IS1 (BCM) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (CBZ) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | **24 Hour Standard** | 271559 | 9.18 | 1003474 | 11.14 | 471409 | 15.99 |
| | **Upper Limit** | 380183 | 9.51 | 1404864 | 11.47 | 659973 | 16.32 |
| | **Lower Limit** | 162935 | 8.85 | 602084 | 10.81 | 282845 | 15.66 |
| | **Client Sample ID** | | | | | | |
| 01 | Method Blank | 285194 | 9.16 | 1063787 | 11.13 | 461560 | 15.98 |
| 02 | Lab Control Sample | 273380 | 9.19 | 1012077 | 11.15 | 474908 | 15.99 |
| 03 | Duplicate Lab Control Sample | 281902 | 9.18 | 1040291 | 11.14 | 489726 | 15.99 |
| 04 | WDI-IBM-49-6-10-07 | 277645 | 9.16 | 1028324 | 11.14 | 457381 | 15.98 |
| 05 | WDI-IBM-50-6-10-07 | 287587 | 9.16 | 1066467 | 11.14 | 474135 | 15.99 |
| 06 | WDI-IBM-03-6-9-07 | 289211 | 9.18 | 1061951 | 11.14 | 488234 | 15.99 |
| 07 | WDI-IBM-41-6-10-07 | 288375 | 9.17 | 1064763 | 11.14 | 466494 | 15.98 |
| 08 | WDI-IBM-41-6-10-07 (Lab Duplicate) | 287130 | 9.17 | 1052142 | 11.14 | 456309 | 15.98 |
| 09 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
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| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Verified by: RC Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715

## Internal Standard Area and RT Summary

Test Code: EPA TO-15 Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Aristotle Bragasin
Sampling Media: Summa Canister(s)
Test Notes:

Lab File ID: 06200701.D
Date Analyzed: 06/20/07
Time Analyzed: 10:30

| | | IS1 (BCM) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (CBZ) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | **24 Hour Standard** | 481397 | 9.07 | 2300265 | 11.00 | 1262984 | 15.82 |
| | **Upper Limit** | 673956 | 9.40 | 3220371 | 11.33 | 1768178 | 16.15 |
| | **Lower Limit** | 288838 | 8.74 | 1380159 | 10.67 | 757790 | 15.49 |
| | **Client Sample ID** | | | | | | |
| 01 | Method Blank | 467717 | 9.04 | 2244383 | 10.98 | 1228497 | 15.81 |
| 02 | Lab Control Sample | 447994 | 9.07 | 2148115 | 11.00 | 1216505 | 15.82 |
| 03 | Duplicate Lab Control Sample | 450756 | 9.08 | 2167344 | 11.00 | 1225211 | 15.82 |
| 04 | WDI-IBM-24-6-10-07 | 447196 | 9.04 | 2171248 | 10.98 | 1206861 | 15.81 |
| 05 | WDI-IBM-03B-6-10-07 | 449150 | 9.05 | 2168320 | 10.99 | 1205690 | 15.81 |
| 06 | WDI-IBM-03B-6-10-07 (Lab Duplicate) | 466943 | 9.05 | 2241745 | 10.98 | 1238812 | 15.81 |
| 07 | WDI-IBM-28-6-10-07 | 487866 | 9.05 | 2310779 | 10.98 | 1274711 | 15.81 |
| 08 | WDI-IBM-24B-6-9-07 | 500712 | 9.05 | 2375319 | 10.98 | 1290810 | 15.81 |
| 09 | WDI-IBM-24B-6-9-07-SC | 505151 | 9.06 | 2382652 | 10.99 | 1303049 | 15.81 |
| 10 | WDI-IBM-22-6-9-07 | 510146 | 9.05 | 2426986 | 10.99 | 1308272 | 15.81 |
| 11 | | | | | | | |
| 12 | | | | | | | |
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| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Verified by: RG Date: 6/26/07

| | DATE/TIME | FILENAME | SAMPLE ID | MISC. INFO | AS POS | INIT | COMMENT |
|---|---|---|---|---|---|---|---|
| 5 | 6/11/07 14:52 | 06110705.D | 25ng TO-15 LCSD | S15-05250705/S15-05230703 | 2 | CH/ST | |
| 6 | 6/11/07 15:38 | 06110706.D | Blank (100ml) | S15-05250705 no special bake | 1 | | |
| 7 | 6/11/07 16:43 | 06110707.D | P2701682-003 Dil (100ml) | [redacted] | 12 | | CASE FILE: DIL NOT NEEDED |
| 8 | 6/11/07 17:23 | 06110708.D | P2701682-003 Dup Dil (100ml) | [redacted] | 12 | | PASS AS DUP (EXTRA DUP.) |
| 9 | 6/11/07 18:09 | 06110709.D | P2701682-003 (25ml) | [redacted] | 12 | | CASE FILE: DIL NOT NEEDED. |
| 10 | 6/11/07 18:46 | 06110710.D | P2701657-002 Dil (200ml) | [redacted] | 14 | | |
| 1 | 6/12/07 9:35 | 06120701.D | 25ng TO-15 CCV Std | S15-05250705/S15-05240704 | 1 | CH/ST | PASS |
| 2 | 6/12/07 10:26 | 06120702.D | Method Blank (1000ml) | S15-05250705 | 1 | | PASS |
| 3 | 6/12/07 11:09 | 06120703.D | 25ng TO-15 LCS | S15-05250705/S15-05230703 | 2 | | PASS |
| 4 | 6/12/07 11:53 | 06120704.D | P2701646-003 (1.0ml) | [redacted] | 1 | | CASE FILE: RAN @ higher vol. |
| 5 | 6/12/07 12:33 | 06120705.D | P2701646-003 (8.0ml) | [redacted] | 1 | | |
| 6 | 6/12/07 13:09 | 06120706.D | P2701646-003 Dup (8.0ml) | [redacted] | 1 | | PASS AS DUP. |
| 7 | 6/12/07 14:27 | 06120707.D | CAS QC4A 6/9/07 | 1SC00481 | 5 | | NOT USED |
| 8 | 6/12/07 16:01 | 06120708.D | CAS QC4A 6/9/07 | 1SC00481 | 5 | | PASS except for Benzyl that are to 1.0ng ONLY. |
| 9 | 6/12/07 16:37 | 06120709.D | P2701678-001 (0.50ml) | [redacted] | 1 | | |
| 10 | 6/12/07 17:36 | 06120710.D | Blank (100ml) | System Check | 1 | | |
| 11 | 6/12/07 18:12 | 06120711.D | 25ng Std Check | S15-05250705/S15-05240704 | 1 | | |
| 12 | 6/12/07 18:49 | 06120712.D | 1ng Std Check | S15-05250705/S15-05250703 | 1 | | |
| 13 | 6/12/07 19:26 | 06120713.D | 0.5ng TO-15 ICAL Std | S15-05250705/S15-05250703 | 1 | | ~~PASS~~ ICAL GOOD FOR ALL COMPOUNDS ~~(0.5ng-100ng)~~ |
| 14 | 6/12/07 20:03 | 06120714.D | 1ng TO-15 ICAL Std | S15-05250705/S15-05250703 | 1 | | ~~EXCEPT FOR~~ 0.5ng-100ng |
| 15 | 6/12/07 20:39 | 06120715.D | 5ng TO-15 ICAL Std | S15-05250705/S15-05250703 | 1 | | except for Acetone & 1-butanol |
| 16 | 6/12/07 21:16 | 06120716.D | 25ng TO-15 ICAL Std | S15-05250705/S15-05240704 | 1 | | 1.0ng → 100ng |
| 17 | 6/12/07 21:52 | 06120717.D | 50ng TO-15 ICAL Std | S15-05250705/S15-05240704 | 1 | | SS 6/13/07 |
| 18 | 6/12/07 22:29 | 06120718.D | 100ng TO-15 ICAL Std | S15-05250705/S15-05240704 | 1 | | |
| 19 | 6/12/07 23:05 | 06120719.D | 25ng TO-15 ICV Std | S15-05250705/S15-05230703 | 2 | | PASS |
| 1 | 6/13/07 10:40 | 06130701.D | Blank (100ml) | System Check LCS can open | 1 | CH/ST | |
| 2 | 6/13/07 11:17 | 06130702.D | 25ng TO-15 CCV Std | S15-05250705/S15-05240704 | 1 | | PASS |
| 3 | 6/13/07 12:49 | 06130703.D | Method Blank (1000ml) | S15-05250705 | 1 | | NOT USED |
| 4 | 6/13/07 13:29 | 06130704.D | Method Blank (1000ml) | S15-05250705 | 1 | | PASS |
| 5 | 6/13/07 14:07 | 06130705.D | 25ng TO-15 LCS | S15-05250705/S15-05230703 | 2 | | PASS |
| 6 | 6/13/07 14:50 | 06130706.D | P2701678-001 (0.35ml) | [redacted] | 1 | | |
| 7 | 6/13/07 15:29 | 06130707.D | P2701678-001 Dup (0.35ml) | [redacted] | 1 | | PASS AS DUP. |
| 8 | 6/13/07 16:06 | 06130708.D | P2701678-002 (0.030ml) | [redacted] | 1 | | |
| 9 | 6/13/07 17:01 | 06130709.D | P2701712-001 (1000ml) | [redacted] | 3 | | |
| 10 | 6/13/07 18:08 | 06130710.D | P2701712-002 (1000ml) | [redacted] | 4 | | |
| 11 | 6/13/07 18:45 | 06130711.D | P2701712-002 dil (100ml) | [redacted] | 4 | | CASE FILE: DIL NOT NEEDED |
| 12 | 6/13/07 19:25 | 06130712.D | P2701712-003 (1000ml) | [redacted] | 5 | | |
| 13 | 6/13/07 20:02 | 06130713.D | P2701712-003 Dil (100ml) | [redacted] | 5 | | CASE FILE: DIL NOT NEEDED |
| 14 | 6/13/07 20:41 | 06130714.D | P2701712-004 (1000ml) | [redacted] | 6 | | |
| 15 | 6/13/07 21:18 | 06130715.D | P2701712-004 Dil (100ml) | [redacted] | 6 | | CASE FILE: DIL NOT NEEDED |
| 16 | 6/13/07 21:58 | 06130716.D | P2701712-005 (1000ml) | [redacted] | 7 | | |
| 17 | 6/13/07 22:35 | 06130717.D | P2701712-005 Dil (100ml) | [redacted] | 7 | | CASE FILE: DIL NOT NEEDED |
| 18 | 6/13/07 23:11 | 06130718.D | CAS QC2 6/8/07 (500ml) | 1128.00 | 13 | | FAIL |
| 19 | 6/13/07 23:48 | 06130719.D | CAS QC4A 6/12/07 (400ml) | 1SC00472 | 14 | | PASS except for TCE |
| 20 | 6/14/07 0:25 | 06130720.D | CAS QC4B 6/12/07 (400ml) | 1SC00339 | 15 | | PASS except for TCE |
| 1 | 6/14/07 9:30 | 06140701.D | 25ng TO-15 CCV Std | S15-05250705/S15-05240704 | 1 | CH/ST | PASS |
| 2 | 6/14/07 10:25 | 06140702.D | Method Blank (1000ml) | S15-05250705 | 1 | | PASS |
| 3 | 6/14/07 11:06 | 06140703.D | 25ng TO-15 LCS | S15-05250705/S15-05230703 | 2 | | PASS |
| 4 | 6/14/07 11:55 | 06140704.D | P2701712-006 (1000ml) | [redacted] | 5 | | |
| 5 | 6/14/07 12:35 | 06140705.D | P2701712-006 Dup (1000ml) | [redacted] | 5 | | ~~CASE FILE~~ PASS AS DUP SS 6/18/07 |

