**DEPARTMENT OF THE ARMY**
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640

REPLY TO
ATTENTION OF

ARRC-SNJ-PW-E

September 16, 2014

New York State Department of Environmental Conservation
Division of Environmental Remediation
Attn: Daniel Eaton, Program Manager
625 Broadway
Albany, New York 12233-7015

Re: O'Donovan USAFRC
Final Report Addendum – Additional Indoor Air Sampling Results

Dear Mr. Eaton:

Please find included, as an enclosure to this correspondence, the Final Report Addendum-Additional Indoor Air Sampling Results for the Army-owned portion of the Major James J. O'Donovan AFRC.

Questions or comments regards to this document should be directed to Susan D. Shelton at 609.562.7661 or email Susan.d.Shelton5.ctr@mail.mil.

Sincerely,

Kevin F. Gashlin
Environmental Protection Specialist
DPW

**Enclosures:**
One (1) CD-ROM

cc:
Shawna Hoppe, USEPA – Region 2
Scarlett McLaughlin, NYDOH

CB&I Federal Services LLC
2790 Mosside Boulevard
Monroeville, PA 15146
Tel: +1 412-858-1630
Fax: +1 412-858-1654
www.CBI.com

August 13, 2014

U.S Army Corps of Engineers
Attn: Mr. John Hartley
Omaha District Rapid Response
Building 525 Castle Hall
Offutt AFB, Nebraska 68113

Subject: O'Donovan USAFRC
Final Report Addendum – Additional Indoor Air Sampling Results

Dear Mr. Hartley,

CB&I Federal Services LLC (CB&I) has prepared this Indoor Air Assessment Report for the United States Army Corps of Engineers (USACE)-Omaha District, in compliance with the Rapid Response Contract No. W9128F-12-D-0003, Task Order No. 018. The purpose of this investigation was to conduct a breathing zone assessment (BZA) of occupied spaces (indoor air) in the Major James J. O'Donovan United States Armed Forces Reserve Center (USAFRC) buildings located at 90 North Main Avenue, Albany, New York (**Figure 1**).

**Background**

The O'Donovan USAFRC site is located on a 3.5-acre parcel at 90 North Main Avenue in Albany, New York. The site area of investigation includes the 3.5-acre O'Donovan USAFRC parcel and the adjacent streets (North Main Avenue and Washington Avenue) on two sides of the property. The surrounding area consists of the adjacent Albany High School and residential properties (**Figure 1**).

The O'Donovan USAFRC site was developed for use by the military in 1955 as a 100-man center for conducting United States Army Reserve (USAR) and United States Armed Forces Reserve training. The site was most recently used as a reserve training center for US Army, Navy, and Marine personnel (PARS Environmental, Inc. [PARS], 2012). The USAFRC is in the process of being closed with plans to surplus the property in the future.

As reported in the Site Investigation Report (Shaw Environmental and Infrastructure, Inc. [Shaw], 2013), numerous remedial activities and investigations have been performed at the site. In March and April 2013, Shaw conducted a site investigation to delineate contamination in soil vapor, groundwater and indoor air identified during previous investigations at the site. The results of sampling conducted in 2012 suggested a potential for vapor intrusion (VI) contamination of the neighboring Albany High School and residences, prompting the New York State Department of Environmental Conservation

(NYSDEC) and New York State Department of Health (NYSDOH) to request a time-critical response action.

The groundwater analytical results from the March and April 2013 site investigation show that PCE was present in two locations (MW-2 and MW-3) at concentrations above the New York State Groundwater Quality Standard (NYS GWQS) of 5.0 µg/L. In response to the findings, a remedial investigation plan is currently being developed to address all contaminated media at the installation.

Analytical results from the indoor air sampling event in March 2013 reported numerous detections, specifically: 21 different compounds constituting 127 analytical detections for sub-slab vapor samples and 27 different compounds constituting 139 analytical detections for indoor air samples. Four target compounds (1,1,1-trichloroethane [1,1,1-TCA], carbon tetrachloride, PCE, and trichloroethene [TCE]) were selected as indicators of contamination, as they are the compounds listed in the NYSDOH VI Guidance.

A total of 19 compounds were detected in soil gas. Soil gas results were compared to the USEPA Target Shallow Soil Gas Concentrations (TSSGC) values located in Table 2 of the Office of Solid Waste Emergency Response (OSWER) Draft Vapor Intrusion guidance document. Since the soil to indoor air attenuation factor of the site was unknown, an attenuation factor of 0.1, the lowest value in the table, was used for comparison. TCE was detected in two locations (SV-7 and SV-8) above the USEPA TSSGC guidance value of 22 µg/$m^3$. The USEPA TSSGC guidance was used in lieu of the NYSDEC sub-slab guidance because SV-7 and SV-8 were collected from soil gas implants away from the building foundation.

Based on sample results collected during the site investigation, it was recommended that additional air sampling should be completed during the next heating season (November 15, 2013 through March 31, 2014) to confirm the initial results. Also, due to the uncertainties in the soil to the indoor air attenuation factor at the site, and the detection of TCE above the applicable guidance value, further investigation was recommended for soil gas concurrent with the sub-slab and indoor air sampling. Overall, soil gas results did not indicate a high likelihood of soil vapor intrusion from the AFRC at nearby structures, but for a definitive answer, additional sampling at these locations would be necessary.

**Work Scope**

Four indoor air samples, one duplicate sample and one ambient air (outdoor) air sample were proposed to be collected on the “Army” side of the building. Sample locations were chosen by USACE to coincide with rooms that were currently occupied by Full-time Staff. However, two of the proposed rooms (RM 116 – 7$^{th}$ LOD Admin and RM 119 – 7$^{th}$ LOD Supply Sgt) were locked and inaccessible. It was noted that the Staff was in the process of moving to a facility in Schenectady, New York and the building was no longer occupied. According to the person interviewed, it was anticipated that the staff

would be completely removed from the facility by June 20th. A flyer indicated that the decommissioning ceremony of the building would occur on Saturday, August 2, 2014 at 1400.

*Indoor Air Sampling*

On June 12, 2014, CB&I representatives mobilized to the site to document room conditions, complete a limited inspection, and collect air samples. Prior to sampling, the CB&I representatives inventoried any supplies located in the room, documented conditions of windows and air conditioning unit in the rooms, and reviewed the building inspection from the previous year with the site contact to determine if there were any changes made over the year. Additionally, weather conditions (temperature, precipitation, wind speed, etc.) were also documented. At the time of the sampling, the average temperature was 65°F with light winds and light to moderate rainfalls. Field Sheets are included as **Attachment A**.

As discussed previously, only two of the four indoor air sample locations were accessible. Two indoor air samples and one duplicate sample were collected on June 13, 2014 at the locations shown on **Figure 2**. Sample locations were as follows:

- IA-RM104 and IA-DUP – RM 104 / Retention NCO Room
- IA-RM105 – RM 105 / 865th CSH Admin Room

All samples were collected approximately 4 to 5 feet from the ground or floor surface using 6-liter summa canisters over a 24-hour period. The duplicate air samples were collected adjacent to each other; no “T-splitter” was used. A “T-splitter” is a device in the shape of a letter “T” that allows two canisters to collect sample from one point at the same time.

Upon completion of the sampling, CB&I recorded the serial number of each canister and associated regulator on the chain-of-custody and air sampling sheets. The assigned sample identification was then placed on the canister identification tag, and recorded on the chain of custody and field notebook/sample form. The gauge pressure and sample start time were also recorded. A digital photograph of each canister setup and surrounding area was taken for the project files to document the set-up (**Attachment B)**. The canisters were shipped under standard chain-of-custody protocol to Chemtech in Mountainside, New Jersey (Chemtech) for volatile organic compound (VOC) analysis via United States Environmental Protection Agency (USEPA) Method TO-15. Results of the air sampling are summarized in **Table 1** and discussed in the following paragraphs.

*Ambient Outdoor Air Sampling*

One ambient outdoor air (OA-1) sample was collected on June 13, 20134; the outdoor air sample was collected as shown on **Figure 2**. The sample was suspended approximately 4.5-feet above the ground

using summa canisters with a 24-hour regulator. After collection, the sample was sent to Chemtech for VOC analysis by USEPA Method TO-15.

**Analytical Results**

Analytical results from the indoor air sampling event in June 2014 reported numerous detections, specifically: 17 different compounds. Analytical results are included as **Attachment C**. Four target compounds (1,1,1-TCA) carbon tetrachloride, PCE, and TCE) were selected as indicators of contamination as they were the compounds chosen during the March/April 2013 sampling event. 1,1,1-TCA was not detected in any of the June 2014 indoor air or ambient outdoor air samples. TCE was only detected in the ambient outdoor sample at a concentration of 0.81 µg/$m^3$. PCE was detected in the RM104 sample (0.27 µg/$m^3$), RM105 sample (0.34 µg/$m^3$) and ambient outdoor air (0.68 µg/$m^3$). It was not detected in the RM104 duplicate sample (<0.2 µg/$m^3$). Carbon tetrachloride was detected at a concentration of 0.38 µg/$m^3$ in all of the samples.

**Conclusions/Recommendations**

The sample results for the indicator compounds were all below the indoor air threshold concentration and New York indoor air limit, where applicable. However, samples were collected outside of the New York heating season guidance (November 15th – March 31st). Additionally, no sub-slab samples were collected as part of this sampling event.

It is CB&I's understanding that the USAFRC building is now unoccupied. CB&I recommends that an additional round of indoor air sampling be completed (including sub-slab samples) during the heating season should the USAFRC building become occupied.

Sincerely,

Heather A. Fariello, CHMM
Project Scientist
CB&I
Heather Fariello
Phone: (518) 785-2346
E-Mail Address: heather.fariello@cbi.com

Thomas P. Mathison, PMP
Project Manager
CB&I Federal Services
Tom Mathison
(412) 858-1630
tom.mathison@CBIfederalservices.com

Attachments:
Tables
Figures
Attachment A: Field Sheets
Attachment B: Photo Log
Attachment C: Analytical Data

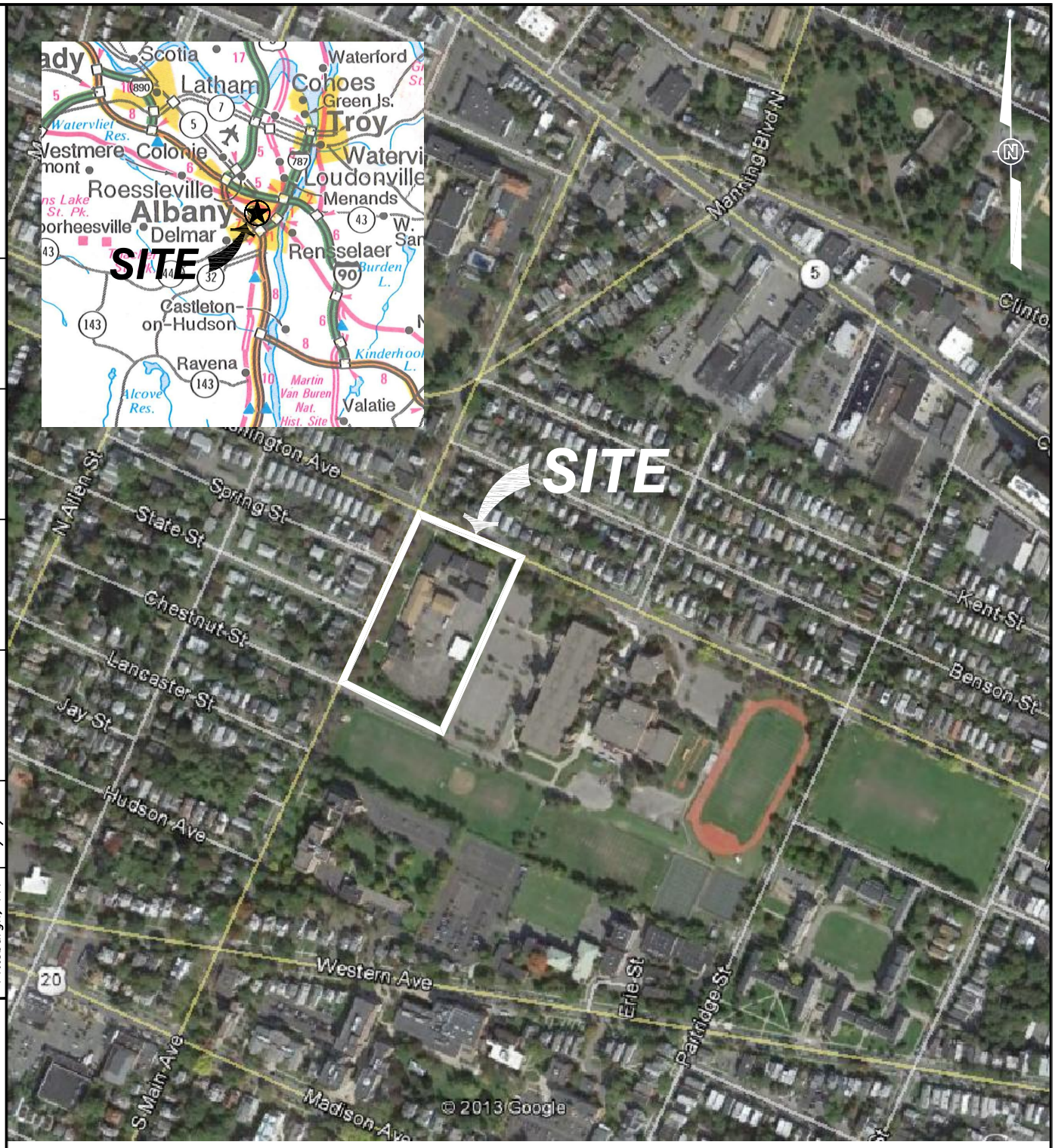
# TABLES

**Table 1**
**O'Donovan Training Center**
**Ambient Indoor and Outdoor Air Results Summary**
**June 2014**

| Chemical | CAS Number | Indoor Air Threshold Conc. ug/m$^3$ | | IA-RM 104 12-13 Jun-14 | | Duplicate (IA-RM104) | | | IA-RM105 12-Jun-14 | | | OA-1 12-Jun-14 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | *F2781-01* | *Qualifier* | *F2781-03* | *Qualifier* | *RPD* | *F2781-02* | *Qualifier* | | *F2781-04* | *Qualifier* |
| Dichlorodifluoromethane | 75-71-8 | 200 | | 1.73 | J | 2.82 | | 47.9% | 3.02 | | | 1.53 | J |
| Chloromethane | 74-87-3 | 90 | | 2.27 | | 2.07 | | 9.2% | 1.26 | | | 1.3 | |
| Vinyl Chloride | 75-01-4 | 28 | | 0.08 | U | 0.08 | U | Both U | 0.08 | U | | 0.08 | U |
| Bromomethane | 74-83-9 | 5 | | 0.39 | U | 0.39 | U | Both U | 0.39 | U | | 0.39 | U |
| Chloroethane | 75-00-3 | 10,000 | | 0.26 | U | 0.26 | U | Both U | 0.26 | U | | 0.26 | U |
| Trichlorofluoromethane | 75-69-4 | 70 | | 5 | | 4.95 | | 1.0% | 2.64 | J | | 1.35 | J |
| 1,1-Dichloroethene | 75-35-4 | 200 | | 0.4 | U | 0.4 | U | Both U | 0.4 | U | | 0.4 | U |
| Acetone | 67-64-1 | 350 | | 69.8 | D | 74.1 | D | 6.0% | 25.9 | | | **475** | D |
| Carbon Disulfide | 75-15-0 | 700 | | 0.31 | U | 0.31 | U | Both U | 0.31 | U | | 0.31 | U |
| Methylene Chloride | 75-09-2 | 60 | NY limit | 1.77 | | 1.67 | J | 5.8% | 1.32 | J | | 0.69 | J |
| trans-1,2-Dichloroethene | 156-60-5 | 70 | | 0.4 | U | 0.4 | U | Both U | 0.4 | U | | 0.4 | U |
| 1,1-Dichloroethane | 75-34-3 | 500 | | 0.4 | U | 0.4 | U | Both U | 0.4 | U | | 0.4 | U |
| 2-Butanone | 78-93-3 | 1,000 | | 3.54 | | 2.95 | | 18.2% | 3.24 | | | 169 | E |
| Carbon Tetrachloride | 56-23-5 | 16 | | 0.38 | | 0.38 | | 0.0% | 0.38 | | | 0.38 | |
| Chloroform | 67-66-3 | 11 | | 0.49 | U | 0.49 | U | Both U | 0.49 | U | | 0.49 | U |
| 1,1,1-Trichloroethane | 71-55-6 | 2,200 | | 0.16 | U | 0.16 | U | Both U | 0.16 | U | | 0.16 | U |
| Benzene | 71-43-2 | 31 | | 0.67 | J | 0.54 | J | 21.5% | 0.61 | J | | 1.15 | J |
| 1,2-Dichloroethane | 107-06-2 | 9.4 | | 0.4 | U | 0.4 | U | 0.0% | 0.4 | U | | 0.4 | U |
| Trichloroethene | 79-01-6 | 5 | NY limit | 0.16 | U | 0.16 | U | Both U | 0.16 | U | | 0.81 | |
| 1,2-Dichloropropane | 78-87-5 | 4 | | 0.46 | U | 0.46 | U | Both U | 0.46 | U | | 0.46 | U |
| Bromodichloromethane | 75-27-4 | 14 | | 0.67 | U | 0.67 | U | Both U | 0.67 | U | | 0.67 | U |
| 4-Methyl-2-Pentanone | 108-10-1 | None Specified | | 0.41 | U | 0.37 | J | 10.3% | 0.41 | U | | 0.41 | U |
| Toluene | 108-88-3 | 400 | | 6.03 | | 7.91 | | 27.0% | 5.65 | | | 10.2 | |
| trans-1,3-Dichloropropene | 10061-02-6 | 20 | | 0.45 | U | 0.45 | U | Both U | 0.45 | U | | 0.45 | U |
| cis-1,3-Dichloropropene | 10061-01-5 | 20 | | 0.45 | U | 0.45 | U | Both U | 0.45 | U | | 0.45 | U |
| 1,1,2-Trichloroethane | 79-00-5 | 15 | | 0.55 | U | 0.55 | U | Both U | 0.55 | U | | 0.55 | U |
| 2-Hexanone | 591-78-6 | None Specified | | 0.49 | J | 0.45 | J | 8.5% | 0.41 | U | | 35.6 | |
| Dibromochloromethane | 124-48-1 | 10 | | 0.85 | U | 0.85 | U | Both U | 0.85 | U | | 0.85 | U |
| Tetrachloroethene | 127-18-4 | 100 | NY limit | 0.27 | | 0.2 | U | INDT | 0.34 | | | 0.68 | |
| Chlorobenzene | 108-90-7 | 60 | | 0.46 | U | 0.46 | U | 0.0% | 0.46 | U | | 0.46 | U |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 3.3 | | 0.69 | U | 0.69 | U | 0.0% | 0.69 | U | | 0.69 | U |
| Ethyl Benzene | 100-41-4 | 220 | | 0.43 | U | 0.43 | U | 0.0% | 0.43 | U | | 1.69 | J |
| m/p-Xylene | 179601-23-1 | 7,000 | | 5.21 | | 1.48 | J | 111.5% | 1.69 | J | | 6.52 | |
| o-Xylene | 95-47-6 | 7,000 | | 2.3 | | 0.69 | J | 107.7% | 0.65 | J | | 2.08 | J |
| Styrene | 100-42-5 | 1,000 | | 0.47 | J | 0.43 | U | 8.9% | 0.43 | U | | 0.43 | U |
| Bromoform | 75-25-2 | 220 | | 1.03 | U | 1.03 | U | Both U | 1.03 | U | | 1.03 | U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 4.2 | | 0.21 | U | 0.21 | U | Both U | 0.21 | U | | 0.21 | U |
| 1,3-Dichlorobenzene | 541-73-1 | 110 | | 0.6 | U | 0.6 | U | Both U | 0.6 | U | | 0.6 | U |
| 1,4-Dichlorobenzene | 106-46-7 | 800 | | 0.6 | U | 0.6 | U | Both U | 0.6 | U | | 0.6 | U |
| 1,2-Dichlorobenzene | 95-50-1 | 200 | | 0.6 | U | 0.6 | U | Both U | 0.6 | U | | 0.6 | U |

Results are shown in ug/m$^3$
U- analyte is not detected, concentration is detection limit
J- estimated value, concentration is above detection-limit, but below reporting limit
D- result is from a diluted additional analytical run
INDT-RPD is invalid; one result is U-flagged
Concentrations in **bold** font are above the IA Threshold value

# FIGURES




S C A L E

0 500 1000 FEET

| OFFICE | DATE | DESIGNED BY | DRAWN BY | CHECKED BY | APPROVED BY | DRAWING NUMBER |
|---|---|---|---|---|---|---|
| Pittsburgh, PA | -/-/-- | -- | -- | -- | -- | 149092-A4 |

CB&I Federal Services, LLC
2790 Mosside Boulevard
Monroeville, PA 15146

MAJOR JAMES J. O'DONOVAN
UNITED STATES ARMED FORCES RESERVE CENTER
ALBANY, NEW YORK

FIGURE 1

SITE LOCATION MAP

Xref : Image : 20130508055448971_0001.jpg
A5C7C6D02799.dib
CB&I.jpg

File: O:\Project\149092\149092-A4.dwg
Plot Date/Time: Sep 11, 2014 - 2:33pm
Plotted By: bernadette.oconnor