| | DATE/TIME | FILENAME | SAMPLE ID | MISC. INFO | AS POS | INIT | COMMENT |
|---|---|---|---|---|---|---|---|
| 27 | 6/18/07 7:41 | 06150727.D | Blank (100ml) | Mon 7AM | 1 | CH/BT | |
| 1 | 6/18/07 9:29 | 06180701.D | Blank (100ml) | System Check | 1 | CH/BT | |
| 2 | 6/18/07 10:06 | 06180702.D | 25ng TO-15 CCV Std | S15-05250705/S15-05240704 | 1 | | PASS |
| 3 | 6/18/07 10:52 | 06180703.D | CAS QC3 6/14/07 (1000ml) | AC00631 | 5 | | PASS AS MB & QC CAN |
| 4 | 6/18/07 11:35 | 06180704.D | 25ng TO-15 LCS | S15-05250705/S15-05230703 | 2 | | PASS |
| 5 | 6/18/07 12:12 | 06180705.D | 25ng TO-15 LCSD | S15-05250705/S15-05230703 | 2 | | PASS AS LCS DUP. |
| 6 | 6/18/07 13:07 | 06180706.D | P2701739-006 (0.02ml) | [redacted] | 1 | | |
| 7 | 6/18/07 13:44 | 06180707.D | P2701739-006 (0.40ml) | [redacted] | 1 | | |
| 8 | 6/18/07 14:35 | 06180708.D | P2701739-006 Dup (0.40ml) | [redacted] | 1 | | PASS AS DUP. |
| 9 | 6/18/07 15:19 | 06180709.D | P2701739-024 (0.20ml) | [redacted] | 1 | | |
| 10 | 6/18/07 15:58 | 06180710.D | P2701775-003 (4.0ml) | [redacted] | | | |
| 11 | 6/18/07 16:37 | 06180711.D | P2701775-005 (4.0ml) | [redacted] | | | |
| 12 | 6/18/07 17:14 | 06180712.D | P2701775-001 (20ml) | [redacted] | | | |
| 13 | 6/18/07 17:51 | 06180713.D | P2701775-001 (15ml) | [redacted] | | | |
| 14 | 6/18/07 18:28 | 06180714.D | P2701775-002 (15ml) | [redacted] | | | |
| 15 | 6/18/07 19:10 | 06180715.D | P2701775-002 (18ml) | [redacted] | | | |
| 16 | 6/18/07 19:46 | 06180716.D | P2701775-004 (500ml) | [redacted] | | | |
| 17 | 6/18/07 20:22 | 06180717.D | P2701775-004 Dil (100ml) | [redacted] | 3 | | |
| 18 | 6/18/07 20:59 | 06180718.D | P2701775-005 (25ml) | [redacted] | | | |
| 19 | 6/18/07 21:36 | 06180719.D | Blank (100ml) | System Check | ~~4~~ | | ST 6/18/07 |
| 20 | 6/18/07 22:13 | 06180720.D | P2701707-001 (400ml) | [redacted] | 5 | | |
| 21 | 6/18/07 22:50 | 06180721.D | P2701707-002 (400ml) | [redacted] | 6 | | |
| 22 | 6/18/07 23:27 | 06180722.D | P2701707-003 (400ml) | [redacted] | 7 | | |
| 23 | 6/19/07 0:04 | 06180723.D | P2701707-007 (50ml) | [redacted] | 9 | | CASE FILE: RAN @ LOWER VOL. |
| 24 | 6/19/07 0:41 | 06180724.D | P2701707-008 (50ml) | [redacted] | 10 | | CASE FILE: RAN @ LOWER VOL |
| 25 | 6/19/07 1:18 | 06180725.D | P2701707-009 (50ml) | [redacted] | 11 | | CASE FILE: RAN @ LOWER VOL |
| 1 | 6/19/07 9:41 | 06190701.D | 25ng TO-15 CCV Std | S15-06180707/S15-05240704 | 1 | CH/BT | PASS |
| 2 | 6/19/07 10:40 | 06190702.D | Method Blank (1000ml) | S15-06180707 | 1 | | PASS |
| 3 | 6/19/07 11:16 | 06190703.D | 25ng TO-15 LCS | S15-06180707/S15-05230703 | 2 | | PASS |
| 4 | 6/19/07 11:54 | 06190704.D | 25ng TO-15 LCSD | S15-06180707/S15-05230703 | 2 | | PASS AS DUP (LCS) |
| 5 | 6/19/07 12:30 | 06190705.D | 1ng CRQL Std | S15-06180707/S15-05250703 | 1 | | PASS |
| 6 | 6/19/07 13:19 | 06190706.D | P2701715-005 (60ml) | TRC WDI-IBM-41-6-10-07 (-2.5, 3.5) | 5 | | CASE FILE: RAN @ LOWER VOL. |
| 7 | 6/19/07 13:55 | 06190707.D | P2701715-005 Dup (60ml) | TRC WDI-IBM-41-6-10-07 (-2.5, 3.5) | 5 | | CASE FILE: EXTRA RUN ~~FLE ABOVE LIMIT~~ |
| 8 | 6/19/07 14:43 | 06190708.D | P2701715-007 (10ml) | TRC WDI-IBM-49-6-10-07 (-1.0, 3.5) | 1 | | CASE FILE: RAN @ higher vol. |
| 9 | 6/19/07 15:26 | 06190709.D | P2701715-007 (1000ml) | TRC WDI-IBM-49-6-10-07 (-1.0, 3.5) | 6 | | |
| 10 | 6/19/07 16:07 | 06190710.D | P2701715-007 Dup (1000ml) | TRC WDI-IBM-49-6-10-07 (-1.0, 3.5) | 6 | | CASE FILE: DID NOT MATCH PRIMARY |
| 11 | 6/19/07 17:24 | 06190711.D | P2701715-006 (1000ml) | TRC WDI-IBM-50-6-10-07 (-5.2, 3.5) | 3 | | |
| 12 | 6/19/07 18:39 | 06190712.D | P2701715-001 (1000ml) | TRC WDI-IBM-03-6-9-07 ~~(-6.1, 3.0)~~ (-3.0, 3.4) | 4 | ST | 6/22/07 |
| 13 | 6/19/07 19:15 | 06190713.D | P2701715-005 (50ml) | TRC WDI-IBM-41-6-10-07 (-2.5, 3.5) | 6 | | |
| 14 | 6/19/07 19:52 | 06190714.D | P2701715-005 Dup (50ml) | TRC WDI-IBM-41-6-10-07 (-2.5, 3.5) | 6 | | PASS AS DUP. |
| 15 | 6/19/07 20:29 | 06190715.D | 25ng TO-15 CCV Std | S15-06180707/S15-05240704 | 1 | | |
| 16 | 6/19/07 21:06 | 06190716.D | Blank (100ml) | System Check | 1 | | |
| 17 | 6/19/07 21:43 | 06190717.D | P2701707-001 Dil (100ml) | [redacted] | 7 | | |
| 18 | 6/19/07 22:20 | 06190718.D | P2701707-003 Dil (100ml) | [redacted] | 8 | | |
| 19 | 6/19/07 22:56 | 06190719.D | P2701707-006 (25ml) | [redacted] | 9 | | |
| 20 | 6/19/07 23:33 | 06190720.D | P2701707-007 (25ml) | [redacted] | 10 | | |
| 21 | 6/20/07 0:09 | 06190721.D | P2701707-008 (25ml) | [redacted] | 11 | | |
| 22 | 6/20/07 0:46 | 06190722.D | P2701707-009 (25ml) | [redacted] | 12 | | |
| 23 | 6/20/07 1:26 | 06190723.D | P2701774-001 (1000ml) | [redacted] | 3 | | |
| 24 | 6/20/07 2:06 | 06190724.D | P2701774-001 Dup (1000ml) | [redacted] | 3 | | CASE FILE: EXTRA DUP |