File: O:\project\Department of the Army\500205\500205-A1.dwg
Plot Date/Time: Jul 25, 2014 - 10:30am Xref :
Plotted By: bernadette.oconnor Image :

| OFFICE | DATE | DESIGNED BY | DRAWN BY | CHECKED BY | APPROVED BY | DRAWING NUMBER |
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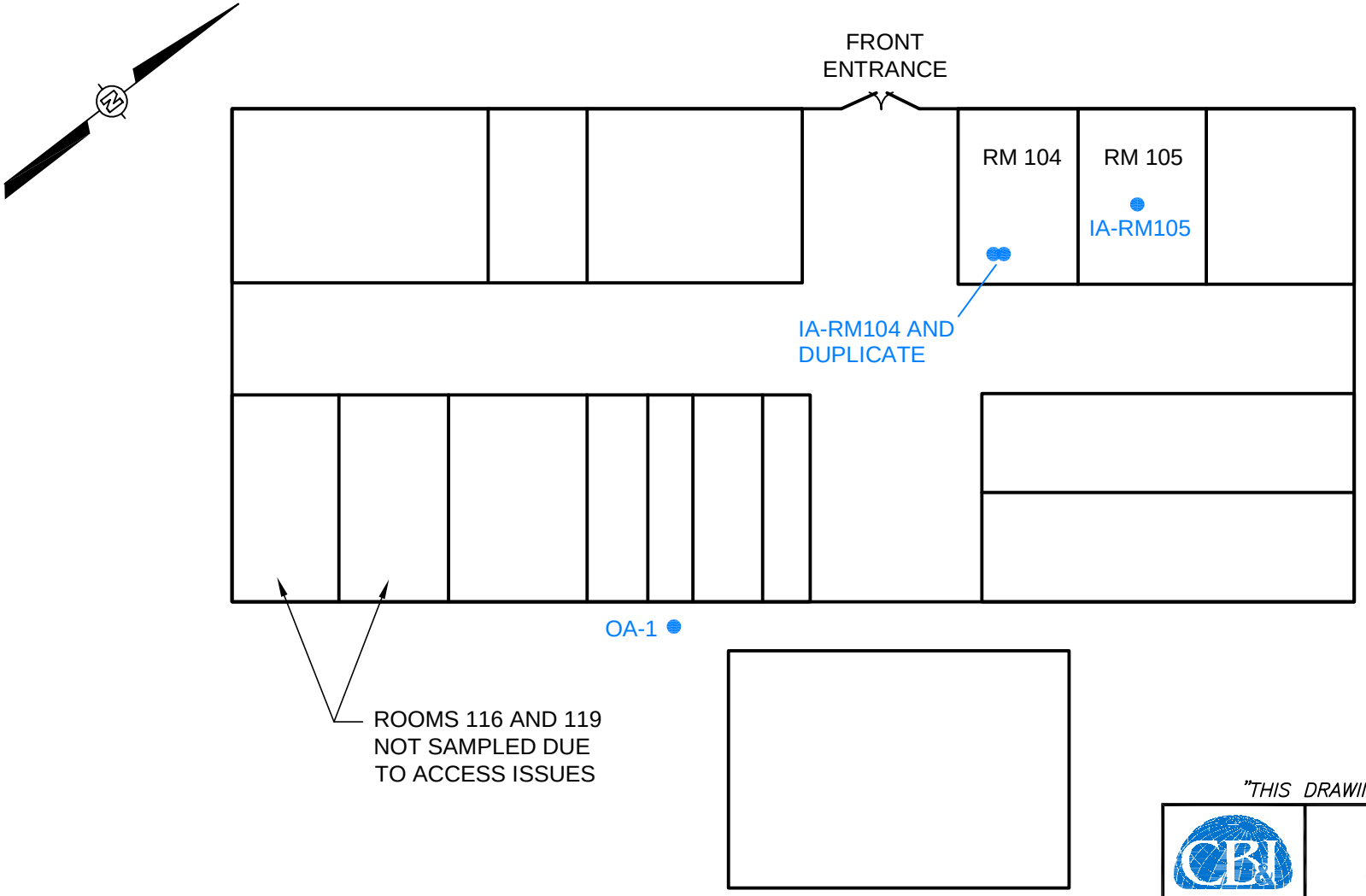
| Pittsburgh, PA | 7/25/14 | T. MATHISON | B. Faison | T. Mathison | -- | 500205-A1 |




"THIS DRAWING NOT TO SCALE"

LEGEND:

IA-RM105 ● AIR SAMPLE LOCATION

CB&I
2790 Mosside Boulevard
Monroeville, PA 15146-2792

DEPARTMENT OF THE ARMY

FIGURE 2
SAMPLING LOCATION PLAN
FIRST FLOOR

O'DONOVAN USAFRC
ALBANY, NEW YORK

# ATTACHMENT A

## Field Sheets

| | |
|---|---|
| Project Name and No: | Albany USAFRC / 775002S.000102.00 |
| Date: | 6/12/14 - 6/13/14 |
| Sampler(s): | RA + HAF |
| Sample ID: | IA - RM105 |
| Address / Location | USAFRC Washington Ave Albany, NY |
| Weather Conditions: | TH 62 F, Cloudy, 84% hum, 57 dp, wind S 7 mph, pressure = 1019.2 mb |
| PID Meter Used: | ppb Rae 3000 |
| He LD Meter Used: | |
| Purge Pump Used: | |

| | Soil Gas | Ambient | Comments |
|---|---|---|---|
| **SUMMA CANISTER RECORD** | | | |
| Canister Serial No.: | | 10279 | windows closed |
| Flow Controller No.: | | 10476 | a/c off |
| Start Date / Time | | 6/12/14 1121 | |
| Stop Date / Time | | 6/13/14 0844 | |
| Start / Stop Pressure (in. Hg) | | 27 / 3.5 | |
| DUPLICATE SAMPLE ID | | — | |
| Approximate GW Depth: | | N/A | |
| Air Temp (°C or °F): | | ~70 | |
| Direction / Distance fom Bldg. or Structure: | | — | |
| Distance to roadway: | | — | |
| Intake Height / Depth (feet) | | 4' 4" | on desk |
| Noticeable Odor? | | musty | |
| PID Reading (ppb): | | 200 | |
| He Dector Reading (% or ppm He): Leak Test result: Pass/Fail | | N/A | |
| Sample Analysis: | | TO-15 | |
| Container Description: | | good | |
| Photo Taken: Yes / No | | yes | |

hand sanitizer 588 ppb
air freshner - french vanilla 283 ppb
White-out (bic) - 800 ppb

F. 67 F rain 88% hum, 64° dp, 1011.5 mb wind ESE 4 mph

| | |
|---|---|
| | Project Name and No: Albany USAFRC / 775002500200 |
| | Date: 6/12/14 - 6/13/14 |
| | Sampler(s): RA + HAF |
| Sample ID: HAF 6/12/14 ~~AA~~ OA-1 | Address / Location USAFRC Albany, NY |
| Weather Conditions: 62 F, cloudy/light rain, 84% hum, 57 dp, wind S 7mph, press 1019.2 mb | |
| PID Meter Used: ppbRae 3000 | He LD Meter Used: — Purge Pump Used: — |

| | Soil Gas | Ambient | Comments |
|---|---|---|---|
| **SUMMA CANISTER RECORD** | | | |
| Canister Serial No.: | | 10313 | |
| Flow Controller No.: | | 10190 | |
| Start Date / Time | | 6/12/14 1146 | |
| Stop Date / Time | | 6/13/14 1109 | |
| Start / Stop Pressure (in. Hg) | | +30 / 5 | |
| DUPLICATE SAMPLE ID | | — | |
| Approximate GW Depth: | | — | |
| Air Temp (°C or °F): | | 62 | |
| Direction / Distance fom Bldg. or Structure: | | 18" | |
| Distance to roadway: | | | |
| Intake Height / Depth (feet) | | ~~3'3"~~ 4' 4" HAF 6/12/14 | |
| Noticeable Odor? | | NO | |
| PID Reading (ppb): | | 0.0 | |
| He Dector Reading (% or ppm He): Leak Test result: Pass/Fail | | N/A | |
| Sample Analysis: | | TO-15 | |
| Container Description: | | good | |
| Photo Taken: Yes / No | | yes | |

| | |
|---|---|
| Project Name and No: | Albany USAFRC / 7750025.00010200 |
| Date: | 6/12/14 - 6/13/14 |
| Sampler(s): | RA + HAF |
| Sample ID: | 1A - RM104 |
| Address / Location | USAFRC Albany, NY |
| Weather Conditions: | 62 F, cloudy, 84% humidity 57° dp, wind S 7mph press = 1019.2 mb |
| PID Meter Used: | ppb Rae 3000 |
| He LD Meter Used: | — |
| Purge Pump Used: | — |

| | Soil Gas | Ambient | HAF - ~~Comments~~ duplicate |
|---|---|---|---|
| **SUMMA CANISTER RECORD** | | | |
| Canister Serial No.: | | 10281 | 10291 |
| Flow Controller No.: | | 10505 | 10619 |
| Start Date / Time | | 6/12/14 1131 | 6/12/14 1131 |
| Stop Date / Time | | 6/13/14 1103 | 6/13/14 1103 |
| Start / Stop Pressure (in. Hg) | | +30 / 6 | +30 / 5 |
| DUPLICATE SAMPLE ID | | — | Duplicate |
| Approximate GW Depth: | | — | — |
| Air Temp (°C or °F): | | ~70 F | ~70 F |
| Direction / Distance fom Bldg. or Structure: | | — | — |
| Distance to roadway: | | — | — |
| Intake Height / Depth (feet) | | 4' 3" | 4' 3" |
| Noticeable Odor? | | NO | NO |
| PID Reading (ppb): | | 490 | 490 |
| He Dector Reading (% or ppm He): Leak Test result: Pass/Fail | | N/A | N/A |
| Sample Analysis: | | To-15 | To-15 |
| Container Description: | | good | good |
| Photo Taken: Yes / No | | yes | yes |

* window closed, a/c off

Shredder oil - 0 ppb

# ATTACHMENT B

## Photo Log

**CB&I Federal Services LLC**
**Photographic Record**

| | |
|---|---|
| **Customer:** USACOE | **Project Number: 500205** |
| **Site Name:** O'Donovan USAFRC | **Site Location: Albany, New York** |

| | |
|---|---|
| **Photographer:** RA<br>**Date:** June 12, 2014<br>**Direction:** Northeast<br>**Comments:** Major O'Donovan United States Armed Forces Reserve Center (USAFRC) |  |
| **Photographer:** HAF<br>**Date:** June 12, 2014<br>**Direction:** West/Northwest<br>**Comments:** Ambient Outdoor Air Sample |  |

**CB&I Federal Services LLC**
**Photographic Record**

| | |
|---|---|
| **Customer:** USACOE | **Project Number: 500205** |
| **Site Name:** O'Donovan USAFRC | **Site Location: Albany, New York** |

| | |
|---|---|
| **Photographer:** RA<br>**Date:** June 12, 2014<br>**Direction:** North<br>**Comments:** IA-RM105 |  |
| **Photographer:** HAF<br>**Date:** June 12, 2014<br>**Direction:** Northwest<br>**Comments:** IA-RM104 and duplicate |  |

**CB&I Federal Services LLC**
**Photographic Record**

| | |
|---|---|
| **Customer:** USACOE | **Project Number: 500205** |
| **Site Name:** O'Donovan USAFRC | **Site Location: Albany, New York** |

| | |
|---|---|
| **Photographer:** RA<br>**Date:** June 12, 2014<br>**Direction:** Not Applicable<br>**Comments:** Bic Cover-it |  |
| **Photographer:** HAF<br>**Date:** June 12, 2014<br>**Direction:** Not Applicable<br>**Comments:** Dahle |  |

# ATTACHMENT C

## Analytical Data

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# ANALYTICAL RESULTS SUMMARY

VOLATILE ORGANICS

**PROJECT NAME : ALBANY AIR**

**CB&I FEDERAL SERVICES LLC**

**2790 Mosside Boulevard**

**Monroeville, PA - 15146-2792**

**Phone No: 412-858-3305**

**ORDER ID : F2781**

**ATTENTION : Guy Gallello, Jr**

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

Table Of Contents for F2781

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922



# Cover Page

**Order ID :** F2781

**Project ID :** Albany Air

**Client :** CB&I Federal Services LLC

| Lab Sample Number | Client Sample Number |
|---|---|
| F2781-01 | IA-RM104 |
| F2781-02 | IA-RM105 |
| F2781-03 | DUPLICATE |
| F2781-04 | OA-1 |

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : Mildred V Reyes

APPROVED
By Mildred V Reyes at 3:03 pm, Jul 01, 2014

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**CB&I Federal Services LLC**
**Project Name: Albany Air**
**Project # N/A**
**Chemtech Project # F2781**
**Test Name: VOCMS Group2**

**A. Number of Samples and Date of Receipt:**
4 Air samples were received on 06/18/2014.

**B. Parameters**
According to the Chain of Custody document, the following analyses were requested: VOCMS Group2. This data package contains results for VOCMS Group2.

**C. Analytical Techniques:**
The analysis performed on instrument MSVOA_L were done using GC column RTX-1, which is 60 meters, 0.32 mm id, 1.0 um df, Restek Cat. #10157. The Trap was supplied by Entech, glass bead and Tenax , Entech 7100A Preconcentrator.The analysis of VOCMS Group2 was based on method TO-15.

**D. QA/ QC Samples:**
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements except for OA-1DL.
The Retention Times were acceptable for all samples.
The Blank Spike for {VL0618ABS} with File ID: VL023225.D met requirements for all samples except for Dichlorodifluoromethane[55%] .
The Duplicate Samples for {F2781-04DUP} with File ID: VL023227.D met requirements for all samples except for Dichlorodifluoromethane[66.7%] .
The Blank analysis indicated presence of Acetone 0.4ug/m3[0.17 ppbv] FileID:VL023224.D{VL0618ABL}, Methylene Chloride 0.35ug/m3[0.1 ppbv] FileID:VL023224.D{VL0618ABL} due to possible lab contamination.
The Initial Calibration met the requirements .The Initial Calibration met the requirements except for 1,1,1-Trichloroethane have more than 30% RSD in the Initial Calibration with dated 06/17/2014 with L Instrument but as per method two compounds as allowed to be failed.
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.
Samples IA-RM104, DUPLICATE and OA-1 were diluted due to high concentrations.

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## E. Additional Comments:

| Manual Integration Report | | | | |
|---|---|---|---|---|
| Sequence | VL061714 | Instrument | MSVOA_I | |

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICCC010 | VL023193.D | Chlorobenzene-d5 | sonal | 6/17/2014 7:17:19 AM | sam | 6/17/2014 5:16:44 PM | Coelution Of the peak |
| VSTDICC002 | VL023194.D | Ethanol | sonal | 6/17/2014 7:17:21 AM | sam | 6/17/2014 5:16:20 PM | Peak Integrated by Software incorrectly |
| VSTDICC002 | VL023194.D | m/p-Xylene | sonal | 6/17/2014 7:17:21 AM | sam | 6/17/2014 5:16:20 PM | Peak Integrated by Software incorrectly |
| VSTDICC001 | VL023197.D | 1,4-Dioxane | sonal | 6/17/2014 7:17:23 AM | sam | 6/17/2014 5:16:31 PM | Peak Integrated by Software incorrectly |
| VSTDICC001 | VL023197.D | Ethanol | sonal | 6/17/2014 7:17:23 AM | sam | 6/17/2014 5:16:31 PM | Peak Integrated by Software incorrectly |
| VSTDICC0.5 | VL023198.D | Ethanol | sonal | 6/17/2014 7:17:25 AM | sam | 6/17/2014 5:17:40 PM | Peak Integrated by Software incorrectly |
| VSTDICC015 | VL023199.D | Chlorobenzene-d5 | sonal | 6/17/2014 7:17:27 AM | sam | 6/17/2014 5:16:58 PM | Coelution Of the peak |
| VSTDICV010 | VL023200.D | Chlorobenzene-d5 | sonal | 6/17/2014 8:06:44 AM | sam | 6/17/2014 5:18:18 PM | Coelution Of the peak |

| Manual Integration Report | | | | |
|---|---|---|---|---|
| Sequence | VL061814 | Instrument | MSVOA_I | |

| Instrument | MSVOA_I |
|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC010 | VL023223. | Chlorobenzene-d5 | sonal | 6/19/20 | sam | 6/19/2014 | Coelution Of |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | D | | | 14 9:01:59 AM | | 10:40:33 AM | the peak |
| VL0618ABL | VL023224.D | 1,2,4-Trichlorobenzene | sonal | 6/19/2014 9:02:01 AM | sam | 6/19/2014 10:40:41 AM | Peak Integrated by Software incorrectly |
| VL0618ABL | VL023224.D | Tetrachloroethene | sonal | 6/19/2014 9:02:01 AM | sam | 6/19/2014 10:40:41 AM | Peak Integrated by Software incorrectly |
| VL0618ABS | VL023225.D | Chlorobenzene-d5 | sonal | 6/19/2014 9:02:02 AM | sam | 6/19/2014 10:40:52 AM | Coelution Of the peak |
| F2781-04 | VL023226.D | 1,1,2-Trichlorotrifluoroethane | sonal | 6/19/2014 9:02:04 AM | MMDadoda | 6/19/2014 10:57:01 AM | Peak Integrated by Software incorrectly |
| F2781-04 | VL023226.D | 1,3,5-Trimethylbenzene | sonal | 6/19/2014 9:02:04 AM | MMDadoda | 6/19/2014 10:57:01 AM | Peak Integrated by Software incorrectly |
| F2781-04 | VL023226.D | Acetone | sonal | 6/19/2014 9:02:04 AM | MMDadoda | 6/19/2014 10:57:01 AM | Peak Integrated by Software incorrectly |
| F2781-04DUP | VL023227.D | 1,1,2-Trichlorotrifluoroethane | sonal | 6/19/2014 9:02:05 AM | MMDadoda | 6/19/2014 10:57:15 AM | Peak Integrated by Software incorrectly |
| F2781-04DUP | VL023227.D | 1,3,5-Trimethylbenzene | sonal | 6/19/2014 9:02:05 AM | MMDadoda | 6/19/2014 10:57:15 AM | Peak Integrated by Software incorrectly |
| F2781-04DUP | VL023227.D | Acetone | sonal | 6/19/2014 9:02:05 AM | MMDadoda | 6/19/2014 10:57:15 AM | Peak Integrated by Software incorrectly |

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| F2781-02 | VL023229.D | 1,1,2-Trichlorotrifluoroethane | sam | 6/19/2014 10:41:09 AM | MMDadoda | 6/19/2014 10:57:30 AM | Peak Integrated by Software incorrectly |
| F2781-02 | VL023229.D | 2,2,4-Trimethylpentane | sam | 6/19/2014 10:41:09 AM | MMDadoda | 6/19/2014 10:57:30 AM | Peak Integrated by Software incorrectly |
| F2781-02 | VL023229.D | Ethyl Benzene | sam | 6/19/2014 10:41:09 | MMDadoda | 6/19/2014 10:57:30 AM | Peak Integrated by Software |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | AM | | | incorrectly |
| F2781-02 | VL023229.D | Hexane | sam | 6/19/2014 10:41:09 AM | MMDadoda | 6/19/2014 10:57:30 AM | Peak Integrated by Software incorrectly |
| F2781-02 | VL023229.D | Naphthalene | sam | 6/19/2014 10:41:09 AM | MMDadoda | 6/19/2014 10:57:30 AM | Peak Integrated by Software incorrectly |
| F2781-02 | VL023229.D | Styrene | sam | 6/19/2014 10:41:09 AM | MMDadoda | 6/19/2014 10:57:30 AM | Peak Integrated by Software incorrectly |
| F2781-01 | VL023231.D | 1,1,2-Trichlorotrifluoroethane | sonal | 6/19/2014 9:02:11 AM | MMDadoda | 6/19/2014 10:59:26 AM | Peak Integrated by Software incorrectly |
| F2781-01 | VL023231.D | 2-Butanone | sonal | 6/19/2014 9:02:11 AM | MMDadoda | 6/19/2014 10:59:26 AM | Peak Integrated by Software incorrectly |
| F2781-01 | VL023231.D | Chlorodifluoromethane | sonal | 6/19/2014 9:02:11 AM | MMDadoda | 6/19/2014 10:59:26 AM | Peak Integrated by Software incorrectly |
| F2781-01 | VL023231.D | Hexane | sonal | 6/19/2014 9:02:11 AM | MMDadoda | 6/19/2014 10:59:26 AM | Peak Integrated by Software incorrectly |
| F2781-01 | VL023231.D | p-Isopropyltoluene | sonal | 6/19/2014 9:02:11 AM | MMDadoda | 6/19/2014 10:59:26 AM | Peak Integrated by Software incorrectly |
| F2781-01DL | VL023232.D | Toluene | sam | 6/19/2014 10:41:25 AM | MMDadoda | 6/19/2014 10:59:46 AM | Peak Integrated by Software incorrectly |

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| F2781-03 | VL023234.D | 1,1,2-Trichlorotrifluoroethane | sonal | 6/19/2014 9:02:13 AM | MMDadoda | 6/19/2014 10:59:59 AM | Peak Integrated by Software incorrectly |
| F2781-03 | VL023234.D | Chlorodifluoromethane | sonal | 6/19/2014 9:02:13 AM | MMDadoda | 6/19/2014 10:59:59 AM | Peak Integrated by Software incorrectly |
| F2781-03 | VL023234.D | Hexane | sonal | 6/19/2014 9:02:13 AM | MMDadoda | 6/19/2014 10:59:59 AM | Peak Integrated by Software incorrectly |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F2781-04DL | VL023238.D | Ethanol | sonal | 6/19/2014 9:22:47 AM | sam | 6/19/2014 10:42:03 AM | Peak Integrated by Software incorrectly |

**F. Manual Integration Comments:**
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature__ Mildred V Reyes

**APPROVED**
*By Mildred V Reyes at 3:03 pm, Jul 01, 2014*

## DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

| | |
|---|---|
| Value | If the result is a value greater than or equal to the detection limit, report the value |
| **U** | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required. |
| **ND** | Indicates the analyte was analyzed for, but not detected |
| **J** | Indicates an estimated value**.** This flag is used:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others. |
| **B** | Indicates the analyte was found in the blank as well as the sample report as "12 B". |
| **E** | Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis. |
| **D** | This flag identifies all compounds identified in an analysis at a secondary dilution factor. |
| **P** | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P". |
| **N** | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used. |
| **A** | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product. |
| **Q** | Indicates the LCS did not meet the control limits requirements |

## APPENDIX A

## QA REVIEW GENERAL DOCUMENTATION

**Project #:** F2781

| | Completed |
|---|---|
| **For thorough review, the report must have the following:** | |
| **GENERAL:** | |
| **Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)** | ✓ |
| **Check chain-of-custody for proper relinquish/return of samples** | ✓ |
| **Is the chain of custody signed and complete** | ✓ |
| **Check internal chain-of-custody for proper relinquish/return of samples /sample extracts** | ✓ |
| **Collect information for each project id from server. Were all requirements followed** | ✓ |
| **COVER PAGE:** | |
| **Do numbers of samples correspond to the number of samples in the Chain of Custody on login page** | ✓ |
| **Do lab numbers and client Ids on cover page agree with the Chain of Custody** | ✓ |
| **CHAIN OF CUSTODY:** | |
| **Do requested analyses on Chain of Custody agree with form I results** | ✓ |
| **Do requested analyses on Chain of Custody agree with the log-in page** | ✓ |
| **Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody** | ✓ |
| **Were the samples received within hold time** | ✓ |
| **Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle** | ✓ |
| **ANALYTICAL:** | |
| **Was method requirement followed?** | ✓ |
| **Was client requirement followed?** | ✓ |
| **Does the case narrative summarize all QC failure?** | ✓ |
| **All runlogs and manual integration are reviewed for requirements** | ✓ |
| **All manual calculations and /or hand notations verified** | ✓ |