UNDER

NEEDED

TRA RUN ST 6/20/07

| | Date/Time | File Name | Sample ID | Misc Info | Operator | Vial | Comment |
|---|---|---|---|---|---|---|---|
| 1 | 6/19/07 13:48 | 06180701.D | Blank (1000ml) | S15-06190701 | SC | 1 | |
| 2 | 6/19/07 14:54 | 06190702.D | 25ng TO-15 CCV STD | S15-06190701/06060701 | SC | 2 | |
| 3 | 6/19/07 15:45 | 06190703.D | 5ng TO-15 CCV STD | S15-06190701/05250702 | SC | 2 | |
| 4 | 6/19/07 16:21 | 06190704.D | 25ng TO-15 CCV STD | S15-06190701/06060701 | SC | 2 | |
| 5 | 6/19/07 16:57 | 06190705.D | 0.5ng TO-15 CCV STD | S15-06190701/05250702 | SC | 2 | |
| 6 | 6/19/07 17:53 | 06190706.D | Blank (500ml) | Check System | SC | 2 | |
| 7 | 6/19/07 18:29 | 06190707.D | Blank (200ml) | Check System | SC | 2 | |
| 8 | 6/19/07 19:06 | 06190708.D | 25ng BFB STD | S15-06190701 | SC | 2 | Passed |
| 9 | 6/19/07 19:42 | 06190709.D | 0.5ng TO-15 ICAL STD | S15-06190701/S15-05250702 | SC | 2 | ICAL Passed for all compounds 0.5ng - 100ng |
| 10 | 6/19/07 20:18 | 06190710.D | 1ng TO-15 ICAL STD | S15-06190701/S15-05250702 | SC | 2 | |
| 11 | 6/19/07 20:54 | 06190711.D | 5ng TO-15 ICAL STD | S15-06190701/S15-05250702 | SC | 2 | |
| 12 | 6/19/07 21:30 | 06190712.D | 25ng TO-15 ICAL STD | S15-06190701/S15-06060701 | SC | 2 | |
| 13 | 6/19/07 22:06 | 06190713.D | 50ng TO-15 ICAL STD | S15-06190701/S15-06060701 | SC | 2 | |
| 14 | 6/19/07 22:42 | 06190714.D | 100ng TO-15 ICAL STD | S15-06190701/S15-06060701 | SC | 2 | |
| 15 | 6/19/07 23:18 | 06190715.D | 25ng TO-15 ICV STD | S15-06190701/S15-06070701 | SC | 3 | Acetone, 2-Hexanone over Marginal |
| 16 | 6/20/07 9:37 | 06190716.D | 25ng TO-15 ICV STD | S15-06190701/S15-06180704 | SC | 4 | Passed all comp. |
| 1 | 6/20/07 10:30 | 06200701.D | 25ng TO-15 CCV STD | S15-06190701/06060701 | AB | 2 | PASSED |
| 2 | 6/20/07 11:22 | 06200702.D | TO-15 Method Blank (1000ml) | S15-06190701 | AB | 2 | PASSED |
| 3 | 6/20/07 12:05 | 06200703.D | 1.0ng CRQL std | S15-06190701/S15-05250702 | AB | 2 | PASSED |
| 4 | 6/20/07 12:43 | 06200704.D | 25ng TO-15 LCS | S15-06190701/S15-06180704 | AB | 4 | PASSED |
| 5 | 6/20/07 13:25 | 06200705.D | 25ng TO-15 LCSD | S15-06190701/S15-06180704 | AB | 4 | PASSED AS DUP |
| 6 | 6/20/07 14:06 | 06200706.D | P2701715-008 (1000ml) | TRC WDI-IBM-24-6-10-07 (-3.0, 3.5) | AB | 14 | |
| 7 | 6/20/07 14:47 | 06200707.D | P2701715-009 (1000ml) | TRC WDI-IBM-03B-6-10-07 (-3.7, 3.5) | AB | 15 | |
| 8 | 6/20/07 15:28 | 06200708.D | P2701715-009 Dup (1000ml) | TRC WDI-IBM-03B-6-10-07 (-3.7, 3.5) | AB | 15 | PASSED AS DUP |
| 9 | 6/20/07 16:08 | 06200709.D | P2701715-010 (1000ml) | TRC WDI-IBM-28-6-10-07 (-1.8, 3.5) | AB | 16 | |
| 10 | 6/20/07 16:59 | 06200710.D | P2701715-002 (1000ml) | TRC WDI-IBM-22-6-9-07 (-3.5, 3.5) | AB | 7 | CASECLIE RR (STD) |
| 11 | 6/20/07 17:41 | 06200711.D | P2701715-003 (1000ml) | TRC WDI-IBM-24B-6-9-07 (-3.3, 3.6) | AB | 8 | |
| 12 | 6/20/07 18:22 | 06200712.D | P2701715-004 (1000ml) | TRC WDI-IBM-24B-6-9-07-SC (-3.3, 3.5) | AB | 9 | |
| 13 | 6/20/07 19:52 | 06200713.D | P2701715-002 (1000ml) | TRC WDI-IBM-22-6-9-07 (-3.5, 3.5)(-2.3, 0.0) | AB | 16 | |
| 14 | 6/20/07 20:28 | 06200714.D | 25ng TO-15 CCV STD | S15-06190701/06060701 | AB | 2 | Acetone 2-Hexanone Biased Low |
| 15 | 6/20/07 21:04 | 06200715.D | Blank | | AB | 2 | |
| 16 | 6/20/07 21:40 | 06200716.D | P2701706-001 (400ml) | [redacted] | AB | 3 | |
| 17 | 6/20/07 22:16 | 06200717.D | P2701706-002 (400ml) | [redacted] | AB | 4 | |
| 18 | 6/20/07 22:52 | 06200718.D | P2701706-003 (400ml) | [redacted] | AB | 5 | |
| 19 | 6/20/07 23:28 | 06200719.D | P2701706-006 (400ml) | [redacted] | AB | 6 | |
| 20 | 6/21/07 0:04 | 06200720.D | P2701706-007 (400ml) | [redacted] | AB | 7 | |
| 21 | 6/21/07 0:40 | 06200721.D | P2701706-008 (400ml) | [redacted] | AB | 8 | |
| 22 | 6/21/07 1:16 | 06200722.D | P2701706-010 (400ml) | [redacted] | AB | 9 | |
| 23 | 6/21/07 1:52 | 06200723.D | P2701706-011 (400ml) | [redacted] | AB | 10 | |
| 24 | 6/21/07 2:28 | 06200724.D | P2701706-012 (400ml) | [redacted] | AB | 12 | |
| 25 | 6/21/07 3:05 | 06200725.D | P2701706-014 (400ml) | [redacted] | AB | 13 | |

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-001

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01117

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.0 Pf 1 = 3.4

Can D.F. = 1.55

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.039 | ND | 0.015 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.039 | ND | 0.0050 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-22-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-002

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00628

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.5 Pf 1 = 3.5

Can D.F. = 1.63

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.041 | ND | 0.016 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.041 | ND | 0.0053 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Ru Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-003

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00910

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.3 Pf 1 = 3.6

Can D.F. = 1.61

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.040 | ND | 0.016 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.040 | ND | 0.0052 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-003DUP

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00910

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.3 Pf 1 = 3.6

Can D.F. = 1.61

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.040 | ND | 0.016 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.040 | ND | 0.0052 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RL Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24B-6-9-07-SC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-004

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00917

Date Collected: 6/9/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.3 Pf 1 = 3.5

Can D.F. = 1.60

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.040 | ND | 0.016 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.040 | ND | 0.0052 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-41-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-005

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01044

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 0.040 Liter(s)

Pi 1 = -2.5 Pf 1 = 3.5

Can D.F. = 1.49

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.93 | ND | 0.36 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.93 | ND | 0.12 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RL Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-50-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-006

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00723

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -5.2 Pf 1 = 3.5

Can D.F. = 1.92

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.048 | ND | 0.019 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.048 | ND | 0.0062 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-49-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-007

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00412

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.0 Pf 1 = 3.5

Can D.F. = 1.33

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.033 | ND | 0.013 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.033 | ND | 0.0043 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Ru Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-24-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-008

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00731

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.0 Pf 1 = 3.5

Can D.F. = 1.56

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.039 | ND | 0.015 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.039 | ND | 0.0051 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-03B-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-009

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00822

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.7 Pf 1 = 3.5

Can D.F. = 1.65

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.041 | ND | 0.016 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.041 | ND | 0.0054 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **WDI-IBM-28-6-10-07**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P2701715-010

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:
Container ID: AC01258

Date Collected: 6/10/07
Date Received: 6/11/07
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.8 Pf 1 = 3.5

Can D.F. = 1.41

| **CAS #** | **Compound** | **Result µg/m³** | MRL µg/m³ | **Result ppbV** | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.035 | ND | 0.014 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.035 | ND | 0.0046 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rec Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Method Blank**
**Client Project ID:** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070620-MB

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/20/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

| CAS # | Compound | Result µg/m³ | MRL µg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|---|---|---|---|---|---|---|
| 75-01-4 | Vinyl Chloride | ND | 0.025 | ND | 0.0098 | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.025 | ND | 0.0033 | |

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715

## Surrogate Spike Recovery Results

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister(s)
Test Notes:

Date Collected: 6/10/07
Date Received: 6/11/07
Date Analyzed: 6/20/07

| Client Sample ID | CAS Sample ID | 1,2-Dichloroethane-d4 | | Toluene-d8 | | Bromofluorobenzene | | Data Qualifier |
|---|---|---|---|---|---|---|---|---|
| | | % Recovered | Acceptance Limits | % Recovered | Acceptance Limits | % Recovered | Acceptance Limits | |
| Method Blank | P070620-MB | **87** | 80-120 | **95** | 80-120 | **90** | 80-120 | |
| Lab Control Sample | P070620-LCS | **88** | 80-120 | **94** | 80-120 | **93** | 80-120 | |
| Duplicate Lab Control Sample | P070620-DLCS | **89** | 80-120 | **95** | 80-120 | **92** | 80-120 | |
| WDI-IBM-03-6-9-07 | P2701715-001 | **83** | 80-120 | **98** | 80-120 | **86** | 80-120 | |
| WDI-IBM-22-6-9-07 | P2701715-002 | **85** | 80-120 | **96** | 80-120 | **89** | 80-120 | |
| WDI-IBM-24B-6-9-07 | P2701715-003 | **85** | 80-120 | **95** | 80-120 | **92** | 80-120 | |
| WDI-IBM-24B-6-9-07 | P2701715-003DUP | **84** | 80-120 | **97** | 80-120 | **92** | 80-120 | |
| WDI-IBM-24B-6-9-07-SC | P2701715-004 | **85** | 80-120 | **96** | 80-120 | **92** | 80-120 | |
| WDI-IBM-41-6-10-07 | P2701715-005 | **88** | 80-120 | **95** | 80-120 | **79** | 80-120 | |
| WDI-IBM-50-6-10-07 | P2701715-006 | **84** | 80-120 | **96** | 80-120 | **93** | 80-120 | |
| WDI-IBM-49-6-10-07 | P2701715-007 | **83** | 80-120 | **96** | 80-120 | **91** | 80-120 | |
| WDI-IBM-24-6-10-07 | P2701715-008 | **85** | 80-120 | **96** | 80-120 | **94** | 80-120 | |
| WDI-IBM-03B-6-10-07 | P2701715-009 | **85** | 80-120 | **96** | 80-120 | **89** | 80-120 | |
| WDI-IBM-28-6-10-07 | P2701715-010 | **85** | 80-120 | **97** | 80-120 | **91** | 80-120 | |

Verified By: RG Date: 6/26/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Sample ID:** **Duplicate Lab Control Sample**
**Client Project ID :** **WDI**

CAS Project ID: P2701715
CAS Sample ID: P070620-LCS, P070620-DLCS

## Laboratory Control Sample/Duplicate Laboratory Control Sample Summary

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister
Test Notes:

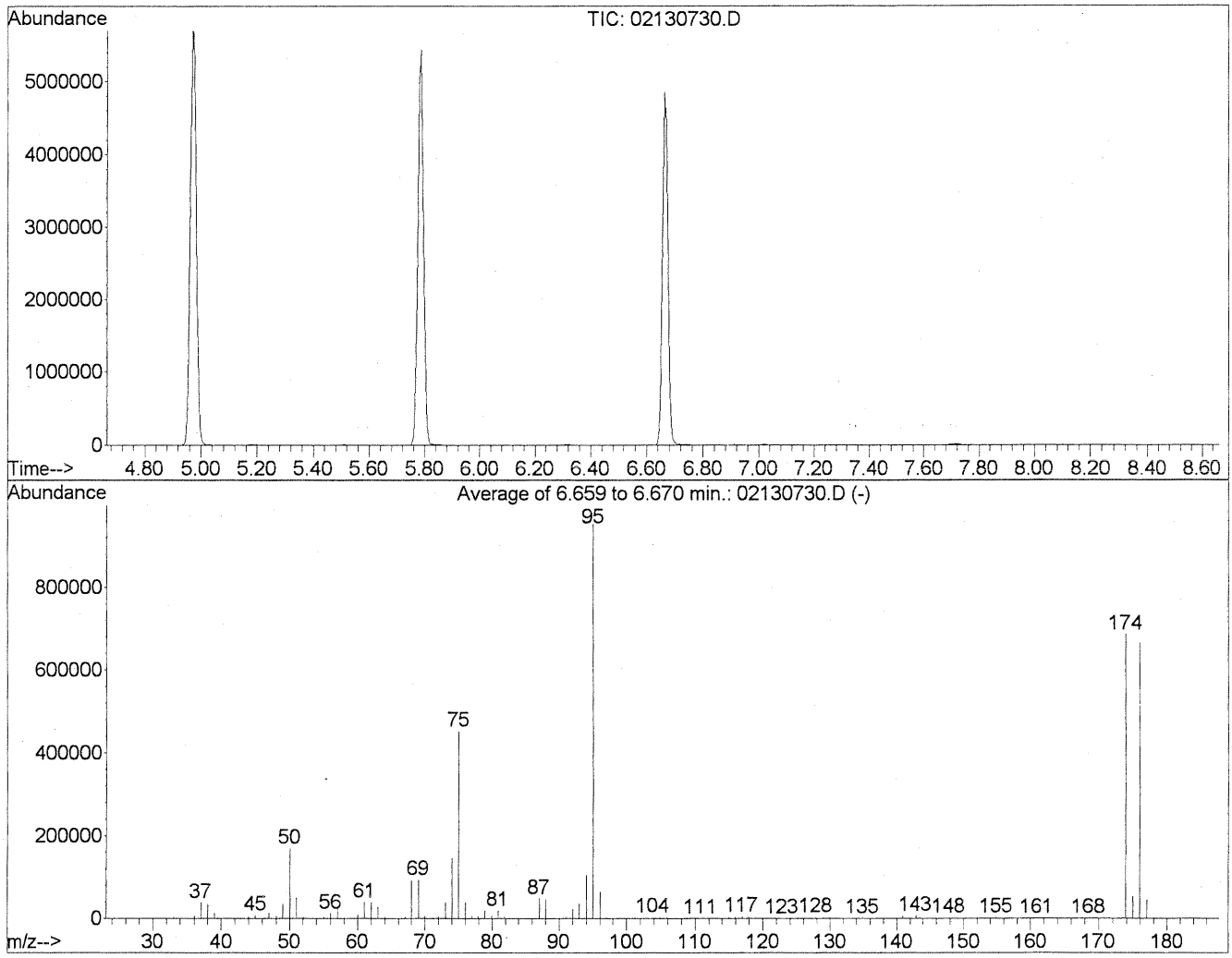
Date Collected: NA
Date Received: NA
Date Analyzed: 6/20/07
Volume(s) Analyzed: NA

| **Compound** | Spike Amt LCS/DLCS pg | Result LCS pg | Result DLCS pg | **% Recovery LCS** | **% Recovery DLCS** | Acceptance Limits | **RPD** | RPD Limit % | **Data Qualifier** |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 495 | 432 | 442 | **87** | **89** | 65-135 | **2** | 35 | |
| 1,2-Dibromoethane | 520 | 532 | 543 | **102** | **104** | 65-135 | **2** | 35 | |

Verified By: Re Date: 6/26/07

BFB

Data File : J:\MS07\DATA\2007_02\13\02130730.D  Vial: 1
Acq On : 14 Feb 2007 1:54  Operator: AB
Sample : 25ng BFB  Inst : MSD7
Misc :  Multiplr: 1.00
MS Integration Params: rteint.p
Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM



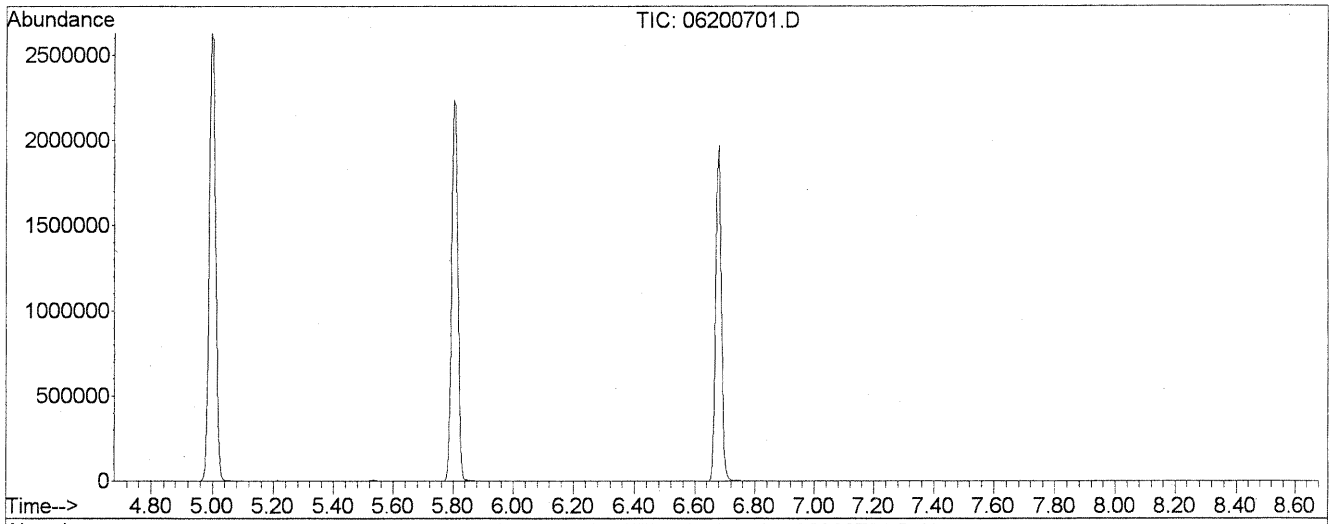

AutoFind: Scans 379, 380, 381; Background Corrected with Scan 371

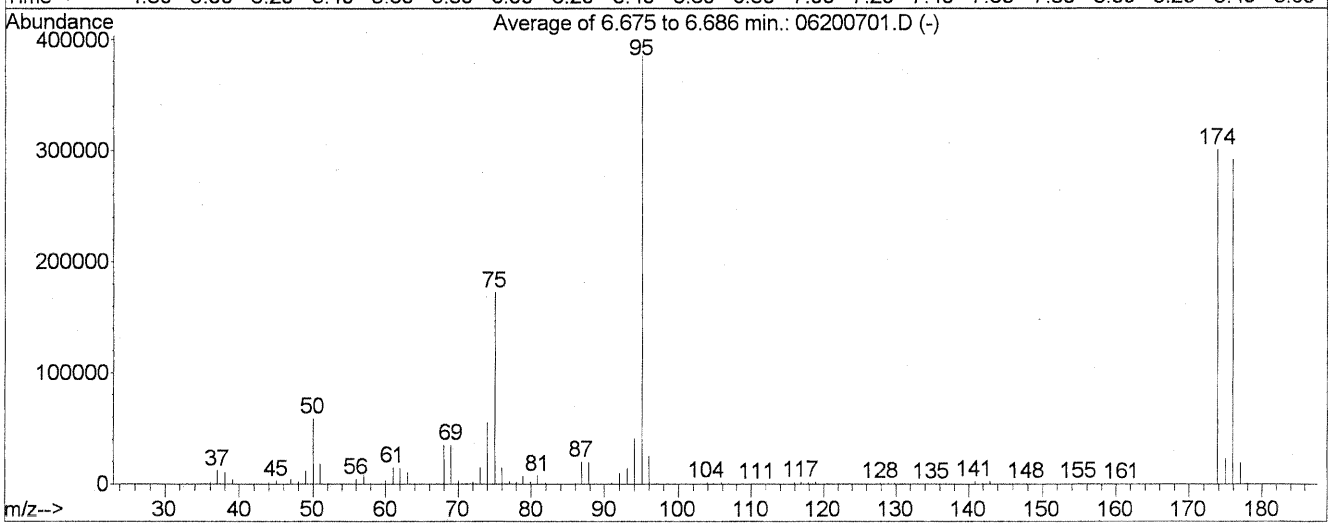
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 17.7 | 168490 | PASS |
| 75 | 95 | 30 | 66 | 47.4 | 451477 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 951829 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 64149 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 72.0 | 685162 | PASS |
| 175 | 174 | 4 | 9 | 7.7 | 52925 | PASS |
| 176 | 174 | 93 | 101 | 96.9 | 664106 | PASS |
| 177 | 176 | 5 | 9 | 6.7 | 44560 | PASS |

BFB

Data File : J:\MS07\DATA\2007_06\20\06200701.D
Acq On : 20 Jun 2007 9:10
Sample : 25ng BFB
Misc :
MS Integration Params: rteint.p
Method : J:\MS07\METHODS\K7021307.M (RTE Integrator)
Title : TO-15/SIM

Vial: 1
Operator: LM
Inst : MSD7
Multiplr: 1.00




AutoFind: Scans 382, 383, 384; Background Corrected with Scan 374

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 15.2 | 58304 | PASS |
| 75 | 95 | 30 | 66 | 44.8 | 172429 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 384640 | PASS |
| 96 | 95 | 5 | 9 | 6.5 | 24936 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 78.2 | 300629 | PASS |
| 175 | 174 | 4 | 9 | 7.7 | 23280 | PASS |
| 176 | 174 | 93 | 101 | 97.1 | 291968 | PASS |
| 177 | 176 | 5 | 9 | 6.4 | 18791 | PASS |



LM 6/20/07 102

# Response Factor Report MSD7

Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM
Last Update : Wed Feb 14 09:55:39 2007
Response via : Initial Calibration

Calibration Files
10 =02130732.D 25 =02130733.D 100 =02130734.D 250 =02130735.D 500 =02130736.D
1000 =02130737.D 2500 =02130738.D 9999 =02130739.D = =