**1st Level QA Review Si** REVIEWED RAMANI By kalpana at 2:16 pm, Jul 01, 2014 **Date:** 06/28/2014

**2nd Level QA Review Signature:** _____ **Date:** _____

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | F2781 | **OrderDate:** | 6/18/2014 11:43:00 AM |
| **Client:** | CB&I Federal Services LLC | **Project:** | Albany Air |
| **Contact:** | Guy Gallello, Jr | **Location:** | Air Lab |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **F2781-01** | **IA-RM104** | **Air** | | | **06/13/14** | | | **06/18/14** |
| | | | VOCMS Group2 | TO-15 | | | 06/18/14 | |
| **F2781-01DL** | **IA-RM104DL** | **Air** | | | **06/13/14** | | | **06/18/14** |
| | | | VOCMS Group2 | TO-15 | | | 06/19/14 | |
| **F2781-02** | **IA-RM105** | **Air** | | | **06/13/14** | | | **06/18/14** |
| | | | VOCMS Group2 | TO-15 | | | 06/18/14 | |
| **F2781-03** | **DUPLICATE** | **Air** | | | **06/13/14** | | | **06/18/14** |
| | | | VOCMS Group2 | TO-15 | | | 06/19/14 | |
| **F2781-03DL** | **DUPLICATEDL** | **Air** | | | **06/13/14** | | | **06/18/14** |
| | | | VOCMS Group2 | TO-15 | | | 06/19/14 | |
| **F2781-04** | **OA-1** | **Air** | | | **06/13/14** | | | **06/18/14** |
| | | | VOCMS Group2 | TO-15 | | | 06/18/14 | |
| **F2781-04DL** | **OA-1DL** | **Air** | | | **06/13/14** | | | **06/18/14** |
| | | | VOCMS Group2 | TO-15 | | | 06/19/14 | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** F2781

**Client:** CB&I Federal Services LLC

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | LOD | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **IA-RM104** | | | | | | | | |
| F2781-01 | IA-RM104 | Air | Dichlorodifluoromethane | 0.35 | JQ | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Chloromethane | 1.10 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Trichlorofluoromethane | 0.89 | | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Acetone | 29.80 | EB | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Methylene Chloride | 0.51 | B | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | 2-Butanone | 1.20 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Carbon Tetrachloride | 0.06 | | 0.03 | 0.015 | 0.03 | ppbv |
| F2781-01 | IA-RM104 | Air | Benzene | 0.21 | J | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Trichloroethene | 0.03 | | 0.02 | 0.015 | 0.03 | ppbv |
| F2781-01 | IA-RM104 | Air | Toluene | 1.60 | | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | 2-Hexanone | 0.12 | J | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Tetrachloroethene | 0.04 | | 0.03 | 0.015 | 0.03 | ppbv |
| F2781-01 | IA-RM104 | Air | m/p-Xylene | 1.20 | | 0.1 | 0.5 | 1 | ppbv |
| F2781-01 | IA-RM104 | Air | o-Xylene | 0.53 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-01 | IA-RM104 | Air | Styrene | 0.11 | J | 0.1 | 0.25 | 0.5 | ppbv |
| | | | **Total Voc :** | | **37.75** | | | | |
| | | | **Total Concentration:** | | **37.75** | | | | |
| **Client ID:** | **IA-RM104DL** | | | | | | | | |
| F2781-01DL | IA-RM104DL | Air | Acetone | 29.40 | DB | 1 | 2.5 | 5 | ppbv |
| F2781-01DL | IA-RM104DL | Air | Toluene | 0.80 | JD | 0.5 | 2.5 | 5 | ppbv |
| | | | **Total Voc :** | | **30.20** | | | | |
| | | | **Total Concentration:** | | **30.20** | | | | |
| **Client ID:** | **IA-RM105** | | | | | | | | |
| F2781-02 | IA-RM105 | Air | Dichlorodifluoromethane | 0.61 | Q | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | Chloromethane | 0.61 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | Trichlorofluoromethane | 0.47 | J | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | Acetone | 10.90 | B | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | Methylene Chloride | 0.38 | JB | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | 2-Butanone | 1.10 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | Carbon Tetrachloride | 0.06 | | 0.03 | 0.015 | 0.03 | ppbv |
| F2781-02 | IA-RM105 | Air | Benzene | 0.19 | J | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | Toluene | 1.50 | | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-02 | IA-RM105 | Air | Tetrachloroethene | 0.05 | | 0.03 | 0.015 | 0.03 | ppbv |
| F2781-02 | IA-RM105 | Air | m/p-Xylene | 0.39 | J | 0.1 | 0.5 | 1 | ppbv |
| F2781-02 | IA-RM105 | Air | o-Xylene | 0.15 | J | 0.1 | 0.25 | 0.5 | ppbv |
| | | | **Total Voc :** | | **16.41** | | | | |
| | | | **Total Concentration:** | | **16.41** | | | | |

# Hit Summary Sheet
**SW-846**

**SDG No.:** F2781

**Client:** CB&I Federal Services LLC

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | LOD | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **DUPLICATE** | | | | | | | | |
| F2781-03 | DUPLICATE | Air | Dichlorodifluoromethane | 0.57 | Q | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | Chloromethane | 1.00 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | Trichlorofluoromethane | 0.88 | | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | Acetone | 30.80 | EB | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | Methylene Chloride | 0.48 | JB | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | 2-Butanone | 1.00 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | Carbon Tetrachloride | 0.06 | | 0.03 | 0.015 | 0.03 | ppbv |
| F2781-03 | DUPLICATE | Air | Benzene | 0.17 | J | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | 4-Methyl-2-Pentanone | 0.09 | J | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | Toluene | 2.10 | | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | 2-Hexanone | 0.11 | J | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-03 | DUPLICATE | Air | m/p-Xylene | 0.34 | J | 0.1 | 0.5 | 1 | ppbv |
| F2781-03 | DUPLICATE | Air | o-Xylene | 0.16 | J | 0.1 | 0.25 | 0.5 | ppbv |
| | | | **Total Voc :** | | **37.76** | | | | |
| | | | **Total Concentration:** | | **37.76** | | | | |
| **Client ID:** | **DUPLICATEDL** | | | | | | | | |
| F2781-03DL | DUPLICATEDL | Air | Acetone | 31.20 | DB | 1 | 2.5 | 5 | ppbv |
| F2781-03DL | DUPLICATEDL | Air | Toluene | 1.10 | JD | 0.5 | 2.5 | 5 | ppbv |
| | | | **Total Voc :** | | **32.30** | | | | |
| | | | **Total Concentration:** | | **32.30** | | | | |
| **Client ID:** | **OA-1** | | | | | | | | |
| F2781-04 | OA-1 | Air | Dichlorodifluoromethane | 0.31 | JQ | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | Chloromethane | 0.63 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | Trichlorofluoromethane | 0.24 | J | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | Acetone | 170.00 | EB | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | Methylene Chloride | 0.20 | JB | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | 2-Butanone | 57.50 | E | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | Carbon Tetrachloride | 0.06 | | 0.03 | 0.015 | 0.03 | ppbv |
| F2781-04 | OA-1 | Air | Benzene | 0.36 | J | 0.04 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | Trichloroethene | 0.15 | | 0.02 | 0.015 | 0.03 | ppbv |
| F2781-04 | OA-1 | Air | Toluene | 2.70 | | 0.05 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | 2-Hexanone | 8.70 | | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | Tetrachloroethene | 0.10 | | 0.03 | 0.015 | 0.03 | ppbv |
| F2781-04 | OA-1 | Air | Ethyl Benzene | 0.39 | J | 0.1 | 0.25 | 0.5 | ppbv |
| F2781-04 | OA-1 | Air | m/p-Xylene | 1.50 | | 0.1 | 0.5 | 1 | ppbv |
| F2781-04 | OA-1 | Air | o-Xylene | 0.48 | J | 0.1 | 0.25 | 0.5 | ppbv |
| | | | **Total Voc :** | | **243.32** | | | | |
| | | | **Total Concentration:** | | **243.32** | | | | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** F2781

**Client:** CB&I Federal Services LLC

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | LOD | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **OA-1DL** | | | | | | | | |
| F2781-04DL | OA-1DL | Air | Acetone | 200.00 | DB | 4 | 10 | 20 | ppbv |
| F2781-04DL | OA-1DL | Air | 2-Butanone | 36.00 | D | 4 | 10 | 20 | ppbv |
| | | | **Total Voc :** | **236.00** | | | | | |
| | | | **Total Concentration:** | **236.00** | | | | | |

**Project :** Albany Air

**Field Id Number :** IA-RM104

**Laboratory Id Number :** F2781-01

**Sampling Date :** 06/13/14

**Analysis Date :** 06/18/14

**Target Analyts :** Air Results

| Chemical | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 120.9 | 0.35 | J | 1.73 | | |
| Chloromethane | 74-87-3 | 50.49 | 1.1 | | 2.27 | | |
| Vinyl Chloride | 75-01-4 | 62.5 | 0.03 | U | 0.08 | | |
| Bromomethane | 74-83-9 | 94.94 | 0.1 | U | 0.39 | | |
| Chloroethane | 75-00-3 | 64.52 | 0.1 | U | 0.26 | | |
| Trichlorofluoromethane | 75-69-4 | 137.4 | 0.89 | | 5 | | |
| 1,1-Dichloroethene | 75-35-4 | 96.94 | 0.1 | U | 0.4 | | |
| Acetone | 67-64-1 | 58.08 | 29.8 | E | 70.8 | | |
| Carbon Disulfide | 75-15-0 | 76.14 | 0.1 | U | 0.31 | | |
| Methylene Chloride | 75-09-2 | 84.94 | 0.51 | | 1.77 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 96.94 | 0.1 | U | 0.4 | | |
| 1,1-Dichloroethane | 75-34-3 | 98.96 | 0.1 | U | 0.4 | | |
| 2-Butanone | 78-93-3 | 72.11 | 1.2 | | 3.54 | | |
| Carbon Tetrachloride | 56-23-5 | 153.8 | 0.06 | | 0.38 | | |
| Chloroform | 67-66-3 | 119.4 | 0.1 | U | 0.49 | | |
| 1,1,1-Trichloroethane | 71-55-6 | 133.4 | 0.03 | U | 0.16 | | |
| Benzene | 71-43-2 | 78.11 | 0.21 | J | 0.67 | | |
| 1,2-Dichloroethane | 107-06-2 | 98.96 | 0.1 | U | 0.4 | | |
| Trichloroethene | 79-01-6 | 131.4 | 0.03 | | 0.16 | | |
| 1,2-Dichloropropane | 78-87-5 | 113 | 0.1 | U | 0.46 | | |
| Bromodichloromethane | 75-27-4 | 163.8 | 0.1 | U | 0.67 | | |
| 4-Methyl-2-Pentanone | 108-10-1 | 100.2 | 0.1 | U | 0.41 | | |
| Toluene | 108-88-3 | 92.14 | 1.6 | | 6.03 | | |
| t-1,3-Dichloropropene | 10061-02-6 | 111 | 0.1 | U | 0.45 | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 111 | 0.1 | U | 0.45 | | |
| 1,1,2-Trichloroethane | 79-00-5 | 133.4 | 0.1 | U | 0.55 | | |
| 2-Hexanone | 591-78-6 | 100 | 0.12 | J | 0.49 | | |
| Dibromochloromethane | 124-48-1 | 208.3 | 0.1 | U | 0.85 | | |
| Tetrachloroethene | 127-18-4 | 165.8 | 0.04 | | 0.27 | | |
| Chlorobenzene | 108-90-7 | 112.6 | 0.1 | U | 0.46 | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 167.85 | 0.1 | U | 0.69 | | |
| Ethyl Benzene | 100-41-4 | 106.2 | 0.1 | U | 0.43 | | |
| m/p-Xylene | 179601-23-1 | 106.2 | 1.2 | | 5.21 | | |
| o-Xylene | 95-47-6 | 106.2 | 0.53 | | 2.3 | | |
| Styrene | 100-42-5 | 104.1 | 0.11 | J | 0.47 | | |
| Bromoform | 75-25-2 | 252.8 | 0.1 | U | 1.03 | | |

**Project :** Albany Air

**Field Id Number :** IA-RM104

**Laboratory Id Number :** F2781-01

**Sampling Date :** 06/13/14

**Analysis Date :** 06/18/14

**Target Analyts :** Air Results

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 167.9 | 0.03 | U | 0.21 | | |
| 1,3-Dichlorobenzene | 541-73-1 | 147 | 0.1 | U | 0.6 | | |
| 1,4-Dichlorobenzene | 106-46-7 | 147 | 0.1 | U | 0.6 | | |
| 1,2-Dichlorobenzene | 95-50-1 | 147 | 0.1 | U | 0.6 | | |

**Project :** Albany Air

**Field Id Number :** IA-RM104DL

**Laboratory Id Number :** F2781-01DL

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| Chemical | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 120.9 | 1 | UD | 4.94 | | |
| Chloromethane | 74-87-3 | 50.49 | 1 | UD | 2.07 | | |
| Vinyl Chloride | 75-01-4 | 62.5 | 0.3 | UD | 0.77 | | |
| Bromomethane | 74-83-9 | 94.94 | 1 | UD | 3.88 | | |
| Chloroethane | 75-00-3 | 64.52 | 1 | UD | 2.64 | | |
| Trichlorofluoromethane | 75-69-4 | 137.4 | 1 | UD | 5.62 | | |
| 1,1-Dichloroethene | 75-35-4 | 96.94 | 1 | UD | 3.96 | | |
| Acetone | 67-64-1 | 58.08 | 29.4 | D | 69.8 | | |
| Carbon Disulfide | 75-15-0 | 76.14 | 1 | UD | 3.11 | | |
| Methylene Chloride | 75-09-2 | 84.94 | 1 | UD | 3.47 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 96.94 | 1 | UD | 3.96 | | |
| 1,1-Dichloroethane | 75-34-3 | 98.96 | 1 | UD | 4.05 | | |
| 2-Butanone | 78-93-3 | 72.11 | 1 | UD | 2.95 | | |
| Carbon Tetrachloride | 56-23-5 | 153.8 | 0.3 | UD | 1.89 | | |
| Chloroform | 67-66-3 | 119.4 | 1 | UD | 4.88 | | |
| 1,1,1-Trichloroethane | 71-55-6 | 133.4 | 0.3 | UD | 1.64 | | |
| Benzene | 71-43-2 | 78.11 | 1 | UD | 3.19 | | |
| 1,2-Dichloroethane | 107-06-2 | 98.96 | 1 | UD | 4.05 | | |
| Trichloroethene | 79-01-6 | 131.4 | 0.3 | UD | 1.61 | | |
| 1,2-Dichloropropane | 78-87-5 | 113 | 1 | UD | 4.62 | | |
| Bromodichloromethane | 75-27-4 | 163.8 | 1 | UD | 6.7 | | |
| 4-Methyl-2-Pentanone | 108-10-1 | 100.2 | 1 | UD | 4.1 | | |
| Toluene | 108-88-3 | 92.14 | 0.8 | JD | 3.01 | | |
| t-1,3-Dichloropropene | 10061-02-6 | 111 | 1 | UD | 4.54 | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 111 | 1 | UD | 4.54 | | |
| 1,1,2-Trichloroethane | 79-00-5 | 133.4 | 1 | UD | 5.46 | | |
| 2-Hexanone | 591-78-6 | 100 | 1 | UD | 4.09 | | |
| Dibromochloromethane | 124-48-1 | 208.3 | 1 | UD | 8.52 | | |
| Tetrachloroethene | 127-18-4 | 165.8 | 0.3 | UD | 2.03 | | |
| Chlorobenzene | 108-90-7 | 112.6 | 1 | UD | 4.61 | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 167.85 | 1 | UD | 6.87 | | |
| Ethyl Benzene | 100-41-4 | 106.2 | 1 | UD | 4.34 | | |
| m/p-Xylene | 179601-23-1 | 106.2 | 2 | UD | 8.69 | | |
| o-Xylene | 95-47-6 | 106.2 | 1 | UD | 4.34 | | |
| Styrene | 100-42-5 | 104.1 | 1 | UD | 4.26 | | |
| Bromoform | 75-25-2 | 252.8 | 1 | UD | 10.3 | | |

**Project :** Albany Air

**Field Id Number :** IA-RM104DL

**Laboratory Id Number :** F2781-01DL

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 167.9 | 0.3 | UD | 2.06 | | |
| 1,3-Dichlorobenzene | 541-73-1 | 147 | 1 | UD | 6.01 | | |
| 1,4-Dichlorobenzene | 106-46-7 | 147 | 1 | UD | 6.01 | | |
| 1,2-Dichlorobenzene | 95-50-1 | 147 | 1 | UD | 6.01 | | |

**Project :** Albany Air

**Field Id Number :** IA-RM105

**Laboratory Id Number :** F2781-02

**Sampling Date :** 06/13/14

**Analysis Date :** 06/18/14

**Target Analyts :** Air Results

| Chemical | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 120.9 | 0.61 | | 3.02 | | |
| Chloromethane | 74-87-3 | 50.49 | 0.61 | | 1.26 | | |
| Vinyl Chloride | 75-01-4 | 62.5 | 0.03 | U | 0.08 | | |
| Bromomethane | 74-83-9 | 94.94 | 0.1 | U | 0.39 | | |
| Chloroethane | 75-00-3 | 64.52 | 0.1 | U | 0.26 | | |
| Trichlorofluoromethane | 75-69-4 | 137.4 | 0.47 | J | 2.64 | | |
| 1,1-Dichloroethene | 75-35-4 | 96.94 | 0.1 | U | 0.4 | | |
| Acetone | 67-64-1 | 58.08 | 10.9 | | 25.9 | | |
| Carbon Disulfide | 75-15-0 | 76.14 | 0.1 | U | 0.31 | | |
| Methylene Chloride | 75-09-2 | 84.94 | 0.38 | J | 1.32 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 96.94 | 0.1 | U | 0.4 | | |
| 1,1-Dichloroethane | 75-34-3 | 98.96 | 0.1 | U | 0.4 | | |
| 2-Butanone | 78-93-3 | 72.11 | 1.1 | | 3.24 | | |
| Carbon Tetrachloride | 56-23-5 | 153.8 | 0.06 | | 0.38 | | |
| Chloroform | 67-66-3 | 119.4 | 0.1 | U | 0.49 | | |
| 1,1,1-Trichloroethane | 71-55-6 | 133.4 | 0.03 | U | 0.16 | | |
| Benzene | 71-43-2 | 78.11 | 0.19 | J | 0.61 | | |
| 1,2-Dichloroethane | 107-06-2 | 98.96 | 0.1 | U | 0.4 | | |
| Trichloroethene | 79-01-6 | 131.4 | 0.03 | U | 0.16 | | |
| 1,2-Dichloropropane | 78-87-5 | 113 | 0.1 | U | 0.46 | | |
| Bromodichloromethane | 75-27-4 | 163.8 | 0.1 | U | 0.67 | | |
| 4-Methyl-2-Pentanone | 108-10-1 | 100.2 | 0.1 | U | 0.41 | | |
| Toluene | 108-88-3 | 92.14 | 1.5 | | 5.65 | | |
| t-1,3-Dichloropropene | 10061-02-6 | 111 | 0.1 | U | 0.45 | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 111 | 0.1 | U | 0.45 | | |
| 1,1,2-Trichloroethane | 79-00-5 | 133.4 | 0.1 | U | 0.55 | | |
| 2-Hexanone | 591-78-6 | 100 | 0.1 | U | 0.41 | | |
| Dibromochloromethane | 124-48-1 | 208.3 | 0.1 | U | 0.85 | | |
| Tetrachloroethene | 127-18-4 | 165.8 | 0.05 | | 0.34 | | |
| Chlorobenzene | 108-90-7 | 112.6 | 0.1 | U | 0.46 | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 167.85 | 0.1 | U | 0.69 | | |
| Ethyl Benzene | 100-41-4 | 106.2 | 0.1 | U | 0.43 | | |
| m/p-Xylene | 179601-23-1 | 106.2 | 0.39 | J | 1.69 | | |
| o-Xylene | 95-47-6 | 106.2 | 0.15 | J | 0.65 | | |
| Styrene | 100-42-5 | 104.1 | 0.1 | U | 0.43 | | |
| Bromoform | 75-25-2 | 252.8 | 0.1 | U | 1.03 | | |

**Project :** Albany Air

**Field Id Number :** IA-RM105

**Laboratory Id Number :** F2781-02

**Sampling Date :** 06/13/14

**Analysis Date :** 06/18/14

**Target Analyts :** Air Results

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 167.9 | 0.03 | U | 0.21 | | |
| 1,3-Dichlorobenzene | 541-73-1 | 147 | 0.1 | U | 0.6 | | |
| 1,4-Dichlorobenzene | 106-46-7 | 147 | 0.1 | U | 0.6 | | |
| 1,2-Dichlorobenzene | 95-50-1 | 147 | 0.1 | U | 0.6 | | |