| | | Compound | 10 | 25 | 100 | 250 | 500 | 1000 | 2500 | 9999 | Avg | | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Bromochloromethan | ---ISTD--- | | | | | | | | | | |
| 2) | T | Dichlorodifluorom | 3.663 | 3.450 | 3.903 | 3.462 | 3.318 | 3.154 | 3.004 | 2.916 | 3.359 | | 9.90 |
| 3) | T | Chloromethane | | 1.168 | 1.171 | 1.004 | 0.955 | 0.913 | 0.863 | 0.839 | 0.987 | | 13.77 |
| 4) | T | Vinyl Chloride | 3.323 | 3.086 | 3.618 | 3.195 | 3.054 | 2.932 | 2.770 | 2.648 | 3.078 | | 10.02 |
| 5) | T | Chloroethane | 1.637 | 1.479 | 1.802 | 1.583 | 1.522 | 1.453 | 1.413 | 1.386 | 1.534 | | 8.92 |
| 6) | T | Acetone | | | | 2.281 | 1.919 | 1.625 | 1.501 | 1.313 | 1.728 | | 21.98 |
| 7) | T | 1,1-Dichloroethen | 1.523 | 1.469 | 1.773 | 1.579 | 1.510 | 1.466 | 1.433 | 1.408 | 1.520 | | 7.59 |
| 8) | T | Methylene Chlorid | | | 2.065 | 1.835 | 1.756 | 1.689 | 1.630 | 1.556 | 1.755 | | 10.26 |
| 9) | T | Trichlorotrifluor | 1.384 | 1.186 | 1.418 | 1.254 | 1.209 | 1.061 | 0.933 | 0.908 | 1.169 | | 16.26 |
| 10) | T | trans-1,2-Dichlor | 1.694 | 1.629 | 1.968 | 1.746 | 1.685 | 1.620 | 1.568 | 1.553 | 1.683 | | 7.85 |
| 11) | T | 1,1-Dichloroethan | 2.695 | 2.381 | 3.067 | 2.732 | 2.681 | 2.568 | 2.573 | 2.644 | 2.668 | | 7.31 |
| 12) | T | Methyl tert-Butyl | 5.703 | 4.451 | 5.963 | 5.172 | 4.922 | 3.852 | 3.178 | 3.178 | 4.552 | | 23.65 |
| 13) | T | cis-1,2-Dichloroe | 1.693 | 1.667 | 2.023 | 1.784 | 1.726 | 1.654 | 1.599 | 1.583 | 1.716 | | 8.15 |
| 14) | T | Chloroform | | | 3.159 | 2.620 | 2.450 | 2.206 | 2.149 | 2.139 | 2.454 | | 16.09 |
| 15) | S | 1,2-Dichloroethan | 2.152 | 2.075 | 2.168 | 2.116 | 2.120 | 2.048 | 2.004 | 1.996 | 2.085 | | 3.12 |
| 16) | T | 1,2-Dichloroethan | 2.452 | 2.290 | 2.740 | 2.438 | 2.351 | 2.235 | 2.096 | 2.057 | 2.332 | | 9.38 |
| 17) | T | 1,1,1-Trichloroet | 2.583 | 2.397 | 2.902 | 2.554 | 2.472 | 2.348 | 2.246 | 2.218 | 2.465 | | 8.95 |
| 18) | T | Benzene | | | 1.272 | 0.863 | 0.772 | 0.715 | 0.672 | 0.650 | 0.824 | E1 | 28.21 |
| 19) | T | Carbon Tetrachlor | 1.702 | 1.355 | 1.982 | 1.768 | 1.735 | 1.622 | 1.604 | 1.670 | 1.680 | | 10.50 |
| 20) | I | 1,4-Difluorobenze | ---ISTD--- | | | | | | | | | | |
| 21) | T | 1,2-Dichloropropa | 0.349 | 0.327 | 0.386 | 0.347 | 0.335 | 0.319 | 0.315 | 0.314 | 0.336 | | 7.21 |
| 22) | T | Trichloroethene | 0.310 | 0.275 | 0.319 | 0.281 | 0.271 | 0.260 | 0.254 | 0.255 | 0.278 | | 8.86 |
| 23) | T | 1,4-Dioxane | 0.343 | 0.270 | 0.237 | 0.206 | 0.197 | 0.189 | 0.187 | 0.217 | 0.231 | | 23.08 |
| 24) | T | cis-1,3-Dichlorop | 0.530 | 0.461 | 0.565 | 0.509 | 0.495 | 0.471 | 0.475 | 0.492 | 0.500 | | 6.84 |
| 25) | T | 1,1,2-Trichloroet | 0.287 | 0.265 | 0.296 | 0.259 | 0.251 | 0.241 | 0.237 | 0.240 | 0.259 | | 8.55 |
| 26) | S | Toluene-d8 (SS2) | 1.160 | 1.158 | 1.153 | 1.155 | 1.153 | 1.158 | 1.163 | 1.168 | 1.159 | | 0.45 |
| 27) | T | Toluene | 1.954 | 1.561 | 1.581 | 1.388 | 1.321 | 1.262 | 1.236 | 1.236 | 1.442 | | 17.19 |

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report MSD7

Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM
Last Update : Wed Feb 14 09:55:39 2007
Response via : Initial Calibration

Calibration Files
10 =02130732.D 25 =02130733.D 100 =02130734.D 250 =02130735.D 500 =02130736.D
1000 =02130737.D 2500 =02130738.D 9999 =02130739.D = =

| | | Compound | 10 | 25 | 100 | 250 | 500 | 1000 | 2500 | 9999 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28) | T | 1,2-Dibromoethane | 0.333 | 0.302 | 0.348 | 0.313 | 0.304 | 0.291 | 0.287 | 0.296 | 0.309 | 6.89 |
| 29) | T | Tetrachloroethene | 0.283 | 0.260 | 0.309 | 0.275 | 0.264 | 0.254 | 0.247 | 0.249 | 0.268 | 7.79 |
| 30) | I | Chlorobenzene-d5 | ISTD | | | | | | | | | |
| 31) | T | Chlorobenzene | 1.636 | 1.445 | 1.708 | 1.505 | 1.451 | 1.385 | 1.357 | 1.365 | 1.481 | 8.70 |
| 32) | T | Ethylbenzene | 3.101 | 2.721 | 3.067 | 2.735 | 2.649 | 2.546 | 2.519 | 2.522 | 2.732 | 8.52 |
| 33) | T | m-&-p-Xylene | 1.956 | 1.714 | 1.993 | 1.791 | 1.745 | 1.670 | 1.661 | 1.673 | 1.775 | 7.37 |
| 34) | T | o-Xylene | 1.942 | 1.796 | 2.088 | 1.874 | 1.840 | 1.754 | 1.737 | 1.756 | 1.848 | 6.46 |
| 35) | T | 1,1,2,2-Tetrachlo | 0.869 | 0.841 | 0.928 | 0.841 | 0.825 | 0.798 | 0.796 | 0.822 | 0.840 | 5.11 |
| 36) | S | Bromofluorobenzen | 0.663 | 0.662 | 0.663 | 0.665 | 0.667 | 0.663 | 0.667 | 0.669 | 0.665 | 0.40 |
| 37) | T | 1,3-Dichlorobenze | 1.165 | 1.092 | 1.235 | 1.112 | 1.082 | 1.039 | 1.021 | 1.064 | 1.101 | 6.36 |
| 38) | T | 1,4-Dichlorobenze | 1.160 | 1.066 | 1.186 | 1.078 | 1.048 | 1.011 | 0.996 | 1.043 | 1.074 | 6.27 |
| 39) | T | 1,2-Dichlorobenze | 1.095 | 1.032 | 1.134 | 1.021 | 0.997 | 0.958 | 0.941 | 0.979 | 1.019 | 6.53 |
| 40) | T | 1,2,4-Trichlorobe | 0.648 | 0.603 | 0.657 | 0.605 | 0.593 | 0.577 | 0.579 | 0.593 | 0.607 | 4.94 |
| 41) | T | Naphthalene | 1.117 | 1.008 | 1.837 | 1.739 | 1.749 | 1.695 | 1.744 | 1.789 | 1.585 | 20.58 |
| 42) | T | Hexachlorobutadie | 0.453 | 0.421 | 0.375 | 0.328 | 0.316 | 0.304 | 0.302 | 0.314 | 0.352 | 16.49 |

(#) = Out of Range ### Number of calibration levels exceeded format ###

# Evaluate Continuing Calibration Report

Data File : J:\MS07\DATA\2007_06\20\06200703.D  Vial: 2
Acq On : 20 Jun 2007 10:00  Operator: LM
Sample : 500pg TO-15/SIM CCV  Inst : MSD7
Misc : S15-06190702/S15-06060704  Multiplr: 1.00
MS Integration Params: rteint.p

Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM
Last Update : Wed Feb 14 09:55:39 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 86 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 3.359 | 3.248 | 3.3 | 84 | 0.00 |
| 3 | T | Chloromethane | 0.987 | 0.876 | 11.2 | 79 | 0.00 |
| 4 | T | Vinyl Chloride | 3.078 | 2.841 | 7.7 | 80 | 0.00 |
| 5 | T | Chloroethane | 1.534 | 1.444 | 5.9 | 82 | 0.00 |
| 6 | T | Acetone | 1.728 | 2.330 | -34.8# | 104 | 0.00 |
| 7 | T | 1,1-Dichloroethene | 1.520 | 1.511 | 0.6 | 86 | 0.00 |
| 8 | T | Methylene Chloride | 1.755 | 1.725 | 1.7 | 84 | 0.00 |
| 9 | T | Trichlorotrifluoroethane | 1.169 | 1.141 | 2.4 | 81 | 0.00 |
| 10 | T | trans-1,2-Dichloroethene | 1.683 | 1.672 | 0.7 | 85 | 0.00 |
| 11 | T | 1,1-Dichloroethane | 2.668 | 2.686 | -0.7 | 86 | 0.00 |
| 12 | T | Methyl tert-Butyl Ether | 4.552 | 4.428 | 2.7 | 77 | 0.00 |
| 13 | T | cis-1,2-Dichloroethene | 1.716 | 1.716 | 0.0 | 85 | 0.00 |
| 14 | T | Chloroform | 2.454 | 2.422 | 1.3 | 85 | 0.00 |
| 15 | S | 1,2-Dichloroethane-d4 (SS1) | 2.085 | 1.849 | 11.3 | 75 | 0.00 |
| 16 | T | 1,2-Dichloroethane | 2.332 | 2.153 | 7.7 | 79 | 0.00 |
| 17 | T | 1,1,1-Trichloroethane | 2.465 | 2.302 | 6.6 | 80 | 0.00 |
| 18 | T | Benzene | 8.241 | 8.180 | 0.7 | 91 | 0.00 |
| 19 | T | Carbon Tetrachloride | 1.680 | 1.631 | 2.9 | 81 | 0.00 |
| 20 | I | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 81 | 0.00 |
| 21 | T | 1,2-Dichloropropane | 0.336 | 0.336 | 0.0 | 81 | 0.00 |
| 22 | T | Trichloroethene | 0.278 | 0.289 | -4.0 | 86 | 0.00 |
| 23 | T | 1,4-Dioxane | 0.231 | 0.246 | -6.5 | 100 | 0.00 |
| 24 | T | cis-1,3-Dichloropropene | 0.500 | 0.511 | -2.2 | 83 | 0.00 |
| 25 | T | 1,1,2-Trichloroethane | 0.259 | 0.267 | -3.1 | 86 | 0.00 |
| 26 | S | Toluene-d8 (SS2) | 1.159 | 1.093 | 5.7 | 76 | 0.00 |
| 27 | T | Toluene | 1.442 | 1.391 | 3.5 | 85 | 0.00 |
| 28 | T | 1,2-Dibromoethane | 0.309 | 0.332 | -7.4 | 88 | 0.00 |
| 29 | T | Tetrachloroethene | 0.268 | 0.283 | -5.6 | 86 | 0.00 |
| 30 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 68 | 0.00 |
| 31 | T | Chlorobenzene | 1.481 | 1.855 | -25.3 | 87 | 0.00 |
| 32 | T | Ethylbenzene | 2.732 | 3.290 | -20.4 | 84 | 0.00 |
| 33 | T | m-&-p-Xylene | 1.775 | 2.172 | -22.4 | 84 | 0.00 |
| 34 | T | o-Xylene | 1.848 | 2.295 | -24.2 | 84 | 0.00 |
| 35 | T | 1,1,2,2-Tetrachloroethane | 0.840 | 1.072 | -27.6 | 88 | 0.00 |
| 36 | S | Bromofluorobenzene (SS3) | 0.665 | 0.609 | 8.4 | 62 | 0.00 |
| 37 | T | 1,3-Dichlorobenzene | 1.101 | 1.403 | -27.4 | 88 | 0.00 |
| 38 | T | 1,4-Dichlorobenzene | 1.074 | 1.372 | -27.7 | 89 | 0.00 |
| 39 | T | 1,2-Dichlorobenzene | 1.019 | 1.306 | -28.2 | 89 | 0.00 |

(#) = Out of Range



LM 6/20/07

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# Evaluate Continuing Calibration Report

Data File : J:\MS07\DATA\2007_06\20\06200703.D  Vial: 2
Acq On : 20 Jun 2007 10:00  Operator: LM
Sample : 500pg TO-15/SIM CCV  Inst : MSD7
Misc : S15-06190702/S15-06060704  Multiplr: 1.00
MS Integration Params: rteint.p

Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM
Last Update : Wed Feb 14 09:55:39 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 40 | T | 1,2,4-Trichlorobenzene | 0.607 | 0.780 | -28.5 | 89 | 0.00 |
| 41 | T | Naphthalene | 1.585 | 2.441 | -54.0# | 95 | 0.00 |
| 42 | T | Hexachlorobutadiene | 0.352 | 0.415 | -17.9 | 89 | 0.00 |

UT 6/20/07

# Evaluate Continuing Calibration Report

Data File : J:\MS07\DATA\2007_06\20\06200705.D
Acq On : 20 Jun 2007 11:35
Sample : 25pg TO-15/SIM CRQL STD
Misc : S15-06190702/S15-06060704
MS Integration Params: rteint.p

Vial: 2
Operator: LM
Inst : MSD7
Multiplr: 1.00

Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM
Last Update : Wed Feb 14 09:55:39 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 80 | 0.01 |
| 2 | T | Dichlorodifluoromethane | 3.359 | 3.283 | 2.3 | 76 | 0.02 |
| 3 | T | Chloromethane | 0.987 | 1.058 | -7.2 | 72 | 0.02 |
| 4 | T | Vinyl Chloride | 3.078 | 2.902 | 5.7 | 75 | 0.02 |
| 5 | T | Chloroethane | 1.534 | 1.502 | 2.1 | 81 | 0.02 |
| 6 | T | Acetone | 1.728 | 7.683 | -344.6# | 0# | 0.03 |
| 7 | T | 1,1-Dichloroethene | 1.520 | 1.435 | 5.6 | 78 | 0.02 |
| 8 | T | Methylene Chloride | 1.755 | 1.862 | -6.1 | 0# | 0.02 |
| 9 | T | Trichlorotrifluoroethane | 1.169 | 0.813 | 30.5# | 55 | 0.01 |
| 10 | T | trans-1,2-Dichloroethene | 1.683 | 1.648 | 2.1 | 81 | 0.02 |
| 11 | T | 1,1-Dichloroethane | 2.668 | 2.388 | 10.5 | 80 | 0.01 |
| 12 | T | Methyl tert-Butyl Ether | 4.552 | 3.526 | 22.5 | 63 | 0.03 |
| 13 | T | cis-1,2-Dichloroethene | 1.716 | 1.647 | 4.0 | 79 | 0.01 |
| 14 | T | Chloroform | 2.454 | 3.299 | -34.4# | 0# | 0.01 |
| 15 | S | 1,2-Dichloroethane-d4 (SS1) | 2.085 | 1.854 | 11.1 | 71 | 0.00 |
| 16 | T | 1,2-Dichloroethane | 2.332 | 2.124 | 8.9 | 74 | 0.00 |
| 17 | T | 1,1,1-Trichloroethane | 2.465 | 2.233 | 9.4 | 74 | 0.00 |
| 18 | T | Benzene | 8.241 | 25.497 | -209.4# | 0# | 0.00 |
| 19 | T | Carbon Tetrachloride | 1.680 | 1.212 | 27.9 | 72 | 0.00 |
| 20 | I | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 76 | 0.00 |
| 21 | T | 1,2-Dichloropropane | 0.336 | 0.314 | 6.5 | 73 | 0.00 |
| 22 | T | Trichloroethene | 0.278 | 0.304 | -9.4 | 83 | 0.00 |
| 23 | T | 1,4-Dioxane | 0.231 | 0.302 | -30.7# | 84 | 0.03 |
| 24 | T | cis-1,3-Dichloropropene | 0.500 | 0.467 | 6.6 | 76 | 0.00 |
| 25 | T | 1,1,2-Trichloroethane | 0.259 | 0.270 | -4.2 | 77 | 0.00 |
| 26 | S | Toluene-d8 (SS2) | 1.159 | 1.095 | 5.5 | 71 | 0.00 |
| 27 | T | Toluene | 1.442 | 1.733 | -20.2 | 84 | 0.00 |
| 28 | T | 1,2-Dibromoethane | 0.309 | 0.307 | 0.6 | 77 | 0.00 |
| 29 | T | Tetrachloroethene | 0.268 | 0.281 | -4.9 | 81 | 0.00 |
| 30 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 64 | 0.00 |
| 31 | T | Chlorobenzene | 1.481 | 1.833 | -23.8 | 81 | 0.00 |
| 32 | T | Ethylbenzene | 2.732 | 3.441 | -26.0 | 80 | 0.00 |
| 33 | T | m-&-p-Xylene | 1.775 | 2.174 | -22.5 | 81 | -0.01 |
| 34 | T | o-Xylene | 1.848 | 2.176 | -17.7 | 77 | 0.00 |
| 35 | T | 1,1,2,2-Tetrachloroethane | 0.840 | 0.989 | -17.7 | 75 | 0.00 |
| 36 | S | Bromofluorobenzene (SS3) | 0.665 | 0.605 | 9.0 | 58 | 0.00 |
| 37 | T | 1,3-Dichlorobenzene | 1.101 | 1.290 | -17.2 | 75 | 0.00 |
| 38 | T | 1,4-Dichlorobenzene | 1.074 | 1.255 | -16.9 | 75 | 0.00 |
| 39 | T | 1,2-Dichlorobenzene | 1.019 | 1.182 | -16.0 | 73 | 0.00 |
| 40 | T | 1,2,4-Trichlorobenzene | 0.607 | 0.516 | 15.0 | 54 | 0.00 |
| 41 | T | Naphthalene | 1.585 | 1.669 | -5.3 | 105 | 0.00 |
| 42 | T | Hexachlorobutadiene | 0.352 | 0.294 | 16.5 | 44# | 0.00 |



LM 6/20/07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
02130733.D X7021307.M Wed Jun 20 11:55:45 2007 MSD7

LM 6/20/07

# Evaluate Continuing Calibration Report

Data File : J:\MS07\DATA\2007_06\20\06200719.D  Vial: 2
Acq On : 20 Jun 2007 20:06  Operator: LM
Sample : 500pg TO-15/SIM closing CCV  Inst : MSD7
Misc : S15-06190702/S15-06060704  Multiplr: 1.00
MS Integration Params: rteint.p

Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM
Last Update : Wed Feb 14 09:55:39 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Bromochloromethane (IS1) | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 3.359 | 3.090 | 8.0 | 83 | 0.00 |
| 3 | T | Chloromethane | 0.987 | 0.854 | 13.5 | 80 | 0.00 |
| 4 | T | Vinyl Chloride | 3.078 | 2.713 | 11.9 | 80 | 0.00 |
| 5 | T | Chloroethane | 1.534 | 1.370 | 10.7 | 81 | 0.00 |
| 6 | T | Acetone | 1.728 | 2.283 | -32.1# | 107 | 0.00 |
| 7 | T | 1,1-Dichloroethene | 1.520 | 1.456 | 4.2 | 86 | 0.00 |
| 8 | T | Methylene Chloride | 1.755 | 1.670 | 4.8 | 85 | 0.00 |
| 9 | T | Trichlorotrifluoroethane | 1.169 | 1.091 | 6.7 | 81 | 0.00 |
| 10 | T | trans-1,2-Dichloroethene | 1.683 | 1.611 | 4.3 | 86 | 0.00 |
| 11 | T | 1,1-Dichloroethane | 2.668 | 2.617 | 1.9 | 87 | 0.00 |
| 12 | T | Methyl tert-Butyl Ether | 4.552 | 4.303 | 5.5 | 78 | 0.00 |
| 13 | T | cis-1,2-Dichloroethene | 1.716 | 1.673 | 2.5 | 87 | 0.00 |
| 14 | T | Chloroform | 2.454 | 2.325 | 5.3 | 85 | 0.00 |
| 15 | S | 1,2-Dichloroethane-d4 (SS1) | 2.085 | 1.814 | 13.0 | 77 | 0.00 |
| 16 | T | 1,2-Dichloroethane | 2.332 | 2.070 | 11.2 | 79 | 0.00 |
| 17 | T | 1,1,1-Trichloroethane | 2.465 | 2.222 | 9.9 | 80 | 0.00 |
| 18 | T | Benzene | 8.241 | 7.582 | 8.0 | 88 | 0.00 |
| 19 | T | Carbon Tetrachloride | 1.680 | 1.549 | 7.8 | 80 | 0.00 |
| 20 | I | 1,4-Difluorobenzene (IS2) | 1.000 | 1.000 | 0.0 | 83 | 0.00 |
| 21 | T | 1,2-Dichloropropane | 0.336 | 0.328 | 2.4 | 82 | 0.00 |
| 22 | T | Trichloroethene | 0.278 | 0.283 | -1.8 | 87 | 0.00 |
| 23 | T | 1,4-Dioxane | 0.231 | 0.237 | -2.6 | 100 | 0.00 |
| 24 | T | cis-1,3-Dichloropropene | 0.500 | 0.498 | 0.4 | 84 | 0.00 |
| 25 | T | 1,1,2-Trichloroethane | 0.259 | 0.258 | 0.4 | 86 | 0.00 |
| 26 | S | Toluene-d8 (SS2) | 1.159 | 1.094 | 5.6 | 79 | 0.00 |
| 27 | T | Toluene | 1.442 | 1.431 | 0.8 | 90 | 0.00 |
| 28 | T | 1,2-Dibromoethane | 0.309 | 0.320 | -3.6 | 88 | 0.00 |
| 29 | T | Tetrachloroethene | 0.268 | 0.275 | -2.6 | 87 | 0.00 |
| 30 | I | Chlorobenzene-d5 (IS3) | 1.000 | 1.000 | 0.0 | 70 | 0.00 |
| 31 | T | Chlorobenzene | 1.481 | 1.803 | -21.7 | 87 | 0.00 |
| 32 | T | Ethylbenzene | 2.732 | 3.202 | -17.2 | 84 | 0.00 |
| 33 | T | m-&-p-Xylene | 1.775 | 2.130 | -20.0 | 85 | 0.00 |
| 34 | T | o-Xylene | 1.848 | 2.233 | -20.8 | 85 | 0.00 |
| 35 | T | 1,1,2,2-Tetrachloroethane | 0.840 | 1.018 | -21.2 | 86 | 0.00 |
| 36 | S | Bromofluorobenzene (SS3) | 0.665 | 0.615 | 7.5 | 64 | 0.00 |
| 37 | T | 1,3-Dichlorobenzene | 1.101 | 1.332 | -21.0 | 86 | 0.00 |
| 38 | T | 1,4-Dichlorobenzene | 1.074 | 1.291 | -20.2 | 86 | 0.00 |
| 39 | T | 1,2-Dichlorobenzene | 1.019 | 1.233 | -21.0 | 86 | 0.00 |

(#) = Out of Range



LM 6/21/07

# Evaluate Continuing Calibration Report

Data File : J:\MS07\DATA\2007_06\20\06200719.D  Vial: 2
Acq On : 20 Jun 2007 20:06  Operator: LM
Sample : 500pg TO-15/SIM closing CCV  Inst : MSD7
Misc : S15-06190702/S15-06060704  Multiplr: 1.00
MS Integration Params: rteint.p

Method : J:\MS07\METHODS\X7021307.M (RTE Integrator)
Title : TO-15/SIM
Last Update : Wed Feb 14 09:55:39 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 40 | T | 1,2,4-Trichlorobenzene | 0.607 | 0.738 | -21.6 | 87 | 0.00 |
| 41 | T | Naphthalene | 1.585 | 2.294 | -44.7# | 92 | 0.00 |
| 42 | T | Hexachlorobutadiene | 0.352 | 0.386 | -9.7 | 85 | 0.00 |

LM 6/21/07

# COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS



**Client:** **TRC**
**Client Project ID:** **WDI**

CAS Project ID: P2701715

## Internal Standard Area and RT Summary

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: Summa Canister(s)
Test Notes:

Lab File ID: 06200703.D
Date Analyzed: 06/20/07
Time Analyzed: 10:00

| | | IS1 (BCM) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (CBZ) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | **24 Hour Standard** | 27058 | 5.87 | 140542 | 7.14 | 64411 | 10.60 |
| | **Upper Limit** | 37881 | 6.20 | 196759 | 7.47 | 90175 | 10.93 |
| | **Lower Limit** | 16235 | 5.54 | 84325 | 6.81 | 38647 | 10.27 |
| | **Client Sample ID** | | | | | | |
| 01 | Method Blank | 25950 | 5.87 | 137591 | 7.15 | 63993 | 10.60 |
| 02 | Lab Control Sample | 27669 | 5.87 | 142012 | 7.15 | 65331 | 10.60 |
| 03 | Duplicate Lab Control Sample | 27074 | 5.87 | 139480 | 7.15 | 64687 | 10.60 |
| 04 | WDI-IBM-22-6-9-07 | 27305 | 5.88 | 140927 | 7.15 | 68900 | 10.60 |
| 05 | WDI-IBM-24B-6-9-07 | 26902 | 5.87 | 138487 | 7.14 | 65434 | 10.60 |
| 06 | WDI-IBM-24B-6-9-07 (Lab Duplicate) | 27652 | 5.88 | 140689 | 7.15 | 66773 | 10.60 |
| 07 | WDI-IBM-24B-6-9-07-SC | 27788 | 5.87 | 142226 | 7.14 | 67481 | 10.60 |
| 08 | WDI-IBM-24-6-10-07 | 27408 | 5.87 | 141032 | 7.14 | 65685 | 10.60 |
| 09 | WDI-IBM-03B-6-10-07 | 27529 | 5.87 | 140630 | 7.15 | 68477 | 10.60 |
| 10 | WDI-IBM-28-6-10-07 | 27845 | 5.87 | 143082 | 7.14 | 67854 | 10.60 |
| 11 | WDI-IBM-03-6-9-07 | 27829 | 5.88 | 141665 | 7.15 | 71642 | 10.60 |
| 12 | WDI-IBM-50-6-10-07 | 27295 | 5.87 | 140712 | 7.14 | 65951 | 10.60 |
| 13 | WDI-IBM-49-6-10-07 | 27746 | 5.87 | 142376 | 7.14 | 66972 | 10.60 |
| 14 | WDI-IBM-41-6-10-07 | 28014 | 5.88 | 143854 | 7.15 | 79013 | 10.60 |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Verified by: Re Date: 6/26/07

| | Date/Time | File Name | Sample ID | Misc Info | Operator | Vial | Comment |
|---|---|---|---|---|---|---|---|
| 1 | 2/13/07 9:21 | 02130701.D | 25ng BFB | | AB | 1 | PASSED |
| 2 | 2/13/07 9:49 | 02130702.D | 500pg TO-15/SIM CCV Std | S15-02060703/S15-02070703 | AB | 2 | PASSED [redacted] TBF high |
| 3 | 2/13/07 10:32 | 02130703.D | TO-15/SIM Method Blank (1000ml) | S15-02060703 | AB | 2 | PASSED |
| 4 | 2/13/07 11:03 | 02130704.D | 500pg TO-15/SIM LCS | S15-02060703/S15-01200702 | AB | 3 | PASSED [redacted] |
| 5 | 2/13/07 11:35 | 02130705.D | 25pg TO-15/SIM CRQL Std | S15-02060703/S15-02070704 | AB | 2 | |
| 6 | 2/13/07 12:24 | 02130706.D | P2700354-005 (1000ml) | [redacted] | AB | 9 | |
| 7 | 2/13/07 12:54 | 02130707.D | P2700302-001 (1000ml) | [redacted] | AB | 10 | |
| 8 | 2/13/07 13:25 | 02130708.D | P2700302-002 (1000ml) | [redacted] | AB | 11 | |
| 9 | 2/13/07 14:35 | 02130709.D | Blank (1000ml) | | AB | 2 | |
| 10 | 2/13/07 15:11 | 02130710.D | 500pg TO-15/SIM LCS Dup | S15-02060703/S15-01200702 | AB | 3 | PASSED AS Dup |
| 11 | 2/13/07 15:44 | 02130711.D | P2700354-001 (1000ml) | [redacted] | AB | 12 | |
| 12 | 2/13/07 16:14 | 02130712.D | P2700354-001Dup (1000ml) | [redacted] | AB | 12 | PASSED AS Dup |
| 13 | 2/13/07 16:45 | 02130713.D | P2700354-002 (1000ml) | [redacted] | AB | 13 | |
| 14 | 2/13/07 17:16 | 02130714.D | P2700354-003 (1000ml) | [redacted] | AB | 14 | |
| 15 | 2/13/07 18:01 | 02130715.D | P2700354-004 (1000ml) | [redacted] | AB | 15 | |
| 16 | 2/13/07 18:33 | 02130716.D | 500pg TO-15/SIM CCV Std | S15-02060703/S15-02070703 | AB | 2 | PASSED [redacted] |
| 17 | 2/13/07 19:10 | 02130717.D | Blank (1000ml) | | AB | 2 | |
| 18 | 2/13/07 20:08 | 02130718.D | P2700304-031 (1000ml) | [redacted] | AB | 5 | |
| 19 | 2/13/07 20:39 | 02130719.D | P2700304-025 (1000ml) | [redacted] | AB | 6 | |
| 20 | 2/13/07 21:10 | 02130720.D | P2700304-026 (1000ml) | [redacted] | AB | 7 | |
| 21 | 2/13/07 21:40 | 02130721.D | P2700304-027 (1000ml) | [redacted] | AB | 8 | Cassette is out |
| 22 | 2/13/07 22:11 | 02130722.D | P2700304-028 (1000ml) | [redacted] | AB | 9 | |
| 23 | 2/13/07 22:41 | 02130723.D | P2700304-029 (1000ml) | [redacted] | AB | 12 | |
| 24 | 2/13/07 23:11 | 02130724.D | P2700304-030 (1000ml) | [redacted] | AB | 13 | |
| 25 | 2/13/07 23:39 | 02130725.D | 25pg std check | | AB | 2 | |
| 26 | 2/14/07 0:06 | 02130726.D | 2000pg std check | | AB | 4 | |
| 27 | 2/14/07 0:34 | 02130727.D | Blank (100ml) | | AB | 10 | |
| 28 | 2/14/07 1:01 | 02130728.D | Blank (500ml) | | AB | 2 | |
| 29 | 2/14/07 1:29 | 02130729.D | Blank (100ml) | | AB | 2 | |
| 30 | 2/14/07 1:54 | 02130730.D | 25ng BFB | | AB | 1 | |
| 31 | 2/14/07 2:16 | 02130731.D | Blank (100ml) | | AB | 2 | |
| 32 | 2/14/07 2:44 | 02130732.D | 10pg TO-15/SIM ICAL std | S15-02060703/S15-02070704 | AB | 2 | ICAL (0000) 10 - 10,000 pg |
| 33 | 2/14/07 3:12 | 02130733.D | 25pg TO-15/SIM ICAL std | S15-02060703/S15-02070704 | AB | 2 | Except chloromethane, 25-10000 |
| 34 | 2/14/07 3:41 | 02130734.D | 100pg TO-15/SIM ICAL std | S15-02060703/S15-02070703 | AB | 2 | Acetone 250 - 10,000 |
| 35 | 2/14/07 4:09 | 02130735.D | 250pg TO-15/SIM ICAL std | S15-02060703/S15-02070703 | AB | 2 | MeCl, Benzene, Chloroform |
| 36 | 2/14/07 4:37 | 02130736.D | 500pg TO-15/SIM ICAL std | S15-02060703/S15-02070703 | AB | 2 | 100 - 10,000 pg |
| 37 | 2/14/07 5:05 | 02130737.D | 1000pg TO-15/SIM ICAL std | S15-02060703/S15-02070703 | AB | 2 | |
| 38 | 2/14/07 5:33 | 02130738.D | 2500pg TO-15/SIM ICAL std | S15-02060703/S15-02070703 | AB | 2 | |
| 39 | 2/14/07 6:01 | 02130739.D | 10000pg TO-15/SIM ICAL std | S15-02060703/S15-02050703 | AB | 2 | |
| 40 | 2/14/07 6:29 | 02130740.D | Blank (100ml) | | AB | 2 | |
| 41 | 2/14/07 6:57 | 02130741.D | 500pg TO-15/SIM ICV std | S15-02060703/S15-01200702 | AB | 3 | NOT USED |
| 42 | 2/14/07 10:11 | 02130742.D | 500pg TO-15/SIM ICV std | S15-02060703/S15-01200702 | AB | 3 | ↓ |
| 43 | 2/14/07 10:44 | 02130743.D | 500pg TO-15/SIM ICV std | S15-02060703/S15-02080702 | AB | 3 | PASSED |

| | Date/Time | File Name | Sample ID | Misc Info | Operator | Vial | Comment |
|---|---|---|---|---|---|---|---|
| 19 | 06/19/07 21:32 | 06190719.D | P2701691-006 (1000ml) | [redacted] | LM | 16 | |
| 20 | 06/19/07 22:02 | 06190720.D | P2701686-001 (1000ml) | [redacted] | LM | 13 | |
| 21 | 06/19/07 22:30 | 06190721.D | P2701686-002 (100ml) | [redacted] | LM | 14 | |
| 22 | 06/19/07 22:59 | 06190722.D | 500pg TO-15/SIM (closing CCV) | S15-05240701/S15-06060704 | LM | 2 | Passed |
| 23 | 06/19/07 23:33 | 06190723.D | P2701660-001 (1000ml) | [redacted] | LM | 4 | |
| 24 | 06/20/07 0:05 | 06190724.D | P2701660-002 (1000ml) | [redacted] | LM | 5 | |
| 25 | 06/20/07 0:35 | 06190725.D | P2701660-003 (1000ml) | [redacted] | LM | 6 | |
| 26 | 06/20/07 1:06 | 06190726.D | P2701660-004 (1000ml) | [redacted] | LM | 7 | |
| 27 | 06/20/07 1:36 | 06190727.D | P2701660-005 (1000ml) | [redacted] | LM | 8 | |
| 28 | 06/20/07 2:07 | 06190728.D | P2701660-007 (1000ml) | [redacted] | LM | 9 | |
| 29 | 06/20/07 2:36 | 06190729.D | blank (100ml) | rinse system | LM | 2 | |