**Project :** Albany Air

**Field Id Number :** DUPLICATE

**Laboratory Id Number :** F2781-03

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| Chemical | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 120.9 | 0.57 | | 2.82 | | |
| Chloromethane | 74-87-3 | 50.49 | 1 | | 2.07 | | |
| Vinyl Chloride | 75-01-4 | 62.5 | 0.03 | U | 0.08 | | |
| Bromomethane | 74-83-9 | 94.94 | 0.1 | U | 0.39 | | |
| Chloroethane | 75-00-3 | 64.52 | 0.1 | U | 0.26 | | |
| Trichlorofluoromethane | 75-69-4 | 137.4 | 0.88 | | 4.95 | | |
| 1,1-Dichloroethene | 75-35-4 | 96.94 | 0.1 | U | 0.4 | | |
| Acetone | 67-64-1 | 58.08 | 30.8 | E | 73.2 | | |
| Carbon Disulfide | 75-15-0 | 76.14 | 0.1 | U | 0.31 | | |
| Methylene Chloride | 75-09-2 | 84.94 | 0.48 | J | 1.67 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 96.94 | 0.1 | U | 0.4 | | |
| 1,1-Dichloroethane | 75-34-3 | 98.96 | 0.1 | U | 0.4 | | |
| 2-Butanone | 78-93-3 | 72.11 | 1 | | 2.95 | | |
| Carbon Tetrachloride | 56-23-5 | 153.8 | 0.06 | | 0.38 | | |
| Chloroform | 67-66-3 | 119.4 | 0.1 | U | 0.49 | | |
| 1,1,1-Trichloroethane | 71-55-6 | 133.4 | 0.03 | U | 0.16 | | |
| Benzene | 71-43-2 | 78.11 | 0.17 | J | 0.54 | | |
| 1,2-Dichloroethane | 107-06-2 | 98.96 | 0.1 | U | 0.4 | | |
| Trichloroethene | 79-01-6 | 131.4 | 0.03 | U | 0.16 | | |
| 1,2-Dichloropropane | 78-87-5 | 113 | 0.1 | U | 0.46 | | |
| Bromodichloromethane | 75-27-4 | 163.8 | 0.1 | U | 0.67 | | |
| 4-Methyl-2-Pentanone | 108-10-1 | 100.2 | 0.09 | J | 0.37 | | |
| Toluene | 108-88-3 | 92.14 | 2.1 | | 7.91 | | |
| t-1,3-Dichloropropene | 10061-02-6 | 111 | 0.1 | U | 0.45 | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 111 | 0.1 | U | 0.45 | | |
| 1,1,2-Trichloroethane | 79-00-5 | 133.4 | 0.1 | U | 0.55 | | |
| 2-Hexanone | 591-78-6 | 100 | 0.11 | J | 0.45 | | |
| Dibromochloromethane | 124-48-1 | 208.3 | 0.1 | U | 0.85 | | |
| Tetrachloroethene | 127-18-4 | 165.8 | 0.03 | U | 0.2 | | |
| Chlorobenzene | 108-90-7 | 112.6 | 0.1 | U | 0.46 | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 167.85 | 0.1 | U | 0.69 | | |
| Ethyl Benzene | 100-41-4 | 106.2 | 0.1 | U | 0.43 | | |
| m/p-Xylene | 179601-23-1 | 106.2 | 0.34 | J | 1.48 | | |
| o-Xylene | 95-47-6 | 106.2 | 0.16 | J | 0.69 | | |
| Styrene | 100-42-5 | 104.1 | 0.1 | U | 0.43 | | |
| Bromoform | 75-25-2 | 252.8 | 0.1 | U | 1.03 | | |

**Project :** Albany Air

**Field Id Number :** DUPLICATE

**Laboratory Id Number :** F2781-03

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 167.9 | 0.03 | U | 0.21 | | |
| 1,3-Dichlorobenzene | 541-73-1 | 147 | 0.1 | U | 0.6 | | |
| 1,4-Dichlorobenzene | 106-46-7 | 147 | 0.1 | U | 0.6 | | |
| 1,2-Dichlorobenzene | 95-50-1 | 147 | 0.1 | U | 0.6 | | |

**Project :** Albany Air

**Field Id Number :** DUPLICATEDL

**Laboratory Id Number :** F2781-03DL

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| Chemical | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 120.9 | 1 | UD | 4.94 | | |
| Chloromethane | 74-87-3 | 50.49 | 1 | UD | 2.07 | | |
| Vinyl Chloride | 75-01-4 | 62.5 | 0.3 | UD | 0.77 | | |
| Bromomethane | 74-83-9 | 94.94 | 1 | UD | 3.88 | | |
| Chloroethane | 75-00-3 | 64.52 | 1 | UD | 2.64 | | |
| Trichlorofluoromethane | 75-69-4 | 137.4 | 1 | UD | 5.62 | | |
| 1,1-Dichloroethene | 75-35-4 | 96.94 | 1 | UD | 3.96 | | |
| Acetone | 67-64-1 | 58.08 | 31.2 | D | 74.1 | | |
| Carbon Disulfide | 75-15-0 | 76.14 | 1 | UD | 3.11 | | |
| Methylene Chloride | 75-09-2 | 84.94 | 1 | UD | 3.47 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 96.94 | 1 | UD | 3.96 | | |
| 1,1-Dichloroethane | 75-34-3 | 98.96 | 1 | UD | 4.05 | | |
| 2-Butanone | 78-93-3 | 72.11 | 1 | UD | 2.95 | | |
| Carbon Tetrachloride | 56-23-5 | 153.8 | 0.3 | UD | 1.89 | | |
| Chloroform | 67-66-3 | 119.4 | 1 | UD | 4.88 | | |
| 1,1,1-Trichloroethane | 71-55-6 | 133.4 | 0.3 | UD | 1.64 | | |
| Benzene | 71-43-2 | 78.11 | 1 | UD | 3.19 | | |
| 1,2-Dichloroethane | 107-06-2 | 98.96 | 1 | UD | 4.05 | | |
| Trichloroethene | 79-01-6 | 131.4 | 0.3 | UD | 1.61 | | |
| 1,2-Dichloropropane | 78-87-5 | 113 | 1 | UD | 4.62 | | |
| Bromodichloromethane | 75-27-4 | 163.8 | 1 | UD | 6.7 | | |
| 4-Methyl-2-Pentanone | 108-10-1 | 100.2 | 1 | UD | 4.1 | | |
| Toluene | 108-88-3 | 92.14 | 1.1 | JD | 4.15 | | |
| t-1,3-Dichloropropene | 10061-02-6 | 111 | 1 | UD | 4.54 | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 111 | 1 | UD | 4.54 | | |
| 1,1,2-Trichloroethane | 79-00-5 | 133.4 | 1 | UD | 5.46 | | |
| 2-Hexanone | 591-78-6 | 100 | 1 | UD | 4.09 | | |
| Dibromochloromethane | 124-48-1 | 208.3 | 1 | UD | 8.52 | | |
| Tetrachloroethene | 127-18-4 | 165.8 | 0.3 | UD | 2.03 | | |
| Chlorobenzene | 108-90-7 | 112.6 | 1 | UD | 4.61 | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 167.85 | 1 | UD | 6.87 | | |
| Ethyl Benzene | 100-41-4 | 106.2 | 1 | UD | 4.34 | | |
| m/p-Xylene | 179601-23-1 | 106.2 | 2 | UD | 8.69 | | |
| o-Xylene | 95-47-6 | 106.2 | 1 | UD | 4.34 | | |
| Styrene | 100-42-5 | 104.1 | 1 | UD | 4.26 | | |
| Bromoform | 75-25-2 | 252.8 | 1 | UD | 10.3 | | |

**Project :** Albany Air

**Field Id Number :** DUPLICATEDL

**Laboratory Id Number :** F2781-03DL

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 167.9 | 0.3 | UD | 2.06 | | |
| 1,3-Dichlorobenzene | 541-73-1 | 147 | 1 | UD | 6.01 | | |
| 1,4-Dichlorobenzene | 106-46-7 | 147 | 1 | UD | 6.01 | | |
| 1,2-Dichlorobenzene | 95-50-1 | 147 | 1 | UD | 6.01 | | |

**Project :** Albany Air

**Field Id Number :** OA-1

**Laboratory Id Number :** F2781-04

**Sampling Date :** 06/13/14

**Analysis Date :** 06/18/14

**Target Analyts :** Air Results

| Chemical | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 120.9 | 0.31 | J | 1.53 | | |
| Chloromethane | 74-87-3 | 50.49 | 0.63 | | 1.3 | | |
| Vinyl Chloride | 75-01-4 | 62.5 | 0.03 | U | 0.08 | | |
| Bromomethane | 74-83-9 | 94.94 | 0.1 | U | 0.39 | | |
| Chloroethane | 75-00-3 | 64.52 | 0.1 | U | 0.26 | | |
| Trichlorofluoromethane | 75-69-4 | 137.4 | 0.24 | J | 1.35 | | |
| 1,1-Dichloroethene | 75-35-4 | 96.94 | 0.1 | U | 0.4 | | |
| Acetone | 67-64-1 | 58.08 | 170 | E | 403 | | |
| Carbon Disulfide | 75-15-0 | 76.14 | 0.1 | U | 0.31 | | |
| Methylene Chloride | 75-09-2 | 84.94 | 0.2 | J | 0.69 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 96.94 | 0.1 | U | 0.4 | | |
| 1,1-Dichloroethane | 75-34-3 | 98.96 | 0.1 | U | 0.4 | | |
| 2-Butanone | 78-93-3 | 72.11 | 57.5 | E | 169 | | |
| Carbon Tetrachloride | 56-23-5 | 153.8 | 0.06 | | 0.38 | | |
| Chloroform | 67-66-3 | 119.4 | 0.1 | U | 0.49 | | |
| 1,1,1-Trichloroethane | 71-55-6 | 133.4 | 0.03 | U | 0.16 | | |
| Benzene | 71-43-2 | 78.11 | 0.36 | J | 1.15 | | |
| 1,2-Dichloroethane | 107-06-2 | 98.96 | 0.1 | U | 0.4 | | |
| Trichloroethene | 79-01-6 | 131.4 | 0.15 | | 0.81 | | |
| 1,2-Dichloropropane | 78-87-5 | 113 | 0.1 | U | 0.46 | | |
| Bromodichloromethane | 75-27-4 | 163.8 | 0.1 | U | 0.67 | | |
| 4-Methyl-2-Pentanone | 108-10-1 | 100.2 | 0.1 | U | 0.41 | | |
| Toluene | 108-88-3 | 92.14 | 2.7 | | 10.2 | | |
| t-1,3-Dichloropropene | 10061-02-6 | 111 | 0.1 | U | 0.45 | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 111 | 0.1 | U | 0.45 | | |
| 1,1,2-Trichloroethane | 79-00-5 | 133.4 | 0.1 | U | 0.55 | | |
| 2-Hexanone | 591-78-6 | 100 | 8.7 | | 35.6 | | |
| Dibromochloromethane | 124-48-1 | 208.3 | 0.1 | U | 0.85 | | |
| Tetrachloroethene | 127-18-4 | 165.8 | 0.1 | | 0.68 | | |
| Chlorobenzene | 108-90-7 | 112.6 | 0.1 | U | 0.46 | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 167.85 | 0.1 | U | 0.69 | | |
| Ethyl Benzene | 100-41-4 | 106.2 | 0.39 | J | 1.69 | | |
| m/p-Xylene | 179601-23-1 | 106.2 | 1.5 | | 6.52 | | |
| o-Xylene | 95-47-6 | 106.2 | 0.48 | J | 2.08 | | |
| Styrene | 100-42-5 | 104.1 | 0.1 | U | 0.43 | | |
| Bromoform | 75-25-2 | 252.8 | 0.1 | U | 1.03 | | |

**Project :** Albany Air

**Field Id Number :** OA-1

**Laboratory Id Number :** F2781-04

**Sampling Date :** 06/13/14

**Analysis Date :** 06/18/14

**Target Analyts :** Air Results

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 167.9 | 0.03 | U | 0.21 | | |
| 1,3-Dichlorobenzene | 541-73-1 | 147 | 0.1 | U | 0.6 | | |
| 1,4-Dichlorobenzene | 106-46-7 | 147 | 0.1 | U | 0.6 | | |
| 1,2-Dichlorobenzene | 95-50-1 | 147 | 0.1 | U | 0.6 | | |

**Project :** Albany Air

**Field Id Number :** OA-1DL

**Laboratory Id Number :** F2781-04DL

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| Chemical | Cas Number | Molecular Weight | Insert Results in PPBV | Qualifier | Generate Results in ug/m3 | QAS Decision | Foot Notes |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 120.9 | 4 | UD | 19.8 | | |
| Chloromethane | 74-87-3 | 50.49 | 4 | UD | 8.26 | | |
| Vinyl Chloride | 75-01-4 | 62.5 | 1.2 | UD | 3.07 | | |
| Bromomethane | 74-83-9 | 94.94 | 4 | UD | 15.5 | | |
| Chloroethane | 75-00-3 | 64.52 | 4 | UD | 10.6 | | |
| Trichlorofluoromethane | 75-69-4 | 137.4 | 4 | UD | 22.5 | | |
| 1,1-Dichloroethene | 75-35-4 | 96.94 | 4 | UD | 15.9 | | |
| Acetone | 67-64-1 | 58.08 | 200 | D | 475 | | |
| Carbon Disulfide | 75-15-0 | 76.14 | 4 | UD | 12.5 | | |
| Methylene Chloride | 75-09-2 | 84.94 | 4 | UD | 13.9 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 96.94 | 4 | UD | 15.9 | | |
| 1,1-Dichloroethane | 75-34-3 | 98.96 | 4 | UD | 16.2 | | |
| 2-Butanone | 78-93-3 | 72.11 | 36 | D | 106 | | |
| Carbon Tetrachloride | 56-23-5 | 153.8 | 1.2 | UD | 7.55 | | |
| Chloroform | 67-66-3 | 119.4 | 4 | UD | 19.5 | | |
| 1,1,1-Trichloroethane | 71-55-6 | 133.4 | 1.2 | UD | 6.55 | | |
| Benzene | 71-43-2 | 78.11 | 4 | UD | 12.8 | | |
| 1,2-Dichloroethane | 107-06-2 | 98.96 | 4 | UD | 16.2 | | |
| Trichloroethene | 79-01-6 | 131.4 | 1.2 | UD | 6.45 | | |
| 1,2-Dichloropropane | 78-87-5 | 113 | 4 | UD | 18.5 | | |
| Bromodichloromethane | 75-27-4 | 163.8 | 4 | UD | 26.8 | | |
| 4-Methyl-2-Pentanone | 108-10-1 | 100.2 | 4 | UD | 16.4 | | |
| Toluene | 108-88-3 | 92.14 | 4 | UD | 15.1 | | |
| t-1,3-Dichloropropene | 10061-02-6 | 111 | 4 | UD | 18.2 | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 111 | 4 | UD | 18.2 | | |
| 1,1,2-Trichloroethane | 79-00-5 | 133.4 | 4 | UD | 21.8 | | |
| 2-Hexanone | 591-78-6 | 100 | 4 | UD | 16.4 | | |
| Dibromochloromethane | 124-48-1 | 208.3 | 4 | UD | 34.1 | | |
| Tetrachloroethene | 127-18-4 | 165.8 | 1.2 | UD | 8.14 | | |
| Chlorobenzene | 108-90-7 | 112.6 | 4 | UD | 18.4 | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 167.85 | 4 | UD | 27.5 | | |
| Ethyl Benzene | 100-41-4 | 106.2 | 4 | UD | 17.4 | | |
| m/p-Xylene | 179601-23-1 | 106.2 | 8 | UD | 34.8 | | |
| o-Xylene | 95-47-6 | 106.2 | 4 | UD | 17.4 | | |
| Styrene | 100-42-5 | 104.1 | 4 | UD | 17.0 | | |
| Bromoform | 75-25-2 | 252.8 | 4 | UD | 41.4 | | |

**Project :** Albany Air

**Field Id Number :** OA-1DL

**Laboratory Id Number :** F2781-04DL

**Sampling Date :** 06/13/14

**Analysis Date :** 06/19/14

**Target Analyts :** Air Results

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 167.9 | 1.2 | UD | 8.24 | | |
| 1,3-Dichlorobenzene | 541-73-1 | 147 | 4 | UD | 24.0 | | |
| 1,4-Dichlorobenzene | 106-46-7 | 147 | 4 | UD | 24.0 | | |
| 1,2-Dichlorobenzene | 95-50-1 | 147 | 4 | UD | 24.0 | | |

## Current MDLs for Air

| Method | Matrix | CAS # | Compound Name | Molecular Wt | ppbv MDL | LOD ppbv | LOQ ppbv | ug/m3 MDL | LOD ug/m3 | LOQ ug/m3 |
|---|---|---|---|---|---|---|---|---|---|---|
| TO-15 | Air | 71-55-6 | 1,1,1-Trichloroethane | 133 | 0.04 | 0.04 | 0.5 | 0.22 | 0.22 | 2.72 |
| TO-15 | Air | 79-34-5 | 1,1,2,2-Tetrachloroethane | 168 | 0.10 | 0.1 | 0.5 | 0.69 | 0.69 | 3.44 |
| TO-15 | Air | 79-00-5 | 1,1,2-Trichloroethane | 133 | 0.08 | 0.1 | 0.5 | 0.44 | 0.54 | 2.72 |
| TO-15 | Air | 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 187 | 0.04 | 0.1 | 0.5 | 0.32 | 0.76 | 3.82 |
| TO-15 | Air | 75-34-3 | 1,1-Dichloroethane | 99 | 0.04 | 0.1 | 0.5 | 0.16 | 0.40 | 2.02 |
| TO-15 | Air | 75-35-4 | 1,1-Dichloroethene | 97 | 0.05 | 0.1 | 0.5 | 0.20 | 0.40 | 1.98 |
| TO-15 | Air | 120-82-1 | 1,2,4-Trichlorobenzene | 181 | 0.04 | 0.1 | 0.5 | 0.29 | 0.74 | 3.70 |
| TO-15 | Air | 95-63-6 | 1,2,4-Trimethylbenzene | 120 | 0.10 | 0.1 | 0.5 | 0.50 | 0.49 | 2.45 |
| TO-15 | Air | 106-93-4 | 1,2-Dibromoethane | 188 | 0.07 | 0.1 | 0.5 | 0.55 | 0.77 | 3.84 |
| TO-15 | Air | 95-50-1 | 1,2-Dichlorobenzene | 147 | 0.07 | 0.1 | 0.5 | 0.41 | 0.60 | 3.01 |
| TO-15 | Air | 107-06-2 | 1,2-Dichloroethane | 99 | 0.07 | 0.1 | 0.5 | 0.28 | 0.40 | 2.02 |
| TO-15 | Air | 78-87-5 | 1,2-Dichloropropane | 113 | 0.06 | 0.1 | 0.5 | 0.30 | 0.46 | 2.31 |
| TO-15 | Air | 108-67-8 | 1,3,5-Trimethylbenzene | 120 | 0.09 | 0.1 | 0.5 | 0.44 | 0.49 | 2.45 |
| TO-15 | Air | 106-99-0 | 1,3-Butadiene | 54 | 0.09 | 0.1 | 0.5 | 0.20 | 0.22 | 1.10 |
| TO-15 | Air | 541-73-1 | 1,3-Dichlorobenzene | 147 | 0.08 | 0.1 | 0.5 | 0.46 | 0.60 | 3.01 |
| TO-15 | Air | 106-46-7 | 1,4-Dichlorobenzene | 147 | 0.06 | 0.1 | 0.5 | 0.35 | 0.60 | 3.01 |
| TO-15 | Air | 123-91-1 | 1,4-Dioxane | 88 | 0.09 | 0.1 | 0.5 | 0.32 | 0.36 | 1.80 |
| TO-15 | Air | 540-84-1 | 2,2,4-Trimethylpentane | 114 | 0.04 | 0.1 | 0.5 | 0.21 | 0.47 | 2.33 |
| TO-15 | Air | 78-93-3 | 2-Butanone | 72 | 0.10 | 0.1 | 0.5 | 0.29 | 0.29 | 1.47 |
| TO-15 | Air | 95-49-8 | 2-Chlorotoluene | 126.6 | 0.10 | 0.1 | 0.5 | 0.52 | 0.52 | 2.59 |
| TO-15 | Air | 591-78-6 | 2-Hexanone | 100 | 0.08 | 0.1 | 0.5 | 0.33 | 0.41 | 2.04 |
| TO-15 | Air | 622-96-8 | 4-Ethyltoluene | 120 | 0.08 | 0.1 | 0.5 | 0.38 | 0.49 | 2.45 |
| TO-15 | Air | 108-10-1 | 4-Methyl-2-Pentanone | 100 | 0.06 | 0.1 | 0.5 | 0.24 | 0.41 | 2.04 |
| TO-15 | Air | 67-64-1 | Acetone | 58 | 0.10 | 0.1 | 0.5 | 0.24 | 0.24 | 1.19 |
| TO-15 | Air | 107-05-1 | Allyl Chloride | 77 | 0.05 | 0.1 | 0.5 | 0.16 | 0.31 | 1.57 |
| TO-15 | Air | 71-43-2 | Benzene | 78 | 0.04 | 0.1 | 0.5 | 0.12 | 0.32 | 1.60 |
| TO-15 | Air | 100-44-7 | Benzyl Chloride | 141 | 0.06 | 0.1 | 0.5 | 0.37 | 0.58 | 2.88 |
| TO-15 | Air | 75-27-4 | Bromodichloromethane | 164 | 0.05 | 0.1 | 0.5 | 0.33 | 0.67 | 3.35 |
| TO-15 | Air | 593-60-2 | Bromoethene | 107 | 0.03 | 0.1 | 0.5 | 0.14 | 0.44 | 2.19 |
| TO-15 | Air | 75-25-2 | Bromoform | 253 | 0.05 | 0.1 | 0.5 | 0.49 | 1.03 | 5.17 |
| TO-15 | Air | 74-83-9 | Bromomethane | 95 | 0.03 | 0.1 | 0.5 | 0.12 | 0.39 | 1.94 |
| TO-15 | Air | 75-15-0 | Carbon Disulfide | 76 | 0.05 | 0.1 | 0.5 | 0.14 | 0.31 | 1.55 |
| TO-15 | Air | 56-23-5 | Carbon Tetrachloride | 154 | 0.04 | 0.04 | 0.5 | 0.25 | 0.25 | 3.15 |
| TO-15 | Air | 108-90-7 | Chlorobenzene | 113 | 0.09 | 0.1 | 0.5 | 0.40 | 0.46 | 2.31 |
| TO-15 | Air | 75-00-3 | Chloroethane | 65 | 0.07 | 0.1 | 0.5 | 0.18 | 0.27 | 1.33 |
| TO-15 | Air | 67-66-3 | Chloroform | 119 | 0.02 | 0.1 | 0.5 | 0.08 | 0.49 | 2.43 |
| TO-15 | Air | 74-87-3 | Chloromethane | 50 | 0.06 | 0.1 | 0.5 | 0.12 | 0.20 | 1.02 |
| TO-15 | Air | 156-59-2 | cis-1,2-Dichloroethene | 97 | 0.06 | 0.1 | 0.5 | 0.22 | 0.40 | 1.98 |
| TO-15 | Air | 10061-01-5 | cis-1,3-Dichloropropene | 111 | 0.06 | 0.1 | 0.5 | 0.29 | 0.45 | 2.27 |
| TO-15 | Air | 110-82-7 | Cyclohexane | 82 | 0.08 | 0.1 | 0.5 | 0.28 | 0.34 | 1.68 |
| TO-15 | Air | 124-48-1 | Dibromochloromethane | 208 | 0.05 | 0.1 | 0.5 | 0.43 | 0.85 | 4.25 |
| TO-15 | Air | 75-71-8 | Dichlorodifluoromethane | 121 | 0.04 | 0.1 | 0.5 | 0.18 | 0.49 | 2.47 |
| TO-15 | Air | 76-14-2 | Dichlorotetrafluoroethane | 171 | 0.04 | 0.1 | 0.5 | 0.27 | 0.70 | 3.50 |
| TO-15 | Air | 64-17-5 | Ethanol | 46.1 | 0.10 | 0.1 | 0.5 | 0.19 | 0.19 | 0.94 |
| TO-15 | Air | 141-78-6 | Ethyl Acetate | 88 | 0.06 | 0.1 | 0.5 | 0.23 | 0.36 | 1.80 |
| TO-15 | Air | 100-41-4 | Ethyl Benzene | 106 | 0.08 | 0.1 | 0.5 | 0.35 | 0.43 | 2.17 |
| TO-15 | Air | 142-82-5 | Heptane | 100 | 0.06 | 0.1 | 0.5 | 0.25 | 0.41 | 2.04 |
| TO-15 | Air | 87-68-3 | Hexachloro-1,3-Butadiene | 261 | 0.08 | 0.1 | 0.5 | 0.82 | 1.07 | 5.34 |

**Current MDLs for Air**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TO-15 | Air | 110-54-3 | Hexane | 86 | 0.04 | 0.1 | 0.5 | 0.15 | 0.35 | 1.76 |
| TO-15 | Air | 67-63-0 | Isopropyl Alcohol | 60 | 0.10 | 0.1 | 0.5 | 0.25 | 0.25 | 1.23 |
| TO-15 | Air | 136777-61-2 | m/p-Xylene | 106 | 0.10 | 0.2 | 1 | 0.43 | 0.87 | 4.34 |
| TO-15 | Air | 80-62-6 | Methyl methacrylate | 100.1 | 0.10 | 0.1 | 0.5 | 0.41 | 0.41 | 2.05 |
| TO-15 | Air | 1634-04-4 | Methyl tert-Butyl Ether | 88 | 0.05 | 0.1 | 0.5 | 0.19 | 0.36 | 1.80 |
| TO-15 | Air | 75-09-2 | Methylene Chloride | 85 | 0.05 | 0.1 | 0.5 | 0.16 | 0.35 | 1.74 |
| TO-15 | Air | 95-47-6 | o-Xylene | 106 | 0.07 | 0.1 | 0.5 | 0.29 | 0.43 | 2.17 |
| TO-15 | Air | 115-07-1 | Propene | 42 | 0.10 | 0.1 | 0.5 | 0.18 | 0.18 | 0.86 |
| TO-15 | Air | 100-42-5 | Styrene | 104 | 0.07 | 0.1 | 0.5 | 0.29 | 0.43 | 2.13 |
| TO-15 | Air | 10061-02-6 | t-1,3-Dichloropropene | 111 | 0.07 | 0.1 | 0.5 | 0.30 | 0.45 | 2.27 |
| TO-15 | Air | 27975-78-6 | tert-butyl alcohol | 74.1 | 0.10 | 0.1 | 0.5 | 0.30 | 0.30 | 1.52 |
| TO-15 | Air | 127-18-4 | Tetrachloroethene | 166 | 0.03 | 0.03 | 0.5 | 0.20 | 0.20 | 3.39 |
| TO-15 | Air | 109-99-9 | Tetrahydrofuran | 72 | 0.08 | 0.1 | 0.5 | 0.23 | 0.29 | 1.47 |
| TO-15 | Air | 108-88-3 | Toluene | 92 | 0.05 | 0.1 | 0.5 | 0.20 | 0.38 | 1.88 |
| TO-15 | Air | 156-60-5 | trans-1,2-Dichloroethene | 97 | 0.06 | 0.1 | 0.5 | 0.24 | 0.40 | 1.98 |
| TO-15 | Air | 79-01-6 | Trichloroethene | 131 | 0.04 | 0.04 | 0.5 | 0.21 | 0.21 | 2.68 |
| TO-15 | Air | 75-69-4 | Trichlorofluoromethane | 137 | 0.04 | 0.1 | 0.5 | 0.22 | 0.56 | 2.80 |
| TO-15 | Air | 108-05-4 | Vinyl Acetate | 86 | 0.10 | 0.1 | 0.5 | 0.35 | 0.35 | 1.76 |
| TO-15 | Air | 75-01-4 | Vinyl Chloride | 62.5 | 0.07 | 0.07 | 0.5 | 0.17 | 0.17 | 1.28 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TO-15 | Air | 91-20-3 | Naphthalene | 128 | 0.04 | 0.25 | 0.50 | 0.21 | 1.31 | 2.62 |
| TO-15 | Air | 98-82-8 | Isopropylbenzene | 120 | | | 0.5 | | | 2.46 |
| TO-15 | Air | 103-65-1 | n-propylbenzene | 120 | | | 0.5 | | | 2.46 |
| TO-15 | Air | 98-06-6 | tert-butyl benzene | 134 | | | 0.5 | | | 2.74 |
| TO-15 | Air | 135-98-8 | sec-butylbenzene | 134 | | | 0.5 | | | 2.74 |
| TO-15 | Air | 99-87-6 | p-isopropyltoluene | 134 | | | 0.5 | | | 2.74 |
| TO-15 | Air | 104-51-8 | n-butylbenzene | 134 | | | 0.5 | | | 2.74 |
| | | | Acetonitrile | | | | | | | |
| | | | Acrolein | | | | | | | |
| | | | Acrylonitrile | | | | | | | |
| | | | 1,1,1,2-Tetrachloroethane | | | | | | | |
| | | | Tert-butanol | | | | | | | |

# SAMPLE DATA

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | IA-RM104 | SDG No.: | F2781 |
| Lab Sample ID: | F2781-01 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023231.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.35 | 1.73 | JQ | 0.04 | 0.1 | 0.5 | ppbv |
| 74-87-3 | Chloromethane | 1.1 | 2.27 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-01-4 | Vinyl Chloride | 0.03 | 0.08 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 74-83-9 | Bromomethane | 0.1 | 0.39 | U | 0.03 | 0.1 | 0.5 | ppbv |
| 75-00-3 | Chloroethane | 0.1 | 0.26 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 0.89 | 5 | | 0.04 | 0.1 | 0.5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 67-64-1 | Acetone | 29.8 | 70.8 | EB | 0.1 | 0.1 | 0.5 | ppbv |
| 75-15-0 | Carbon Disulfide | 0.1 | 0.31 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-09-2 | Methylene Chloride | 0.51 | 1.77 | B | 0.05 | 0.1 | 0.5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 0.1 | 0.4 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 78-93-3 | 2-Butanone | 1.2 | 3.54 | | 0.1 | 0.1 | 0.5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 0.06 | 0.38 | | 0.03 | 0.03 | 0.03 | ppbv |
| 67-66-3 | Chloroform | 0.1 | 0.49 | U | 0.02 | 0.1 | 0.5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 0.03 | 0.16 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 71-43-2 | Benzene | 0.21 | 0.67 | J | 0.04 | 0.1 | 0.5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 0.1 | 0.4 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-01-6 | Trichloroethene | 0.03 | 0.16 | | 0.02 | 0.03 | 0.03 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-27-4 | Bromodichloromethane | 0.1 | 0.67 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.1 | 0.41 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-88-3 | Toluene | 1.6 | 6.03 | | 0.05 | 0.1 | 0.5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 0.1 | 0.55 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 591-78-6 | 2-Hexanone | 0.12 | 0.49 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 124-48-1 | Dibromochloromethane | 0.1 | 0.85 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 127-18-4 | Tetrachloroethene | 0.04 | 0.27 | | 0.03 | 0.03 | 0.03 | ppbv |
| 108-90-7 | Chlorobenzene | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.1 | 0.69 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 100-41-4 | Ethyl Benzene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 179601-23-1 | m/p-Xylene | 1.2 | 5.21 | | 0.1 | 0.2 | 1 | ppbv |
| 95-47-6 | o-Xylene | 0.53 | 2.3 | | 0.1 | 0.1 | 0.5 | ppbv |
| 100-42-5 | Styrene | 0.11 | 0.47 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 75-25-2 | Bromoform | 0.1 | 1.03 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.03 | 0.21 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | IA-RM104 | SDG No.: | F2781 |
| Lab Sample ID: | F2781-01 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023231.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 9.6 | | | 65 - 135 | | 96% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1115150 | | 6.65 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2761880 | | 8.32 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 2214350 | | 13.75 | | | | |
| **TENTITIVE IDENTIFIED COMPOUNDS** | | | | | | | | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | | U | | | 0 | ppbv |
| 74-95-3 | Dibromomethane | 1 | | U | | | 0 | ppbv |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | IA-RM104DL | SDG No.: | F2781 |
| Lab Sample ID: | F2781-01DL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023232.D | 10 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 1 | 4.94 | UDQ | 0.4 | 1 | 5 | ppbv |
| 74-87-3 | Chloromethane | 1 | 2.07 | UD | 1 | 1 | 5 | ppbv |
| 75-01-4 | Vinyl Chloride | 0.3 | 0.77 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 74-83-9 | Bromomethane | 1 | 3.88 | UD | 0.3 | 1 | 5 | ppbv |
| 75-00-3 | Chloroethane | 1 | 2.64 | UD | 1 | 1 | 5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 1 | 5.62 | UD | 0.4 | 1 | 5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 1 | 3.96 | UD | 0.5 | 1 | 5 | ppbv |
| 67-64-1 | Acetone | 29.4 | 69.8 | DB | 1 | 1 | 5 | ppbv |
| 75-15-0 | Carbon Disulfide | 1 | 3.11 | UD | 0.5 | 1 | 5 | ppbv |
| 75-09-2 | Methylene Chloride | 1 | 3.47 | UD | 0.5 | 1 | 5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 3.96 | UD | 0.5 | 1 | 5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 1 | 4.05 | UD | 0.4 | 1 | 5 | ppbv |
| 78-93-3 | 2-Butanone | 1 | 2.95 | UD | 1 | 1 | 5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 0.3 | 1.89 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 67-66-3 | Chloroform | 1 | 4.88 | UD | 0.2 | 1 | 5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 0.3 | 1.64 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 71-43-2 | Benzene | 1 | 3.19 | UD | 0.4 | 1 | 5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 1 | 4.05 | UD | 1 | 1 | 5 | ppbv |
| 79-01-6 | Trichloroethene | 0.3 | 1.61 | UD | 0.15 | 0.3 | 0.3 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 1 | 4.62 | UD | 1 | 1 | 5 | ppbv |
| 75-27-4 | Bromodichloromethane | 1 | 6.7 | UD | 0.5 | 1 | 5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | 4.1 | UD | 0.5 | 1 | 5 | ppbv |
| 108-88-3 | Toluene | 0.8 | 3.01 | JD | 0.5 | 1 | 5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 1 | 4.54 | UD | 1 | 1 | 5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | 4.54 | UD | 1 | 1 | 5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 5.46 | UD | 1 | 1 | 5 | ppbv |
| 591-78-6 | 2-Hexanone | 1 | 4.09 | UD | 1 | 1 | 5 | ppbv |
| 124-48-1 | Dibromochloromethane | 1 | 8.52 | UD | 0.5 | 1 | 5 | ppbv |
| 127-18-4 | Tetrachloroethene | 0.3 | 2.03 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 108-90-7 | Chlorobenzene | 1 | 4.61 | UD | 1 | 1 | 5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 6.87 | UD | 1 | 1 | 5 | ppbv |
| 100-41-4 | Ethyl Benzene | 1 | 4.34 | UD | 1 | 1 | 5 | ppbv |
| 179601-23-1 | m/p-Xylene | 2 | 8.69 | UD | 1 | 2 | 10 | ppbv |
| 95-47-6 | o-Xylene | 1 | 4.34 | UD | 1 | 1 | 5 | ppbv |
| 100-42-5 | Styrene | 1 | 4.26 | UD | 1 | 1 | 5 | ppbv |
| 75-25-2 | Bromoform | 1 | 10.3 | UD | 0.5 | 1 | 5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.3 | 2.06 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 6.01 | UD | 1 | 1 | 5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | IA-RM104DL | SDG No.: | F2781 |
| Lab Sample ID: | F2781-01DL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023232.D | 10 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 6.01 | UD | 1 | 1 | 5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 6.01 | UD | 1 | 1 | 5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 9.7 | | | 65 - 135 | | 97% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1142400 | | 6.65 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2845540 | | 8.33 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 2233520 | | 13.75 | | | | |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | IA-RM105 | SDG No.: | F2781 |
| Lab Sample ID: | F2781-02 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023229.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.61 | 3.02 | Q | 0.04 | 0.1 | 0.5 | ppbv |
| 74-87-3 | Chloromethane | 0.61 | 1.26 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-01-4 | Vinyl Chloride | 0.03 | 0.08 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 74-83-9 | Bromomethane | 0.1 | 0.39 | U | 0.03 | 0.1 | 0.5 | ppbv |
| 75-00-3 | Chloroethane | 0.1 | 0.26 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 0.47 | 2.64 | J | 0.04 | 0.1 | 0.5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 67-64-1 | Acetone | 10.9 | 25.9 | B | 0.1 | 0.1 | 0.5 | ppbv |
| 75-15-0 | Carbon Disulfide | 0.1 | 0.31 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-09-2 | Methylene Chloride | 0.38 | 1.32 | JB | 0.05 | 0.1 | 0.5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 0.1 | 0.4 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 78-93-3 | 2-Butanone | 1.1 | 3.24 | | 0.1 | 0.1 | 0.5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 0.06 | 0.38 | | 0.03 | 0.03 | 0.03 | ppbv |
| 67-66-3 | Chloroform | 0.1 | 0.49 | U | 0.02 | 0.1 | 0.5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 0.03 | 0.16 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 71-43-2 | Benzene | 0.19 | 0.61 | J | 0.04 | 0.1 | 0.5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 0.1 | 0.4 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-01-6 | Trichloroethene | 0.03 | 0.16 | U | 0.02 | 0.03 | 0.03 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-27-4 | Bromodichloromethane | 0.1 | 0.67 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.1 | 0.41 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-88-3 | Toluene | 1.5 | 5.65 | | 0.05 | 0.1 | 0.5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 0.1 | 0.55 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 591-78-6 | 2-Hexanone | 0.1 | 0.41 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 124-48-1 | Dibromochloromethane | 0.1 | 0.85 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 127-18-4 | Tetrachloroethene | 0.05 | 0.34 | | 0.03 | 0.03 | 0.03 | ppbv |
| 108-90-7 | Chlorobenzene | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.1 | 0.69 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 100-41-4 | Ethyl Benzene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 179601-23-1 | m/p-Xylene | 0.39 | 1.69 | J | 0.1 | 0.2 | 1 | ppbv |
| 95-47-6 | o-Xylene | 0.15 | 0.65 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 100-42-5 | Styrene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-25-2 | Bromoform | 0.1 | 1.03 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.03 | 0.21 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | IA-RM105 | SDG No.: | F2781 |
| Lab Sample ID: | F2781-02 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023229.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 8.4 | | | 65 - 135 | | 84% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1269980 | | 6.65 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 3238990 | | 8.32 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 2522060 | | 13.75 | | | | |
| **TENTITIVE IDENTIFIED COMPOUNDS** | | | | | | | | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | | U | | | 0 | ppbv |
| 74-95-3 | Dibromomethane | 1 | | U | | | 0 | ppbv |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | DUPLICATE | SDG No.: | F2781 |
| Lab Sample ID: | F2781-03 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023234.D | 1 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.57 | 2.82 | Q | 0.04 | 0.1 | 0.5 | ppbv |
| 74-87-3 | Chloromethane | 1 | 2.07 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-01-4 | Vinyl Chloride | 0.03 | 0.08 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 74-83-9 | Bromomethane | 0.1 | 0.39 | U | 0.03 | 0.1 | 0.5 | ppbv |
| 75-00-3 | Chloroethane | 0.1 | 0.26 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 0.88 | 4.95 | | 0.04 | 0.1 | 0.5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 67-64-1 | Acetone | 30.8 | 73.2 | EB | 0.1 | 0.1 | 0.5 | ppbv |
| 75-15-0 | Carbon Disulfide | 0.1 | 0.31 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-09-2 | Methylene Chloride | 0.48 | 1.67 | JB | 0.05 | 0.1 | 0.5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 0.1 | 0.4 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 78-93-3 | 2-Butanone | 1 | 2.95 | | 0.1 | 0.1 | 0.5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 0.06 | 0.38 | | 0.03 | 0.03 | 0.03 | ppbv |
| 67-66-3 | Chloroform | 0.1 | 0.49 | U | 0.02 | 0.1 | 0.5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 0.03 | 0.16 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 71-43-2 | Benzene | 0.17 | 0.54 | J | 0.04 | 0.1 | 0.5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 0.1 | 0.4 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-01-6 | Trichloroethene | 0.03 | 0.16 | U | 0.02 | 0.03 | 0.03 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-27-4 | Bromodichloromethane | 0.1 | 0.67 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.09 | 0.37 | J | 0.05 | 0.1 | 0.5 | ppbv |
| 108-88-3 | Toluene | 2.1 | 7.91 | | 0.05 | 0.1 | 0.5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 0.1 | 0.55 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 591-78-6 | 2-Hexanone | 0.11 | 0.45 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 124-48-1 | Dibromochloromethane | 0.1 | 0.85 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 127-18-4 | Tetrachloroethene | 0.03 | 0.2 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 108-90-7 | Chlorobenzene | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.1 | 0.69 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 100-41-4 | Ethyl Benzene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 179601-23-1 | m/p-Xylene | 0.34 | 1.48 | J | 0.1 | 0.2 | 1 | ppbv |
| 95-47-6 | o-Xylene | 0.16 | 0.69 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 100-42-5 | Styrene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-25-2 | Bromoform | 0.1 | 1.03 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.03 | 0.21 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | DUPLICATE | SDG No.: | F2781 |
| Lab Sample ID: | F2781-03 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023234.D | 1 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 9.7 | | | 65 - 135 | | 97% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1097460 | | 6.66 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2531790 | | 8.34 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 1933810 | | 13.76 | | | | |
| **TENTITIVE IDENTIFIED COMPOUNDS** | | | | | | | | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | | U | | | 0 | ppbv |
| 74-95-3 | Dibromomethane | 1 | | U | | | 0 | ppbv |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | DUPLICATEDL | SDG No.: | F2781 |
| Lab Sample ID: | F2781-03DL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023235.D | 10 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 1 | 4.94 | UDQ | 0.4 | 1 | 5 | ppbv |
| 74-87-3 | Chloromethane | 1 | 2.07 | UD | 1 | 1 | 5 | ppbv |
| 75-01-4 | Vinyl Chloride | 0.3 | 0.77 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 74-83-9 | Bromomethane | 1 | 3.88 | UD | 0.3 | 1 | 5 | ppbv |
| 75-00-3 | Chloroethane | 1 | 2.64 | UD | 1 | 1 | 5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 1 | 5.62 | UD | 0.4 | 1 | 5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 1 | 3.96 | UD | 0.5 | 1 | 5 | ppbv |
| 67-64-1 | Acetone | 31.2 | 74.1 | DB | 1 | 1 | 5 | ppbv |
| 75-15-0 | Carbon Disulfide | 1 | 3.11 | UD | 0.5 | 1 | 5 | ppbv |
| 75-09-2 | Methylene Chloride | 1 | 3.47 | UD | 0.5 | 1 | 5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 3.96 | UD | 0.5 | 1 | 5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 1 | 4.05 | UD | 0.4 | 1 | 5 | ppbv |
| 78-93-3 | 2-Butanone | 1 | 2.95 | UD | 1 | 1 | 5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 0.3 | 1.89 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 67-66-3 | Chloroform | 1 | 4.88 | UD | 0.2 | 1 | 5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 0.3 | 1.64 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 71-43-2 | Benzene | 1 | 3.19 | UD | 0.4 | 1 | 5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 1 | 4.05 | UD | 1 | 1 | 5 | ppbv |
| 79-01-6 | Trichloroethene | 0.3 | 1.61 | UD | 0.15 | 0.3 | 0.3 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 1 | 4.62 | UD | 1 | 1 | 5 | ppbv |
| 75-27-4 | Bromodichloromethane | 1 | 6.7 | UD | 0.5 | 1 | 5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 1 | 4.1 | UD | 0.5 | 1 | 5 | ppbv |
| 108-88-3 | Toluene | 1.1 | 4.15 | JD | 0.5 | 1 | 5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 1 | 4.54 | UD | 1 | 1 | 5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 1 | 4.54 | UD | 1 | 1 | 5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 5.46 | UD | 1 | 1 | 5 | ppbv |
| 591-78-6 | 2-Hexanone | 1 | 4.09 | UD | 1 | 1 | 5 | ppbv |
| 124-48-1 | Dibromochloromethane | 1 | 8.52 | UD | 0.5 | 1 | 5 | ppbv |
| 127-18-4 | Tetrachloroethene | 0.3 | 2.03 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 108-90-7 | Chlorobenzene | 1 | 4.61 | UD | 1 | 1 | 5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 6.87 | UD | 1 | 1 | 5 | ppbv |
| 100-41-4 | Ethyl Benzene | 1 | 4.34 | UD | 1 | 1 | 5 | ppbv |
| 179601-23-1 | m/p-Xylene | 2 | 8.69 | UD | 1 | 2 | 10 | ppbv |
| 95-47-6 | o-Xylene | 1 | 4.34 | UD | 1 | 1 | 5 | ppbv |
| 100-42-5 | Styrene | 1 | 4.26 | UD | 1 | 1 | 5 | ppbv |
| 75-25-2 | Bromoform | 1 | 10.3 | UD | 0.5 | 1 | 5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.3 | 2.06 | UD | 0.3 | 0.3 | 0.3 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 6.01 | UD | 1 | 1 | 5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | DUPLICATEDL | SDG No.: | F2781 |
| Lab Sample ID: | F2781-03DL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023235.D | 10 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 6.01 | UD | 1 | 1 | 5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 6.01 | UD | 1 | 1 | 5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 9.8 | | | 65 - 135 | | 98% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1121180 | | 6.65 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2612050 | | 8.33 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 2028030 | | 13.76 | | | | |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | OA-1 | SDG No.: | F2781 |
| Lab Sample ID: | F2781-04 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023226.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.31 | 1.53 | JQ | 0.04 | 0.1 | 0.5 | ppbv |
| 74-87-3 | Chloromethane | 0.63 | 1.3 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-01-4 | Vinyl Chloride | 0.03 | 0.08 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 74-83-9 | Bromomethane | 0.1 | 0.39 | U | 0.03 | 0.1 | 0.5 | ppbv |
| 75-00-3 | Chloroethane | 0.1 | 0.26 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 0.24 | 1.35 | J | 0.04 | 0.1 | 0.5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 67-64-1 | Acetone | 170 | 403 | EB | 0.1 | 0.1 | 0.5 | ppbv |
| 75-15-0 | Carbon Disulfide | 0.1 | 0.31 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-09-2 | Methylene Chloride | 0.2 | 0.69 | JB | 0.05 | 0.1 | 0.5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 0.1 | 0.4 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 78-93-3 | 2-Butanone | 57.5 | 169 | E | 0.1 | 0.1 | 0.5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 0.06 | 0.38 | | 0.03 | 0.03 | 0.03 | ppbv |
| 67-66-3 | Chloroform | 0.1 | 0.49 | U | 0.02 | 0.1 | 0.5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 0.03 | 0.16 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 71-43-2 | Benzene | 0.36 | 1.15 | J | 0.04 | 0.1 | 0.5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 0.1 | 0.4 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-01-6 | Trichloroethene | 0.15 | 0.81 | | 0.02 | 0.03 | 0.03 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-27-4 | Bromodichloromethane | 0.1 | 0.67 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.1 | 0.41 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-88-3 | Toluene | 2.7 | 10.2 | | 0.05 | 0.1 | 0.5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 0.1 | 0.55 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 591-78-6 | 2-Hexanone | 8.7 | 35.6 | | 0.1 | 0.1 | 0.5 | ppbv |
| 124-48-1 | Dibromochloromethane | 0.1 | 0.85 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 127-18-4 | Tetrachloroethene | 0.1 | 0.68 | | 0.03 | 0.03 | 0.03 | ppbv |
| 108-90-7 | Chlorobenzene | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.1 | 0.69 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 100-41-4 | Ethyl Benzene | 0.39 | 1.69 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 179601-23-1 | m/p-Xylene | 1.5 | 6.52 | | 0.1 | 0.2 | 1 | ppbv |
| 95-47-6 | o-Xylene | 0.48 | 2.08 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 100-42-5 | Styrene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-25-2 | Bromoform | 0.1 | 1.03 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.03 | 0.21 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | OA-1 | SDG No.: | F2781 |
| Lab Sample ID: | F2781-04 | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023226.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 9.1 | | | 65 - 135 | | 91% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1114670 | | 6.67 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2470600 | | 8.34 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 1892310 | | 13.76 | | | | |
| **TENTITIVE IDENTIFIED COMPOUNDS** | | | | | | | | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | | U | | | 0 | ppbv |
| 74-95-3 | Dibromomethane | 1 | | U | | | 0 | ppbv |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | OA-1DL | SDG No.: | F2781 |
| Lab Sample ID: | F2781-04DL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023238.D | 40 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 4 | 19.8 | UDQ | 1.6 | 4 | 20 | ppbv |
| 74-87-3 | Chloromethane | 4 | 8.26 | UD | 4 | 4 | 20 | ppbv |
| 75-01-4 | Vinyl Chloride | 1.2 | 3.07 | UD | 1.2 | 1.2 | 1.2 | ppbv |
| 74-83-9 | Bromomethane | 4 | 15.5 | UD | 1.2 | 4 | 20 | ppbv |
| 75-00-3 | Chloroethane | 4 | 10.6 | UD | 4 | 4 | 20 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 4 | 22.5 | UD | 1.6 | 4 | 20 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 4 | 15.9 | UD | 2 | 4 | 20 | ppbv |
| 67-64-1 | Acetone | 200 | 475 | DB | 4 | 4 | 20 | ppbv |
| 75-15-0 | Carbon Disulfide | 4 | 12.5 | UD | 2 | 4 | 20 | ppbv |
| 75-09-2 | Methylene Chloride | 4 | 13.9 | UD | 2 | 4 | 20 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 4 | 15.9 | UD | 2 | 4 | 20 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 4 | 16.2 | UD | 1.6 | 4 | 20 | ppbv |
| 78-93-3 | 2-Butanone | 36 | 106 | D | 4 | 4 | 20 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 1.2 | 7.55 | UD | 1.2 | 1.2 | 1.2 | ppbv |
| 67-66-3 | Chloroform | 4 | 19.5 | UD | 0.8 | 4 | 20 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 1.2 | 6.55 | UD | 1.2 | 1.2 | 1.2 | ppbv |
| 71-43-2 | Benzene | 4 | 12.8 | UD | 1.6 | 4 | 20 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 4 | 16.2 | UD | 4 | 4 | 20 | ppbv |
| 79-01-6 | Trichloroethene | 1.2 | 6.45 | UD | 0.6 | 1.2 | 1.2 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 4 | 18.5 | UD | 4 | 4 | 20 | ppbv |
| 75-27-4 | Bromodichloromethane | 4 | 26.8 | UD | 2 | 4 | 20 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 4 | 16.4 | UD | 2 | 4 | 20 | ppbv |
| 108-88-3 | Toluene | 4 | 15.1 | UD | 2 | 4 | 20 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 4 | 18.2 | UD | 4 | 4 | 20 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 4 | 18.2 | UD | 4 | 4 | 20 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 4 | 21.8 | UD | 4 | 4 | 20 | ppbv |
| 591-78-6 | 2-Hexanone | 4 | 16.4 | UD | 4 | 4 | 20 | ppbv |
| 124-48-1 | Dibromochloromethane | 4 | 34.1 | UD | 2 | 4 | 20 | ppbv |
| 127-18-4 | Tetrachloroethene | 1.2 | 8.14 | UD | 1.2 | 1.2 | 1.2 | ppbv |
| 108-90-7 | Chlorobenzene | 4 | 18.4 | UD | 4 | 4 | 20 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4 | 27.5 | UD | 4 | 4 | 20 | ppbv |
| 100-41-4 | Ethyl Benzene | 4 | 17.4 | UD | 4 | 4 | 20 | ppbv |
| 179601-23-1 | m/p-Xylene | 8 | 34.8 | UD | 4 | 8 | 40 | ppbv |
| 95-47-6 | o-Xylene | 4 | 17.4 | UD | 4 | 4 | 20 | ppbv |
| 100-42-5 | Styrene | 4 | 17.0 | UD | 4 | 4 | 20 | ppbv |
| 75-25-2 | Bromoform | 4 | 41.4 | UD | 2 | 4 | 20 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.2 | 8.24 | UD | 1.2 | 1.2 | 1.2 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 4 | 24.0 | UD | 4 | 4 | 20 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | 06/13/14 |
| Project: | Albany Air | Date Received: | 06/18/14 |
| Client Sample ID: | OA-1DL | SDG No.: | F2781 |
| Lab Sample ID: | F2781-04DL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023238.D | 40 | | 06/19/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 4 | 24.0 | UD | 4 | 4 | 20 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 4 | 24.0 | UD | 4 | 4 | 20 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 8.6 | | | 65 - 135 | | 86% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1068730 | | 6.65 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2301270 | | 8.33 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 1445780 | | 13.76 | | | | |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# QC SUMMARY