lab dup

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 06/20/07 9:10 | 06200701.D | 25ng BFB | | LM | 1 | Passed |
| 2 | 06/20/07 9:31 | 06200702.D | blank (100ml) | S15-06190702 | LM | 2 | |
| 3 | 06/20/07 10:00 | 06200703.D | 500pg TO-15/SIM CCV | S15-06190702/S15-06060704 | LM | 2 | Passed |
| 4 | 06/20/07 11:07 | 06200704.D | TO-15/SIM Method Blank (1000ml) | S15-06190702 | LM | 2 | Passed |
| 5 | 06/20/07 11:35 | 06200705.D | 25pg TO-15/SIM CRQL STD | S15-06190702/S15-06060704 | LM | 2 | Passed |
| 6 | 06/20/07 12:17 | 06200706.D | 500pg TO-15/SIM LCS STD | S15-06190702/S15-06070704 | LM | 3 | Passed |
| 7 | 06/20/07 12:46 | 06200707.D | 500pg TO-15/SIM LCSD STD | S15-06190702/S15-06070704 | LM | 3 | Passed |
| 8 | 06/20/07 13:31 | 06200708.D | P2701715-002 (1000ml) | TRC WDI-IBM-22-6-9-07 (-3.5,3.5) | LM | 4 | |
| 9 | 06/20/07 14:02 | 06200709.D | P2701715-003 (1000ml) | TRC WDI-IBM-24B-6-9-07 (-3.3,3.5) | LM | 5 | |
| 10 | 06/20/07 14:46 | 06200710.D | P2701715-003 DUP (1000ml) | TRC WDI-IBM-24B-6-9-07 (-3.3,3.5) | LM | 5 | Passed as lab dup |
| 11 | 06/20/07 15:22 | 06200711.D | P2701715-004 (1000ml) | TRC WDI-IBM-24B-6-9-07-SC (-3.3,3.5) | LM | 4 | |
| 12 | 06/20/07 16:02 | 06200712.D | P2701715-008 (1000ml) | TRC WDI-IBM-24-6-10-07 (-3.0,3.5) | LM | 5 | |
| 13 | 06/20/07 16:37 | 06200713.D | P2701715-009 (1000ml) | TRC WDI-IBM-03B-6-10-07 (-3.7,3.5) | LM | 6 | |
| 14 | 06/20/07 17:35 | 06200714.D | P2701715-010 (1000ml) | TRC WDI-IBM-28-6-10-07 (-1.8,3.5) | LM | 5 | |
| 15 | 06/20/07 18:05 | 06200715.D | P2701715-001 (1000ml) | TRC WDI-IBM-03-6-9-07 (-3.0,3.4) | LM | 6 | |
| 16 | 06/20/07 18:36 | 06200716.D | P2701715-006 (1000ml) | TRC WDI-IBM-50-6-10-07 (-5.2,3.5) | LM | 7 | |
| 17 | 06/20/07 19:08 | 06200717.D | P2701715-007 (1000ml) | TRC WDI-IBM-49-6-10-07 (-1.0,3.5) | LM | 8 | |
| 18 | 06/20/07 19:37 | 06200718.D | P2701715-007 (40ml) | TRC WDI-IBM-41-6-10-07 (-2.5,3.5) | LM | 4 | |
| 19 | 06/20/07 20:06 | 06200719.D | 500pg TO-15/SIM closing CCV | S15-06190702/S15-06060704 | LM | 2 | Passed |
| 20 | 06/20/07 20:38 | 06200720.D | P2701723-001 (1000ml) | [redacted] | LM | 9 | |
| 21 | 06/20/07 21:09 | 06200721.D | P2701723-002 (1000ml) | [redacted] | LM | 10 | |
| 22 | 06/20/07 21:40 | 06200722.D | P2701723-003 (1000ml) | [redacted] | LM | 11 | |
| 23 | 06/20/07 22:10 | 06200723.D | P2701723-004 (1000ml) | [redacted] | LM | 12 | |
| 24 | 06/20/07 22:39 | 06200724.D | P2701723-004 dil (100ml) | [redacted] | LM | 12 | |
| 25 | 06/20/07 23:11 | 06200725.D | P2701723-005 (1000ml) | [redacted] | LM | 13 | |
| 26 | 06/20/07 23:39 | 06200726.D | P2701723-005 dil (100ml) | [redacted] | LM | 13 | |
| 27 | 06/21/07 0:08 | 06200727.D | blank(200ml) | rinse | LM | 2 | |

LM 6/21/07

**Columbia Analytical Services, Inc.**
*Air Quality Laboratory*
*An Employee Owned Company*

# QC CERTIFICATION

| | |
|---|---|
| Quality Control Results: | PASS |
| Quality Control Batch ID: | 07192 |
| Quality Control Analyzed: | 05-Jun-07 |
| Cleaned: | 01-Jun-07 |
| Quality Control Analyzed on Container: | ac00934 |

Container IDs

AC01075
AC01267
AC01169
AC01221
AC01227
AC01311
AC00793
AC01447
AC01117
AC00934
AC01101
AC01018
AC00074
AC01120

**Columbia Analytical Services, Inc.**
*Air Quality Laboratory*
*An Employee Owned Company*

# QC CERTIFICATION

| | |
|---|---|
| Quality Control Results: | PASS |
| Quality Control Batch ID: | 07209 |
| Quality Control Analyzed: | 05-Jun-07 |
| Cleaned: | 04-Jun-07 |
| Quality Control Analyzed on Container: | ac00917 |

Container IDs

AC01217
AC00831
AC01036
AC01044
AC01258
AC00910
AC00628
AC00822
AC00731
AC00723
AC00085
AC00917
AC00412
AC00976

**Columbia Analytical Services, Inc.**
**Sample Acceptance Check Form**

Client: TRC Work order: P2701715

Project: WDI

Sample(s) received on: 06/11/07 Date opened: 06/11/07 by: MZ

*Note:* This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

| | | Yes | No | N/A |
|---|---|---|---|---|
| 1 | Were **sample containers** properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 | Did **sample containers** arrive in good condition? | ☒ | ☐ | ☐ |
| 3 | Were **chain-of-custody** papers used and filled out? | ☒ | ☐ | ☐ |
| 4 | Did **sample container labels** and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 | Was **sample volume** received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 | Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 | Was proper **temperature** (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| | Cooler Temperature NA °C | | | |
| | Blank Temperature NA °C | | | |
| 8 | Were **custody seals** on outside of cooler/Box? | ☐ | ☒ | ☐ |
| | Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| | Were signature and date included? | ☐ | ☐ | ☒ |
| | Were seals intact? | ☐ | ☐ | ☒ |
| | Were custody seals on outside of sample container? | ☐ | ☒ | ☐ |
| | Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| | Were signature and date included? | ☐ | ☐ | ☒ |
| | Were seals intact? | ☐ | ☐ | ☒ |
| 9 | Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| | Is there a client indication that the submitted samples are **pH** (acid) preserved? | ☐ | ☐ | ☒ |
| | Were **VOA vials** checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| | Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it? | ☐ | ☐ | ☒ |
| 10 | **Tubes:** Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| | Do they contain moisture? | ☐ | ☐ | ☒ |
| 11 | **Badges:** Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| | Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |

| Lab Sample ID | Required pH (as received, if required) | pH (as received, if required) | VOA Headspace (Presence/Absence) | Receipt / Preservation Comments |
|---|---|---|---|---|
| P2701715-001 | | | NA | |
| P2701715-002 | | | NA | |
| P2701715-003 | | | NA | |
| P2701715-004 | | | NA | |
| P2701715-005 | | | NA | |
| P2701715-006 | | | NA | |
| P2701715-007 | | | NA | |
| P2701715-008 | | | NA | |
| P2701715-009 | | | NA | |
| P2701715-010 | | | NA | |

Explain any discrepancies: (include lab sample ID numbers):

# Air - Chain of Custody Record & Analytical Service Request



Columbia Analytical Services INC.
An Employee - Owned Company
2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

**Requested Turnaround Time in Business Days (Surcharges) please circle**
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P2701715

Company Name & Address (Reporting Information): TRC, 21 W. TECHNOLOGY DR., IRVINE, CA. 92618

Project Name: WDI

Project Number:

Project Manager: ANAND HELEKAR

P.O. # / Billing Information:

Phone: (949) 727-9336 Fax: (949) 727-7399

Email Address for Result Reporting: AHELEKAR@TRCSOLUTIONS.COM

Sampler (Print & Sign): STEVEN CRAWFORD Steven Crawford

CAS Contact:

Analysis Method and/or Analytes

| Client Sample ID | Laboratory ID Number | Date Collected | Time Collected | Sample Type (Air/Tube/Solid) | Canister ID (Bar Code # - AC, SC, etc.) | Flow Controller (Bar Code - FC #) | Sample Volume | VOCS BY TO-15 + VINYL CHLORIDE AND 1,2-DIBROMOETHANE BY SIM | EPA 25C MODIFIED TOTAL NON METHANE ORGANIC CARBON + METHANE | | | Comments e.g. Actual Preservative or specific instructions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WDI-IBM-03-6-9-07 | 1-6.1 | 6-9-07 | 1506 | AIR | AC01117 | FC00249 | 6L | X | X | | | |
| WDI-IBM-22-6-9-07 | 2-7.1 | 6-9-07 | 1456 | AIR | AC00628 | FC00585 | 6L | X | X | | | |
| WDI-IBM-24B-6-9-07 | 3-6.7 | 6-9-07 | 1513 | AIR | AC00910 | FC00584 | 6L | X | X | | | |
| WDI-IBM-24B-6-9-07-SC | 4-6.8 | 6-9-07 | 1513 | AIR | AC00917 | FC00510 | 6L | X | X | | | |
| WDI-IBM-41-6-10-07 | 5-5.0 | 6-10-07 | 1040 | AIR | AC01044 | FC00447 | 6L | X | X | | | |
| WDI-IBM-50-6-10-07 | 6-10.5 | 6-10-07 | 1200 | AIR | AC00723 | FC00539 | 6L | X | X | | | |
| WDI-IBM-49-6-10-07 | 7-2.1 | 6-10-07 | 1210 | AIR | AC00412 | FC00579 | 6L | X | X | | | |
| WDI-IBM-24-6-10-07 | 8-6.1 | 6-10-07 | 1217 | AIR | AC00731 | FC00400 | 6L | X | X | | | |
| WDI-IBM-03B-6-10-07 | 9-7.5 | 6-10-07 | 1456 | AIR | AC00822 | FC00333 | 6L | X | X | | | |
| WDI-IBM-28-6-10-07 | 10-3.7 | 6-10-07 | 1637 | AIR | AC01258 | FC00435 | 6L | X | X | | | |

**Report Tier Levels - please select**

Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ✓
Tier V - (client specified) ____

EDD required Yes / No
Type: ____ EDD Units: ____

Project Requirements (MRLs, QAPP):

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Date: | Time: |
|---|---|---|---|---|---|
| Steven Crawford | | | | 6/11/07 | 1230 |
| Relinquished by: (Signature) TRC | 6/11/07 | 1026 | Received by: (Signature) | 6/11/07 | 1026 |
| Relinquished by: (Signature) | | | Received by: (Signature) | | |

Cooler / Blank