## Surrogate Summary

**SDG No.:** F2781

**Client:** CB&I Federal Services LLC

**Analytical Method:** SWTO-15

| Lab Sample ID | Client ID | Parameter | Spike | Result | Recovery | Qual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|---|
| F2781-01 | IA-RM104 | 1-Bromo-4-Fluorobenzene | 10 | 9.63 | 96 | | 65 | 135 |
| F2781-01DL | IA-RM104DL | 1-Bromo-4-Fluorobenzene | 10 | 9.66 | 97 | | 65 | 135 |
| F2781-02 | IA-RM105 | 1-Bromo-4-Fluorobenzene | 10 | 8.35 | 84 | | 65 | 135 |
| F2781-03 | DUPLICATE | 1-Bromo-4-Fluorobenzene | 10 | 9.69 | 97 | | 65 | 135 |
| F2781-03DL | DUPLICATEDL | 1-Bromo-4-Fluorobenzene | 10 | 9.81 | 98 | | 65 | 135 |
| F2781-04 | OA-1 | 1-Bromo-4-Fluorobenzene | 10 | 9.13 | 91 | | 65 | 135 |
| F2781-04DL | OA-1DL | 1-Bromo-4-Fluorobenzene | 10 | 8.63 | 86 | | 65 | 135 |
| F2781-04DUP | OA-1DUP | 1-Bromo-4-Fluorobenzene | 10 | 8.9 | 89 | | 65 | 135 |
| VL0618ABL | VL0618ABL | 1-Bromo-4-Fluorobenzene | 10 | 10.04 | 100 | | 65 | 135 |
| VL0618ABS | VL0618ABS | 1-Bromo-4-Fluorobenzene | 10 | 9.573 | 96 | | 65 | 135 |

CHEMTECH

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**
**SW-846**

**SDG No.:** F2781
**Client:** CB&I Federal Services LLC
**Analytical Method:** SWTO-15 **Datafile :** VL023225.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VL0618ABS | Dichlorodifluoromethane | 10 | 5.5 | ppbv | 55 | | * | 70 | 130 | |
| | Chloromethane | 10 | 9 | ppbv | 90 | | | 70 | 130 | |
| | Vinyl Chloride | 10 | 8.3 | ppbv | 83 | | | 70 | 130 | |
| | Bromomethane | 10 | 9.2 | ppbv | 92 | | | 70 | 130 | |
| | Chloroethane | 10 | 9.2 | ppbv | 92 | | | 70 | 130 | |
| | Trichlorofluoromethane | 10 | 9 | ppbv | 90 | | | 70 | 130 | |
| | 1,1-Dichloroethene | 10 | 9.6 | ppbv | 96 | | | 70 | 130 | |
| | Acetone | 10 | 8.4 | ppbv | 84 | | | 70 | 130 | |
| | Carbon disulfide | 10 | 9.1 | ppbv | 91 | | | 70 | 130 | |
| | Methylene Chloride | 10 | 8.3 | ppbv | 83 | | | 70 | 130 | |
| | trans-1,2-Dichloroethene | 10 | 10.1 | ppbv | 101 | | | 70 | 130 | |
| | 1,1-Dichloroethane | 10 | 9.3 | ppbv | 93 | | | 70 | 130 | |
| | 2-Butanone | 10 | 10.3 | ppbv | 103 | | | 70 | 130 | |
| | Carbon Tetrachloride | 10 | 8.1 | ppbv | 81 | | | 70 | 130 | |
| | Chloroform | 10 | 9.2 | ppbv | 92 | | | 70 | 130 | |
| | 1,1,1-Trichloroethane | 10 | 8.3 | ppbv | 83 | | | 70 | 130 | |
| | Benzene | 10 | 10.4 | ppbv | 104 | | | 70 | 130 | |
| | 1,2-Dichloroethane | 10 | 9.2 | ppbv | 92 | | | 70 | 130 | |
| | Trichloroethene | 10 | 9.7 | ppbv | 97 | | | 70 | 130 | |
| | 1,2-Dichloropropane | 10 | 9.9 | ppbv | 99 | | | 70 | 130 | |
| | Bromodichloromethane | 10 | 9.6 | ppbv | 96 | | | 70 | 130 | |
| | 4-Methyl-2-Pentanone | 10 | 10.5 | ppbv | 105 | | | 70 | 130 | |
| | Toluene | 10 | 11.1 | ppbv | 111 | | | 70 | 130 | |
| | t-1,3-Dichloropropene | 10 | 11.8 | ppbv | 118 | | | 70 | 130 | |
| | cis-1,3-Dichloropropene | 10 | 11.5 | ppbv | 115 | | | 70 | 130 | |
| | 1,1,2-Trichloroethane | 10 | 9.4 | ppbv | 94 | | | 70 | 130 | |
| | 2-Hexanone | 10 | 11.4 | ppbv | 114 | | | 70 | 130 | |
| | Dibromochloromethane | 10 | 9.9 | ppbv | 99 | | | 70 | 130 | |
| | Tetrachloroethene | 10 | 9.9 | ppbv | 99 | | | 70 | 130 | |
| | Chlorobenzene | 10 | 8.8 | ppbv | 88 | | | 70 | 130 | |
| | 1,1,1,2-Tetrachloroethane | 10 | 8.9 | ppbv | 89 | | | 70 | 130 | |
| | Ethyl Benzene | 10 | 10.6 | ppbv | 106 | | | 70 | 130 | |
| | m/p-Xylene | 20 | 19.2 | ppbv | 96 | | | 70 | 130 | |
| | o-Xylene | 10 | 9.8 | ppbv | 98 | | | 70 | 130 | |
| | Styrene | 10 | 11.3 | ppbv | 113 | | | 70 | 130 | |
| | Bromoform | 10 | 10.2 | ppbv | 102 | | | 70 | 130 | |
| | 1,1,2,2-Tetrachloroethane | 10 | 8.5 | ppbv | 85 | | | 70 | 130 | |
| | 1,3-Dichlorobenzene | 10 | 8.8 | ppbv | 88 | | | 70 | 130 | |
| | 1,4-Dichlorobenzene | 10 | 9 | ppbv | 90 | | | 70 | 130 | |
| | 1,2-Dichlorobenzene | 10 | 8.9 | ppbv | 89 | | | 70 | 130 | |

## Duplicate Sample Summary

| | | | | |
|---|---|---|---|---|
| **Lab Sample Id :** | F2781-04DUP | | F2781-04 | |
| **Client Id :** | OA-1DUP | | OA-1 | |
| **DF :** | 1 | | 1 | |
| **Datafile :** | VL023227.D | | VL023226.D | |
| **Anal Date & Time :** | 06/18/2014 | 20:36 | 06/18/2014 | 19:46 |

| Parameter | Result | Result | RPD |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0 | 0 | 0 |
| 1,1,1-Trichloroethane | 0 | 0 | 0 |
| 1,1,2,2-Tetrachloroethane | 0 | 0 | 0 |
| 1,1,2-Trichloroethane | 0 | 0 | 0 |
| 1,1-Dichloroethane | 0 | 0 | 0 |
| 1,1-Dichloroethene | 0 | 0 | 0 |
| 1,2-Dichlorobenzene | 0 | 0 | 0 |
| 1,2-Dichloroethane | 0 | 0 | 0 |
| 1,2-Dichloropropane | 0 | 0 | 0 |
| 1,3-Dichlorobenzene | 0 | 0 | 0 |
| 1,4-Dichlorobenzene | 0 | 0 | 0 |
| 2-Butanone | 55.8 | 57.5 | 3 |
| 2-Hexanone | 9.5 | 8.7 | 8.8 |
| 4-Methyl-2-Pentanone | 0 | 0 | 0 |
| Acetone | 160 | 170 | 6.1 |
| Benzene | 0.39 | 0.36 | 8 |
| Bromodichloromethane | 0 | 0 | 0 |
| Bromoform | 0 | 0 | 0 |
| Bromomethane | 0 | 0 | 0 |
| Carbon Disulfide | 0 | 0 | 0 |
| Carbon Tetrachloride | 0.06 | 0.06 | 0 |
| Chlorobenzene | 0 | 0 | 0 |
| Chloroethane | 0 | 0 | 0 |
| Chloroform | 0 | 0 | 0 |
| Chloromethane | 0.71 | 0.63 | 11.9 |
| cis-1,3-Dichloropropene | 0 | 0 | 0 |
| Dibromochloromethane | 0 | 0 | 0 |
| Dichlorodifluoromethane | 0.62 | 0.31 | 66.7 * |
| Ethyl Benzene | 0.41 | 0.39 | 5 |
| m/p-Xylene | 1.6 | 1.5 | 6.5 |
| | | | |

## Duplicate Sample Summary

| | | | | |
|---|---|---|---|---|
| **Lab Sample Id :** | F2781-04DUP | | F2781-04 | |
| **Client Id :** | OA-1DUP | | OA-1 | |
| **DF :** | 1 | | 1 | |
| **Datafile :** | VL023227.D | | VL023226.D | |
| **Anal Date & Time :** | 06/18/2014 | 20:36 | 06/18/2014 | 19:46 |

| Parameter | Result | Result | RPD |
|---|---|---|---|
| Methylene Chloride | 0.21 | 0.2 | 4.9 |
| o-Xylene | 0.48 | 0.48 | 0 |
| Styrene | 0 | 0 | 0 |
| t-1,3-Dichloropropene | 0 | 0 | 0 |
| Tetrachloroethene | 0.09 | 0.1 | 10.5 |
| Toluene | 3 | 2.7 | 10.5 |
| trans-1,2-Dichloroethene | 0 | 0 | 0 |
| Trichloroethene | 0.17 | 0.15 | 12.5 |
| Trichlorofluoromethane | 0.26 | 0.24 | 8 |
| Vinyl Chloride | 0 | 0 | 0 |

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0618ABL

Lab Name: CHEMTECH Contract: SHAW23

Lab Code: CHEM Case No.: F2781 SAS No.: F2781 SDG NO.: F2781

Lab File ID: VL023224.D Lab Sample ID: VL0618ABL

Date Analyzed: 06/18/2014 Time Analyzed: 16:51

GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VL0618ABS | VL0618ABS | VL023225.D | 06/18/2014 |
| OA-1 | F2781-04 | VL023226.D | 06/18/2014 |
| OA-1DUP | F2781-04DUP | VL023227.D | 06/18/2014 |
| IA-RM105 | F2781-02 | VL023229.D | 06/18/2014 |
| IA-RM104 | F2781-01 | VL023231.D | 06/18/2014 |
| IA-RM104DL | F2781-01DL | VL023232.D | 06/19/2014 |
| DUPLICATE | F2781-03 | VL023234.D | 06/19/2014 |
| DUPLICATEDL | F2781-03DL | VL023235.D | 06/19/2014 |
| OA-1DL | F2781-04DL | VL023238.D | 06/19/2014 |

COMMENTS:

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: SHAW23

Lab Code: CHEM Case No.: F2781 SAS No.: F2781 SDG NO.: F2781

Lab File ID: VL023192.D BFB Injection Date: 06/17/2014

Instrument ID: MSVOA_L BFB Injection Time: 01:05

GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 28.9 |
| 75 | 30.0 - 66.0% of mass 95 | 61.4 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.5 |
| 173 | Less than 2.0% of mass 174 | 0.0 ( 0.0 ) 1 |
| 174 | 50.0 - 120.0% of mass 95 | 63.3 |
| 175 | 4.0 - 9.0% of mass 174 | 4.7 ( 7.5 ) 1 |
| 176 | 93.0 - 101.0% of mass 174 | 60.5 ( 95.5 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4 ( 6.6 ) 2 |
| | | |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDICCC010 | VSTDICCC010 | VL023193.D | 06/17/2014 | 01:59 |
| VSTDICC002 | VSTDICC002 | VL023194.D | 06/17/2014 | 02:41 |
| VSTDICC0.1 | VSTDICC0.1 | VL023195.D | 06/17/2014 | 03:20 |
| VSTDICC0.03 | VSTDICC0.03 | VL023196.D | 06/17/2014 | 04:00 |
| VSTDICC001 | VSTDICC001 | VL023197.D | 06/17/2014 | 04:39 |
| VSTDICC0.5 | VSTDICC0.5 | VL023198.D | 06/17/2014 | 05:19 |
| VSTDICC015 | VSTDICC015 | VL023199.D | 06/17/2014 | 06:00 |

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: SHAW23

Lab Code: CHEM Case No.: F2781 SAS No.: F2781 SDG NO.: F2781

Lab File ID: VL023222.D BFB Injection Date: 06/18/2014

Instrument ID: MSVOA_L BFB Injection Time: 11:51

GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 26.9 |
| 75 | 30.0 - 66.0% of mass 95 | 59.3 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 |
| 173 | Less than 2.0% of mass 174 | 0.0 ( 0.0 ) 1 |
| 174 | 50.0 - 120.0% of mass 95 | 64.8 |
| 175 | 4.0 - 9.0% of mass 174 | 4.9 ( 7.6 ) 1 |
| 176 | 93.0 - 101.0% of mass 174 | 63.1 ( 97.5 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.1 ( 6.5 ) 2 |
| | | |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDCCC010 | VSTDCCC010 | VL023223.D | 06/18/2014 | 15:12 |
| VL0618ABL | VL0618ABL | VL023224.D | 06/18/2014 | 16:51 |
| VL0618ABS | VL0618ABS | VL023225.D | 06/18/2014 | 17:33 |
| OA-1 | F2781-04 | VL023226.D | 06/18/2014 | 19:46 |
| OA-1DUP | F2781-04DUP | VL023227.D | 06/18/2014 | 20:36 |
| IA-RM105 | F2781-02 | VL023229.D | 06/18/2014 | 22:16 |
| IA-RM104 | F2781-01 | VL023231.D | 06/18/2014 | 23:57 |
| IA-RM104DL | F2781-01DL | VL023232.D | 06/19/2014 | 00:46 |
| DUPLICATE | F2781-03 | VL023234.D | 06/19/2014 | 02:19 |
| DUPLICATEDL | F2781-03DL | VL023235.D | 06/19/2014 | 03:05 |
| OA-1DL | F2781-04DL | VL023238.D | 06/19/2014 | 05:20 |

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## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: SHAW23

Lab Code: CHEM Case No.: F2781 SAS No.: F2781 SDG NO.: F2781

Lab File ID: VL023223.D Date Analyzed: 06/18/2014

Instrument ID: MSVOA_L Time Analyzed: 15:12

GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 1343990 | 6.67 | 3278150 | 8.34 | 2969560 | 13.77 |
| UPPER LIMIT | 1881580 | 7.00 | 4589410 | 8.67 | 4157380 | 14.10 |
| LOWER LIMIT | 806392 | 6.34 | 1966890 | 8.01 | 1781730 | 13.44 |
| EPA SAMPLE NO. | | | | | | |
| IA-RM104 | 1115150 | 6.65 | 2761880 | 8.32 | 2214350 | 13.75 |
| IA-RM104DL | 1142400 | 6.65 | 2845540 | 8.33 | 2233520 | 13.75 |
| IA-RM105 | 1269980 | 6.65 | 3238990 | 8.32 | 2522060 | 13.75 |
| DUPLICATE | 1097460 | 6.66 | 2531790 | 8.34 | 1933810 | 13.76 |
| DUPLICATEDL | 1121180 | 6.65 | 2612050 | 8.33 | 2028030 | 13.76 |
| OA-1 | 1114670 | 6.67 | 2470600 | 8.34 | 1892310 | 13.76 |
| OA-1DL | 1068730 | 6.65 | 2301270 | 8.33 | 1445780 * | 13.76 |
| OA-1DUP | 1155230 | 6.67 | 2826810 | 8.34 | 2462120 | 13.76 |
| VL0618ABL | 1193440 | 6.66 | 2825400 | 8.33 | 2276570 | 13.76 |
| VL0618ABS | 1253510 | 6.67 | 2881870 | 8.34 | 2539270 | 13.77 |

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% 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.

# QC SAMPLE DATA

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | |
| Project: | Albany Air | Date Received: | |
| Client Sample ID: | VL0618ABL | SDG No.: | F2781 |
| Lab Sample ID: | VL0618ABL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023224.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.1 | 0.49 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 74-87-3 | Chloromethane | 0.1 | 0.21 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-01-4 | Vinyl Chloride | 0.03 | 0.08 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 74-83-9 | Bromomethane | 0.1 | 0.39 | U | 0.03 | 0.1 | 0.5 | ppbv |
| 75-00-3 | Chloroethane | 0.1 | 0.26 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 0.1 | 0.56 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 67-64-1 | Acetone | 0.17 | 0.4 | J | 0.1 | 0.1 | 0.5 | ppbv |
| 75-15-0 | Carbon Disulfide | 0.1 | 0.31 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-09-2 | Methylene Chloride | 0.1 | 0.35 | J | 0.05 | 0.1 | 0.5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 0.1 | 0.4 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 0.1 | 0.4 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 78-93-3 | 2-Butanone | 0.1 | 0.29 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 0.03 | 0.19 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 67-66-3 | Chloroform | 0.1 | 0.49 | U | 0.02 | 0.1 | 0.5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 0.03 | 0.16 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 71-43-2 | Benzene | 0.1 | 0.32 | U | 0.04 | 0.1 | 0.5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 0.1 | 0.4 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-01-6 | Trichloroethene | 0.03 | 0.16 | U | 0.02 | 0.03 | 0.03 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-27-4 | Bromodichloromethane | 0.1 | 0.67 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.1 | 0.41 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 108-88-3 | Toluene | 0.1 | 0.38 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.1 | 0.45 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 0.1 | 0.55 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 591-78-6 | 2-Hexanone | 0.1 | 0.41 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 124-48-1 | Dibromochloromethane | 0.1 | 0.85 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 127-18-4 | Tetrachloroethene | 0.03 | 0.2 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 108-90-7 | Chlorobenzene | 0.1 | 0.46 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.1 | 0.69 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 100-41-4 | Ethyl Benzene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 179601-23-1 | m/p-Xylene | 0.2 | 0.87 | U | 0.1 | 0.2 | 1 | ppbv |
| 95-47-6 | o-Xylene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 100-42-5 | Styrene | 0.1 | 0.43 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 75-25-2 | Bromoform | 0.1 | 1.03 | U | 0.05 | 0.1 | 0.5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.03 | 0.21 | U | 0.03 | 0.03 | 0.03 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | |
| Project: | Albany Air | Date Received: | |
| Client Sample ID: | VL0618ABL | SDG No.: | F2781 |
| Lab Sample ID: | VL0618ABL | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023224.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 0.1 | 0.6 | U | 0.1 | 0.1 | 0.5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 10 | | | 65 - 135 | | 100% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1193440 | | 6.66 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2825400 | | 8.33 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 2276570 | | 13.76 | | | | |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | |
| Project: | Albany Air | Date Received: | |
| Client Sample ID: | VL0618ABS | SDG No.: | F2781 |
| Lab Sample ID: | VL0618ABS | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023225.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 5.5 | 27.2 | | 0.04 | 0.1 | 0.5 | ppbv |
| 74-87-3 | Chloromethane | 9 | 18.6 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-01-4 | Vinyl Chloride | 8.3 | 21.2 | | 0.03 | 0.03 | 0.03 | ppbv |
| 74-83-9 | Bromomethane | 9.2 | 35.7 | | 0.03 | 0.1 | 0.5 | ppbv |
| 75-00-3 | Chloroethane | 9.2 | 24.3 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-69-4 | Trichlorofluoromethane | 9 | 50.6 | | 0.04 | 0.1 | 0.5 | ppbv |
| 75-35-4 | 1,1-Dichloroethene | 9.6 | 38.1 | | 0.05 | 0.1 | 0.5 | ppbv |
| 67-64-1 | Acetone | 8.4 | 20.0 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-15-0 | Carbon Disulfide | 9.1 | 28.3 | | 0.05 | 0.1 | 0.5 | ppbv |
| 75-09-2 | Methylene Chloride | 8.3 | 28.8 | | 0.05 | 0.1 | 0.5 | ppbv |
| 156-60-5 | trans-1,2-Dichloroethene | 10.1 | 40.0 | | 0.05 | 0.1 | 0.5 | ppbv |
| 75-34-3 | 1,1-Dichloroethane | 9.3 | 37.6 | | 0.04 | 0.1 | 0.5 | ppbv |
| 78-93-3 | 2-Butanone | 10.3 | 30.4 | | 0.1 | 0.1 | 0.5 | ppbv |
| 56-23-5 | Carbon Tetrachloride | 8.1 | 51.0 | | 0.03 | 0.03 | 0.03 | ppbv |
| 67-66-3 | Chloroform | 9.2 | 44.9 | | 0.02 | 0.1 | 0.5 | ppbv |
| 71-55-6 | 1,1,1-Trichloroethane | 8.3 | 45.3 | | 0.03 | 0.03 | 0.03 | ppbv |
| 71-43-2 | Benzene | 10.4 | 33.2 | | 0.04 | 0.1 | 0.5 | ppbv |
| 107-06-2 | 1,2-Dichloroethane | 9.2 | 37.2 | | 0.1 | 0.1 | 0.5 | ppbv |
| 79-01-6 | Trichloroethene | 9.7 | 52.1 | | 0.02 | 0.03 | 0.03 | ppbv |
| 78-87-5 | 1,2-Dichloropropane | 9.9 | 45.8 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-27-4 | Bromodichloromethane | 9.6 | 64.3 | | 0.05 | 0.1 | 0.5 | ppbv |
| 108-10-1 | 4-Methyl-2-Pentanone | 10.5 | 43.0 | | 0.05 | 0.1 | 0.5 | ppbv |
| 108-88-3 | Toluene | 11.1 | 41.8 | | 0.05 | 0.1 | 0.5 | ppbv |
| 10061-02-6 | t-1,3-Dichloropropene | 11.8 | 53.6 | | 0.1 | 0.1 | 0.5 | ppbv |
| 10061-01-5 | cis-1,3-Dichloropropene | 11.5 | 52.2 | | 0.1 | 0.1 | 0.5 | ppbv |
| 79-00-5 | 1,1,2-Trichloroethane | 9.4 | 51.3 | | 0.1 | 0.1 | 0.5 | ppbv |
| 591-78-6 | 2-Hexanone | 11.4 | 46.6 | | 0.1 | 0.1 | 0.5 | ppbv |
| 124-48-1 | Dibromochloromethane | 9.9 | 84.3 | | 0.05 | 0.1 | 0.5 | ppbv |
| 127-18-4 | Tetrachloroethene | 9.9 | 67.1 | | 0.03 | 0.03 | 0.03 | ppbv |
| 108-90-7 | Chlorobenzene | 8.8 | 40.5 | | 0.1 | 0.1 | 0.5 | ppbv |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 8.9 | 61.1 | | 0.1 | 0.1 | 0.5 | ppbv |
| 100-41-4 | Ethyl Benzene | 10.6 | 46.0 | | 0.1 | 0.1 | 0.5 | ppbv |
| 179601-23-1 | m/p-Xylene | 19.2 | 83.4 | | 0.1 | 0.2 | 1 | ppbv |
| 95-47-6 | o-Xylene | 9.8 | 42.6 | | 0.1 | 0.1 | 0.5 | ppbv |
| 100-42-5 | Styrene | 11.3 | 48.1 | | 0.1 | 0.1 | 0.5 | ppbv |
| 75-25-2 | Bromoform | 10.2 | 105 | | 0.05 | 0.1 | 0.5 | ppbv |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 8.5 | 58.4 | | 0.03 | 0.03 | 0.03 | ppbv |
| 541-73-1 | 1,3-Dichlorobenzene | 8.8 | 52.9 | | 0.1 | 0.1 | 0.5 | ppbv |

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | CB&I Federal Services LLC | Date Collected: | |
| Project: | Albany Air | Date Received: | |
| Client Sample ID: | VL0618ABS | SDG No.: | F2781 |
| Lab Sample ID: | VL0618ABS | Matrix: | Air |
| Analytical Method: | TO-15 | Test: | VOCMS Group2 |
| Sample Wt/Vol: | 400 Units: mL | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VL023225.D | 1 | | 06/18/14 | VL061814 |

| CAS Number | Parameter | Conc. ppbv | Conc. ug/M3 | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | 9 | 54.1 | | 0.1 | 0.1 | 0.5 | ppbv |
| 95-50-1 | 1,2-Dichlorobenzene | 8.9 | 53.5 | | 0.1 | 0.1 | 0.5 | ppbv |
| **SURROGATES** | | | | | | | | |
| 460-00-4 | 1-Bromo-4-Fluorobenzene | 9.6 | | | 65 - 135 | | 96% | SPK: 10 |
| **INTERNAL STANDARDS** | | | | | | | | |
| 74-97-5 | Bromochloromethane | 1253510 | | 6.67 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 2881870 | | 8.34 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 2539270 | | 13.77 | | | | |

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

# CALIBRATION SUMMARY

# Response Factor Report msvoa_l

Method Path : W:\HPCHEM1\MSVOA_L\METHODS\
Method File : VL061714AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Jun 17 07:07:57 2014
Last Update : Tue Jun 17 07:07:57 2014
Response Via : Initial Calibration

Calibration Files
0.03=VL023196.D 0.1 =VL023195.D 0.5 =VL023198.D 1 =VL023197.D 2 =VL023194.D 10 =VL023193.D 15 =VL023199.D

| | | Compound | 0.03 | 0.1 | 0.5 | 1 | 2 | 10 | 15 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Bromochloromethane | ----------ISTD---------- | | | | | | | | |
| 2) | T | Dichlorodifluo... | | 2.233 | 2.134 | 1.668 | 1.122 | 1.667 | 1.765 | | 25.15 |
| 3) | | Chlorodifluoro... | | 1.393 | 1.314 | 1.294 | 1.016 | 1.001 | 1.203 | | 15.13 |
| 4) | | Chloromethane | | 0.795 | 0.726 | 0.741 | 0.602 | 0.585 | 0.690 | | 13.30 |
| 5) | T | Vinyl Chloride | 1.100 | 0.871 | 0.725 | 0.697 | 0.737 | 0.596 | 0.603 | 0.761 | 23.04 |
| 6) | T | Bromomethane | | | 0.519 | 0.493 | 0.491 | 0.392 | 0.391 | 0.457 | 13.30 |
| 7) | | Chloroethane | | | 0.354 | 0.323 | 0.332 | 0.268 | 0.270 | 0.309 | 12.46 |
| 8) | T | Dichlorotetraf... | | | 1.967 | 1.883 | 1.860 | 1.508 | 1.507 | 1.745 | 12.64 |
| 9) | T | Propene | | | 0.462 | 0.425 | 0.526 | 0.480 | 0.486 | 0.476 | 7.71 |
| 10) | T | Heptane | | | 1.617 | 1.830 | 2.022 | 1.746 | 1.730 | 1.789 | 8.43 |
| 11) | T | Trichlorofluor... | | | 2.451 | 2.322 | 2.240 | 1.823 | 1.804 | 2.128 | 13.95 |
| 12) | T | 1,1,2-Trichlor... | | | 1.612 | 1.570 | 1.549 | 1.266 | 1.257 | 1.451 | 12.00 |
| 13) | | Ethanol | | | 0.078 | 0.068 | 0.059 | 0.038 | 0.031 | 0.055 | 36.53 |
| 14) | T | Bromoethene | | | 0.592 | 0.566 | 0.603 | 0.512 | 0.516 | 0.558 | 7.57 |
| 15) | T | Acetone | | | 1.570 | 1.434 | 1.448 | 1.055 | 1.040 | 1.310 | 18.69 |
| 16) | T | 1,3-Butadiene | | | 0.612 | 0.608 | 0.671 | 0.557 | 0.561 | 0.602 | 7.68 |
| 17) | | tert-Butyl alc... | | | 0.750 | 0.686 | 0.958 | 0.960 | 0.676 | 0.806 | 17.67 |
| 18) | T | 1,1-Dichloroet... | | | 0.810 | 0.776 | 0.806 | 0.674 | 0.672 | 0.748 | 9.24 |
| 19) | T | Isopropyl Alcohol | | | 0.587 | 0.502 | 0.596 | 0.536 | 0.406 | 0.525 | 14.64 |
| 20) | T | Methylene Chlo... | | | 0.835 | 0.748 | 0.731 | 0.555 | 0.541 | 0.682 | 18.85 |
| 21) | T | Allyl Chloride | | | 0.939 | 0.814 | 0.887 | 0.762 | 0.763 | 0.833 | 9.38 |
| 22) | T | trans-1,2-Dich... | | | 0.622 | 0.599 | 0.678 | 0.585 | 0.590 | 0.615 | 6.22 |
| 23) | T | Vinyl Acetate | | | 2.001 | 2.220 | 2.602 | 2.305 | 2.310 | 2.288 | 9.43 |
| 24) | T | 1,1-Dichloroet... | | | 1.537 | 1.496 | 1.533 | 1.255 | 1.257 | 1.415 | 10.36 |
| 25) | T | Ethyl Acetate | | | 2.879 | 2.897 | 3.202 | 2.688 | 2.662 | 2.866 | 7.55 |
| 26) | T | Hexane | | | 1.055 | 1.118 | 1.232 | 1.083 | 1.091 | 1.116 | 6.14 |
| 27) | T | Carbon Disulfide | | | 1.525 | 1.442 | 1.486 | 1.217 | 1.188 | 1.372 | 11.47 |
| 28) | T | Methyl tert-Bu... | | | 1.446 | 1.585 | 1.920 | 1.742 | 1.767 | 1.692 | 10.73 |
| 29) | T | Chloroform | | | 1.742 | 1.701 | 1.710 | 1.401 | 1.410 | 1.593 | 10.77 |
| 30) | T | Cyclohexane | | | 0.775 | 0.814 | 0.963 | 0.866 | 0.890 | 0.861 | 8.40 |
| 31) | T | cis-1,2-Dichlo... | | | 0.770 | 0.792 | 0.970 | 0.904 | 0.928 | 0.873 | 10.02 |
| 32) | T | 1,1,1-Trichlor... | 2.835 | 1.803 | 1.520 | 1.524 | 1.551 | 1.342 | 1.362 | 1.705 | 30.52 |
| 33) | I | 1,4-Difluorobenzene | ----------ISTD---------- | | | | | | | | |
| 34) | T | 2-Butanone | | | 0.578 | 0.623 | 0.751 | 0.683 | 0.682 | 0.663 | 9.91 |
| 35) | T | Carbon Tetrach... | 1.285 | 0.829 | 0.683 | 0.687 | 0.719 | 0.636 | 0.642 | 0.783 | 29.47 |
| 36) | T | Benzene | | | 0.781 | 0.819 | 0.967 | 0.892 | 0.905 | 0.873 | 8.42 |
| 37) | T | 1,2-Dichloroet... | | | 0.594 | 0.587 | 0.622 | 0.534 | 0.531 | 0.573 | 6.88 |

Method Path : W:\HPCHEM1\MSVOA_L\METHODS\
Method File : VL061714AIR.M

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 38) | T | Trichloroethene | 0.483 | 0.361 | 0.313 | 0.336 | 0.387 | 0.365 | 0.385 | 0.376 | 14.33 |
| 39) | T | 1,2-Dichloropr... | | | 0.317 | 0.326 | 0.364 | 0.329 | 0.332 | 0.334 | 5.28 |
| 40) | T | 1,4-Dioxane | | | 0.036 | 0.044 | 0.036 | 0.050 | 0.052 | 0.043# | 16.67 |
| 41) | T | Tetrahydrofuran | | | 0.279 | 0.316 | 0.429 | 0.405 | 0.409 | 0.367 | 17.95 |
| 42) | T | Bromodichlorom... | | | 0.691 | 0.732 | 0.766 | 0.688 | 0.694 | 0.714 | 4.77 |
| 43) | | Methyl Methacr... | | | 0.234 | 0.292 | 0.353 | 0.352 | 0.356 | 0.317 | 16.99 |
| 44) | T | 2,2,4-Trimethy... | | | 1.421 | 1.663 | 1.907 | 1.720 | 1.726 | 1.688 | 10.36 |
| 45) | T | t-1,3-Dichloro... | | | 0.267 | 0.308 | 0.428 | 0.463 | 0.471 | 0.387 | 24.17 |
| 46) | T | cis-1,3-Dichlo... | | | 0.336 | 0.383 | 0.536 | 0.552 | 0.557 | 0.473 | 22.16 |
| 47) | T | 1,1,2-Trichlor... | | | 0.307 | 0.310 | 0.334 | 0.295 | 0.295 | 0.308 | 5.17 |
| 48) | T | Dibromochlorom... | | | 0.445 | 0.472 | 0.530 | 0.494 | 0.506 | 0.489 | 6.65 |
| 49) | T | Bromoform | | | 0.362 | 0.409 | 0.456 | 0.441 | 0.454 | 0.425 | 9.30 |
| 50) | T | 4-Methyl-2-Pen... | | | 0.634 | 0.772 | 0.977 | 0.899 | 0.896 | 0.836 | 16.07 |
| 51) | T | 2-Hexanone | | | 0.401 | 0.569 | 0.797 | 0.797 | 0.793 | 0.671 | 26.88 |
| 52) | T | Tetrachloroethene | 0.437 | 0.292 | 0.263 | 0.266 | 0.315 | 0.303 | 0.321 | 0.314 | 18.62 |
| 53) | T | Toluene | | | 0.672 | 0.828 | 1.068 | 1.030 | 1.049 | 0.930 | 18.64 |
| 54) | T | 1,2-Dibromoethane | | | 0.835 | 0.910 | 1.023 | 0.961 | 0.977 | 0.941 | 7.64 |
| 55) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | |
| 56) | | 1,1,1,2-Tetrac... | | | 0.517 | 0.495 | 0.502 | 0.443 | 0.448 | 0.481 | 6.95 |
| 57) | T | Chlorobenzene | | | 1.030 | 1.008 | 1.016 | 0.896 | 0.900 | 0.970 | 6.81 |
| 58) | T | Ethyl Benzene | | | 1.026 | 1.278 | 1.624 | 1.532 | 1.534 | 1.399 | 17.52 |
| 59) | T | m/p-Xylene | | | 1.084 | 1.300 | 1.440 | 1.300 | 1.303 | 1.285 | 9.93 |
| 60) | T | o-Xylene | | | 0.947 | 1.148 | 1.296 | 1.190 | 1.204 | 1.157 | 11.15 |
| 61) | T | Styrene | | | 0.462 | 0.638 | 0.901 | 0.909 | 0.911 | 0.764 | 26.87 |
| 62) | | Isopropylbenzene | | | 1.432 | 1.603 | 1.779 | 1.594 | 1.605 | 1.603 | 7.66 |
| 63) | T | 1,1,2,2-Tetrac... | | | 0.935 | 0.953 | 0.953 | 0.811 | 0.816 | 0.894 | 8.22 |
| 64) | | n-propylbenzene | | | 0.321 | 0.391 | 0.435 | 0.386 | 0.390 | 0.385 | 10.57 |
| 65) | | tert-Butylbenzene | | | 0.991 | 1.242 | 1.397 | 1.308 | 1.360 | 1.260 | 12.78 |
| 66) | T | Benzyl Chloride | | | 0.835 | 0.953 | 1.096 | 1.067 | 1.075 | 1.005 | 10.94 |
| 67) | | sec-Butylbenzene | | | 1.599 | 1.853 | 2.006 | 1.742 | 1.774 | 1.795 | 8.33 |
| 68) | S | 1-Bromo-4-Fluo... | 0.805 | 0.804 | 0.799 | 0.798 | 0.765 | 0.778 | 0.738 | 0.784 | 3.20 |
| 69) | | p-Isopropyltol... | | | 1.080 | 1.378 | 1.590 | 1.430 | 1.458 | 1.387 | 13.62 |
| 70) | | n-Butylbenzene | | | 1.183 | 1.491 | 1.694 | 1.482 | 1.474 | 1.465 | 12.45 |
| 71) | | 2-Chlorotoluene | | | 0.807 | 1.021 | 1.292 | 1.173 | 1.179 | 1.094 | 17.13 |
| 72) | T | 4-Ethyltoluene | | | 0.946 | 1.267 | 1.500 | 1.362 | 1.365 | 1.288 | 16.19 |
| 73) | T | 1,3,5-Trimethy... | | | 1.136 | 1.393 | 1.573 | 1.382 | 1.396 | 1.376 | 11.32 |
| 74) | T | 1,2,4-Trimethy... | | | 1.258 | 1.514 | 1.629 | 1.434 | 1.464 | 1.460 | 9.23 |
| 75) | T | 1,3-Dichlorobe... | | | 0.887 | 0.935 | 0.955 | 0.824 | 0.836 | 0.887 | 6.54 |
| 76) | T | 1,4-Dichlorobe... | | | 0.784 | 0.842 | 0.913 | 0.780 | 0.780 | 0.820 | 7.14 |
| 77) | T | 1,2-Dichlorobe... | | | 0.739 | 0.791 | 0.829 | 0.689 | 0.692 | 0.748 | 8.22 |
| 78) | T | Hexachloro-1,3... | | | 0.482 | 0.478 | 0.493 | 0.383 | 0.389 | 0.445 | 12.21 |
| 79) | T | Naphthalene | | | 0.721 | 0.962 | 1.252 | 1.024 | 0.824 | 0.957 | 21.25 |
| 80) | T | Naphthalene,2-... | | | 0.141 | 0.167 | 0.319 | 0.302 | 0.103 | 0.206 | 47.51 |
| 81) | T | 1,2,4-Trichlor... | | | 0.416 | 0.493 | 0.577 | 0.477 | 0.434 | 0.479 | 13.15 |

(#) = Out of Range

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922



# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: SHAW23

Lab Code: CHEM Case No.: F2781 SAS No.: F2781 SDG No.: F2781

Instrument ID: MSVOA_L Calibration Date/Time: 06/18/2014 15:12

Lab File ID: VL023223.D Init. Calib. Date(s): 06/17/2014 06/17/2014

Heated Purge: (Y/N) N Init. Calib. Time(s): 01:59 06:00

GC Column: RTX-1 ID: 0.32 (mm)

| COMPOUND | RRF | RRF010 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 1.765 | 1.387 | | -21.42 | 30 |
| Chloromethane | 0.690 | 0.631 | | -8.55 | 30 |
| Vinyl Chloride | 0.761 | 0.654 | | -14.06 | 30 |
| Bromomethane | 0.457 | 0.436 | | -4.59 | 30 |
| Chloroethane | 0.309 | 0.289 | | -6.47 | 30 |
| Trichlorofluoromethane | 2.128 | 1.916 | | -9.96 | 30 |
| 1,1-Dichloroethene | 0.748 | 0.737 | | -1.47 | 30 |
| Acetone | 1.310 | 1.087 | | -17.02 | 30 |
| Carbon Disulfide | 1.372 | 1.265 | | -7.73 | 30 |
| Methylene Chloride | 0.682 | 0.582 | | -14.66 | 30 |
| trans-1,2-Dichloroethene | 0.615 | 0.646 | | 5.04 | 30 |
| 1,1-Dichloroethane | 1.415 | 1.338 | | -5.44 | 30 |
| 2-Butanone | 0.663 | 0.644 | | -2.87 | 30 |
| Carbon Tetrachloride | 0.783 | 0.606 | | -22.6 | 30 |
| Chloroform | 1.593 | 1.488 | | -6.59 | 30 |
| 1,1,1-Trichloroethane | 1.705 | 1.453 | | -14.78 | 30 |
| Benzene | 0.873 | 0.902 | | 3.32 | 30 |
| 1,2-Dichloroethane | 0.573 | 0.498 | | -13.09 | 30 |
| Trichloroethene | 0.376 | 0.364 | | -3.19 | 30 |
| 1,2-Dichloropropane | 0.334 | 0.329 | | -1.5 | 30 |
| Bromodichloromethane | 0.714 | 0.668 | | -6.44 | 30 |
| 4-Methyl-2-Pentanone | 0.836 | 0.840 | | 0.48 | 30 |
| Toluene | 0.930 | 1.043 | | 12.15 | 30 |
| t-1,3-Dichloropropene | 0.387 | 0.456 | | 17.83 | 30 |
| cis-1,3-Dichloropropene | 0.473 | 0.540 | | 14.16 | 30 |
| 1,1,2-Trichloroethane | 0.308 | 0.293 | | -4.87 | 30 |
| 2-Hexanone | 0.671 | 0.750 | | 11.77 | 30 |
| Dibromochloromethane | 0.489 | 0.485 | | -0.82 | 30 |
| Tetrachloroethene | 0.314 | 0.321 | | 2.23 | 30 |
| Chlorobenzene | 0.970 | 0.844 | | -12.99 | 30 |
| 1,1,1,2-Tetrachloroethane | 0.481 | 0.414 | | -13.93 | 30 |
| Ethyl Benzene | 1.399 | 1.461 | | 4.43 | 30 |
| m/p-Xylene | 1.285 | 1.199 | | -6.69 | 30 |
| o-Xylene | 1.157 | 1.101 | | -4.84 | 30 |
| Styrene | 0.764 | 0.867 | | 13.48 | 30 |
| Bromoform | 0.425 | 0.439 | | 3.29 | 30 |
| 1,1,2,2-Tetrachloroethane | 0.894 | 0.738 | | -17.45 | 30 |
| 1,3-Dichlorobenzene | 0.887 | 0.771 | | -13.08 | 30 |
| 1,4-Dichlorobenzene | 0.820 | 0.734 | | -10.49 | 30 |
| 1,2-Dichlorobenzene | 0.748 | 0.659 | | -11.9 | 30 |
| 1-Bromo-4-Fluorobenzene | 0.784 | 0.743 | | -5.23 | 30 |

All other compounds must meet a minimum RRF of 0.010.

# SHIPPING DOCUMENTS

# CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

**CHEMTECH Project No. :** F2781

| | | | |
|---|---|---|---|
| Client Contact Information | Bottle Order ID : **B1406024** | Courier : UPS | 1 of 1 COCs |
| Client ID : **SHAW23** Project ID : **Albany Air** | | Sampler Name(s) : RA + HAF | Analysis / Matrix |
| Customer Name : **CB&I Federal Services LLC** | Project Manager **Guy gallello, jr** | AIR ANALYSIS CHAIN-OF-CUSTODY | |
| Address : **2790 Mosside Boulevard** | Phone Number : **412-858-3305** | | |
| | Fax Number : **4128569912** | Individual Certified | |
| | Site Details: | | |
| City : **Monroeville** | | | |
| State : **PA** | Analysis Turnaround Time | | |
| Zip Code : **15146-2792** | Standard : **15 business days** **OR** | Data Package Type : Cat B/Tier4 | |
| Country : | Rush (Specify): **Days** | EDD Type : EQuIS | |

| Sample Identification | Sample Date(s) | Time Start (24 hr Clock) | Time Stop (24 hr Clock) | Can Vacuum in Field ("Hg) (Start) | Can Vacuum in Field ("Hg) (Stop)** | Interior Temp. (F) (Start) | Interior Temp. (F) (Stop) | Out going Can Pressure ("Hg)(Lab) | In coming Can Pressure ("Hg)(Lab) | Flow Reg. ID | Can ID | Can Size (L) | Flow Controller Readout | Can Cert ID | TO-15 | Indoor/Ambinet Air | Soil Gas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HA-RM104 | 6/13/14 | 1131 | 11 | -30 | 6 | 70 | | -30 | -6.3 | 10505 | 10281 | 6 L | 4.16 | VL022907.D | X | X | |

| Temperature (Fahrenheit) | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | 62 | | | |
| Stop | 67 | | | |

| Pressure (Inches of Hg) | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | 1019.2 | | | |
| Stop | 1011.5 | | | |

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium (Low)

PID Readings: 490 ppb

Sampling site (State):

Quick Connector required : NO

| | | | | |
|---|---|---|---|---|
| Canisters Shiped by: | Date/Time: 6/10/14 | Canisters Received by: RBS | Date/Time: 6/11/14 950 | |
| Samples Relinquished by: H. Farnell | Date/Time: 6/11/14 | Received by: | Date/Time: | B1406024 - 3 |
| Relinquished by: | Date/Time: | Received by: | Date/Time: | |

# CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

**CHEMTECH Project No. :** F2781

| | | | |
|---|---|---|---|
| Client Contact Information | Bottle Order ID : **B1406024** | Courier : UPS | 1 of 1 COCs |
| Client ID : **SHAW23** Project ID : **Albany Air** | | Sampler Name(s) : RA + HAF | Analysis / Matrix |
| Customer Name : **CB&I Federal Services LLC** | Project Manager **Guy gallello, jr** | AIR ANALYSIS CHAIN-OF-CUSTODY | |
| Address : **2790 Mosside Boulevard** | Phone Number : **412-858-3305** | | |
| | Fax Number : **4128569912** | Individual Certified | |
| City : **Monroeville** | Site Details: | | |
| State : **PA** | Analysis Turnaround Time | | |
| Zip Code : **15146-2792** | Standard : **15 business days** OR | Data Package Type : Cat B / Tier 4 | |
| Country : USA | Rush (Specify): ____ **Days** | EDD Type : EQUIS | |

| Sample Identification | Sample Date(s) | Time Start (24 hr Clock) | Time Stop (24 hr Clock) | Can Vacuum in Field ("Hg) (Start) | Can Vacuum in Field ("Hg) (Stop)** | Interior Temp. (F) (Start) | Interior Temp. (F) (Stop) | Out going Can Pressure ("Hg)(Lab) | In coming Can Pressure ("Hg)(Lab) | Flow Reg. ID | Can ID | Can Size (L) | Flow Controller Readout | Can Cert ID | TO-15 | Indoor/Ambinet Air | Soil Gas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A-RM105 | 6/9/14 | 1121 | 0844 | 27 | 3.5 | ~70 | 170 | -30 | -9.2 | 10476 | 10279 | 6 L | 4.16 | VL022927.D | X | X | |

Temperature (Fahrenheit)

| | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | 62 | | | |
| Stop | 67 | | | |

GC/MS Analyst Signature (TO-15)

Pressure (~~Inches of Hg~~) mb HAF

| | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | 1019.2 | | | |
| Stop | 1011.5 | | | |

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium (Low) PID Readings:

Sampling site (State):

Quick Connector required : NO

| | | | | |
|---|---|---|---|---|
| Canisters Shiped by: | Date/Time: 6/10/14 | Canisters Received by: RSJ | Date/Time: 6/11/14 950 | B1406024 - 2 |
| Samples Relinquished by: H. Gallello | Date/Time: 6/11/14 | Received by: | Date/Time: | |
| Relinquished by: | Date/Time: | Received by: | Date/Time: | |

**CHEMTECH**

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

**CHEMTECH Project No. :** F2781

6.1

| | | | |
|---|---|---|---|
| Client Contact Information | Bottle Order ID : **B1406024** | Courier : | 1 of 1 COCs |
| Client ID : **SHAW23** Project ID : **Albany Air** | | Sampler Name(s) : RA + HAF | Analysis / Matrix |
| Customer Name : **CB&I Federal Services LLC** | Project Manager **Guy gallello, jr** | AIR ANALYSIS CHAIN-OF-CUSTODY | |
| Address : **2790 Mosside Boulevard** | Phone Number : **412-858-3305** | | |
| | Fax Number : **4128569912** | Individual Certified | |
| | Site Details: | | |
| City : **Monroeville** | | | |
| State : **PA** | Analysis Turnaround Time | | |
| Zip Code : **15146-2792** | Standard : **15 business days** **OR** | Data Package Type : cat B / tier 4 | |
| Country : | Rush (Specify): STD **Days** | EDD Type : EQuIS | |

| Sample Identification | Sample Date(s) | Time Start (24 hr Clock) | Time Stop (24 hr Clock) | Can Vacuum in Field ("Hg) (Start) | Can Vacuum in Field ("Hg) (Stop)** | Interior Temp. (F) (Start) | Interior Temp. (F) (Stop) | Out going Can Pressure ("Hg)(Lab) | In coming Can Pressure ("Hg)(Lab) | Flow Reg. ID | Can ID | Can Size (L) | Flow Controller Readout | Can Cert ID | TO-15 | Indoor/Ambinet Air | Soil Gas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HAF 6/18/14 [redacted] Duplicate | 6/12 GHSH | [redacted] | HAF | +30 | 5 | 70 | 70 | -30 | -6.3 | 10619 | 10291 | 6 L | 4.16 | VL023098.D | X | X | |

| Temperature (Fahrenheit) | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | 62 | | | |
| Stop | 67 | | | |

| Pressure (Inches of Hg) | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | 1019.2 | | | |
| Stop | 1011.5 | | | |

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium (Low)

PID Readings: 490 ppb

Sampling site (State):

Quick Connector required : NO

| | | | | |
|---|---|---|---|---|
| Canisters Shiped by: | Date/Time: 6/10/14 | Canisters Received by: RSJ | Date/Time: 6/18/14 956 | B1406024 - 4 |
| Samples Relinquished by: H Gallello | Date/Time: 6/16/14 | Received by: | Date/Time: | |
| Relinquished by: | Date/Time: | Received by: | Date/Time: | |

# CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

**CHEMTECH Project No. :** F2781

| | | | |
|---|---|---|---|
| Client Contact Information | Bottle Order ID : **B1406024** | Courier : UPS | 1 of 1 COCs |
| Client ID : **SHAW23** Project ID : **Albany Air** 775002 5.0061020 | | Sampler Name(s) : RA + HAF | Analysis / Matrix |
| Customer Name : **CB&I Federal Services LLC** | Project Manager **Guy gallello, jr** | AIR ANALYSIS CHAIN-OF-CUSTODY | |
| Address : **2790 Mosside Boulevard** | Phone Number : **412-858-3305** | | |
| | Fax Number : **4128569912** | | |
| | Site Details: | Individual Certified | |
| City : **Monroeville** | | | |
| State : **PA** | Analysis Turnaround Time | | |
| Zip Code : **15146-2792** | Standard : **15 business days** OR | Data Package Type : Cat B/tier 4 | |
| Country : USA | Rush (Specify): **Days** | EDD Type : Equis | |

| Sample Identification | Sample Date(s) | Time Start (24 hr Clock) | Time Stop (24 hr Clock) | Can Vacuum in Field ("Hg) (Start) | Can Vacuum in Field ("Hg) (Stop)** | ~~Interior~~ outside Temp. (F) (Start) | ~~Interior~~ outside Temp. (F) (Stop) | Out going Can Pressure ("Hg)(Lab) | In coming Can Pressure ("Hg)(Lab) | Flow Reg. ID | Can ID | Can Size (L) | Flow Controller Readout | Can Cert ID | TO-15 | Indoor/Ambient Air | Soil Gas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OA-1 | 6/12/14 | 1146 | 1109 | +30 | 5 | 62 | 68 | -30 | -8.0 | 10190 | 10313 | 6 L | 4.16 | VL022929.D | X | X | |

Temperature (Fahrenheit)

| | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | 62 | | | |
| Stop | 68 | | | |

Pressure (Inches of Hg)

| | Ambient | Maximum | Minimum | |
|---|---|---|---|---|
| Start | | | | |
| Stop | | | | |

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium (Low)

PID Readings:

Sampling site (State):

Quick Connector required : NO

| | | | | |
|---|---|---|---|---|
| Canisters Shiped by: | Date/Time: 6/10/14 | Canisters Received by: RSJ | Date/Time: 6/18/14 950 | |
| Samples Relinquished by: H. Gallello | Date/Time: 6/16/14 | Received by: | Date/Time: | B1406024 - 5 |
| Relinquished by: | Date/Time: | Received by: | Date/Time: | |

LISA SCHERMERHORN
5187831996
LATHAM 73V325
13 BRITISH AMERICAN BLVD
LATHAM NY 12110

17 LBS

1 OF 4

**SHIP TO:**
SAMPLE RECEIPT
908-789-8900
CHEMTECH
284 SHEFFIELD ST.
**MOUNTAINSIDE NJ 07092**

NJ 078 9-61

**UPS NEXT DAY AIR** 1
TRACKING #: 1Z 73V 325 01 9988 4205

BILLING: P/P

Reference: 00501.77500205.4701.00010200
Senders Name: Heather

CS 16.2.03. WNTIE80 51.0A 04/2014

RSJ
950
6/18/14

LISA SCHERMERHORN
5187831996
LATHAM 73V325
13 BRITISH AMERICAN BLVD
LATHAM NY 12110

17 LBS

2 OF 4

6.2

**SHIP TO:**
SAMPLE RECEIPT
908-789-8900
CHEMTECH
284 SHEFFIELD ST.
**MOUNTAINSIDE NJ 07092**

NJ 078 9-61

**UPS NEXT DAY AIR** 1
TRACKING #: 1Z 73V 325 01 9999 6817

BILLING: P/P

Reference: 00501.77500205.4701.00010200
Senders Name: Heather

CS 16.2.03. WNTIE80 51.0A 04/2014

RSJ
950
6/18/14

LISA SCHERMERHORN
5187831996
LATHAM 73V325
13 BRITISH AMERICAN BLVD
LATHAM NY 12110

18 LBS

3 OF 4

**SHIP TO:**
SAMPLE RECEIPT
908-789-8900
CHEMTECH
284 SHEFFIELD ST.
**MOUNTAINSIDE NJ 07092**

NJ 078 9-61

**UPS NEXT DAY AIR** 1
TRACKING #: 1Z 73V 325 01 9978 9827

BILLING: P/P

Reference: 00501.77500205.4701.00010200
Senders Name: Heather

CS 16.2.03. WNTIE80 51.0A 04/2014

RSJ
950
6/18/14

LISA SCHERMERHORN
5187831996
LATHAM 73V325
13 BRITISH AMERICAN BLVD
LATHAM NY 12110

18 LBS

4 OF 4

6.2

**SHIP TO:**
SAMPLE RECEIPT
908-789-8900
CHEMTECH
284 SHEFFIELD ST.
**MOUNTAINSIDE NJ 07092**

NJ 078 9-61

**UPS NEXT DAY AIR** 1
TRACKING #: 1Z 73V 325 01 9511 9236

BILLING: P/P

Reference: 00501.77500205.4701.00010200
Senders Name: Heather

CS 16.2.03. WNTIE80 51.0A 04/2014

RSJ
950
6/18/14

CHEMTECH 284 Sheffield Street Mountainside NJ 07092 Tel. 908-7898900

# Laboratory Certification

| State | License No. |
|---|---|
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Connecticut | PH-0649 |
| | |
| Florida | E87935 |
| | |
| Louisiana | 5035 |
| | |
| Maryland | 296 |
| | |
| Massachusetts | M-NJ503 |
| | |
| Pennsylvania | 68-548 |
| | |
| Rhode Island | LAO00259 |
| | |
| Virginia | 460220 |
| | |
| Texas | T10470448-10-1 |

Other :

| | |
|---|---|
| DOD ELAP Certified (L-A-B Accredited), ISO/IEC 17025 | L2219 |
| | |
| Soil Permit | P330-11-00012 |
| | |
| CLP Inorganic Contract | EPW09038 |
| | |
| CLP Organic Contract | EPW11030 |

QA Control Code: A2070148

**New Jersey Department of Environmental Protection**



# Internal Chain of Custody

**Instructions:** Use 1 form for each 20 samples of aliquot

**Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample**

Laboratory: Chemtech
REGIONALD
Field Sample Seal No.: F2781
Case No.: Albany Air

Location: 284 Sheffield Street, Mountainside,NJ 7092
Title: Sample Custodian
Date Broken: 6/18/2014 Military Time Seal Broken: 09:56:00
Analytical Parameter/Fraction: VOCMS Group2

| Sample No. | Aliquot/Extract No. | Sample No. | Aliquot/Extract No. |
|---|---|---|---|
| F2781-01 | IA-RM104 | | |
| F2781-02 | IA-RM105 | | |
| F2781-03 | DUPLICATE | | |
| F2781-04 | OA-1 | | |
| | | | |

| Date | Time | Relinquished By | Received By | Purpose of Change of Custody |
|---|---|---|---|---|
| 6/18/14 | 309pm | Signature [signature] | Signature [signature] | TO VOC AIR Lab |
| | | Printed Name KSJ | Printed Name [illegible] | |
| | | Signature | Signature | |
| | | Printed Name | Printed Name | |
| | | Signature | Signature | |
| | | Printed Name | Printed Name | |
| | | Signature | Signature | |
| | | Printed Name | Printed Name | |
| | | Signature | Signature | |
| | | Printed Name | Printed Name | |
| | | Signature | Signature | |
| | | Printed Name | Printed Name | |
| | | Signature | Signature | |
| | | Printed Name | Printed Name | |
| | | Signature | Signature | |
| | | Printed Name | Printed Name | |

*Distribution: White - Original (Sent With Report) Yellow - Contractor Archive Pink - Sample Custodian - Interim Copy*

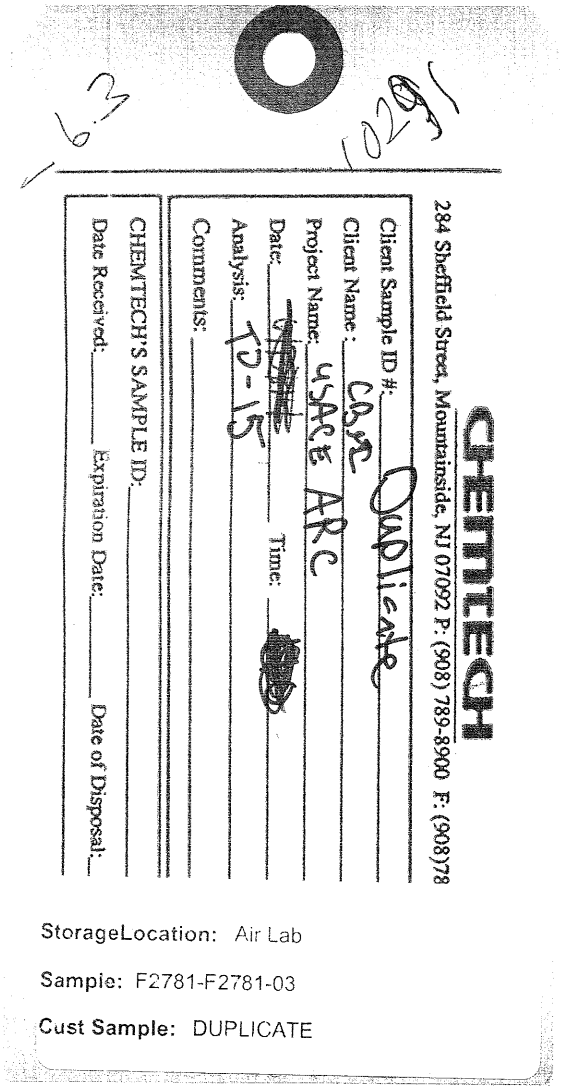
**CHEMTECH** 284 Sheffield Street Mountainside, NJ 07092

# AIR SAMPLE PRESSURE & DILUTION LOGBOOK

Analyst Signature: Supervisor Signature:

**METHOD: TO-15**

| Date | Sample Number | Canister # | Initial Pressure psia | Initial Pressure Hg | Final Pressure psia | Final Pressure Hg | Dilution Factor | Comment |
|---|---|---|---|---|---|---|---|---|
| 06/13/14 | F2751-05 | 10748 | 9.4 | -10.8 | | | | SY |
| 06/17/14 | ~~F25~~ F2751-03 | 10797 | 1.0 | | 20 | | 20x | SY |
| | F2751-01 | 10661 | 0.5 | | 15.0 | | 30x | SY |
| | F2751-02 | 10132 | 0.5 | | 15.0 | | 30x | SY |
| 06/18/14 | F2781-01 | 10281 | 11.6 | -6.3 | | | | SY |
| | F2781-02 | 10279 | 10.2 | -9.2 | | | | |
| | F2781-03 | 10291 | 11.6 | -6.3 | | | | |
| | F2781-04 | 10313 | 10.8 | -8.0 | | | | |

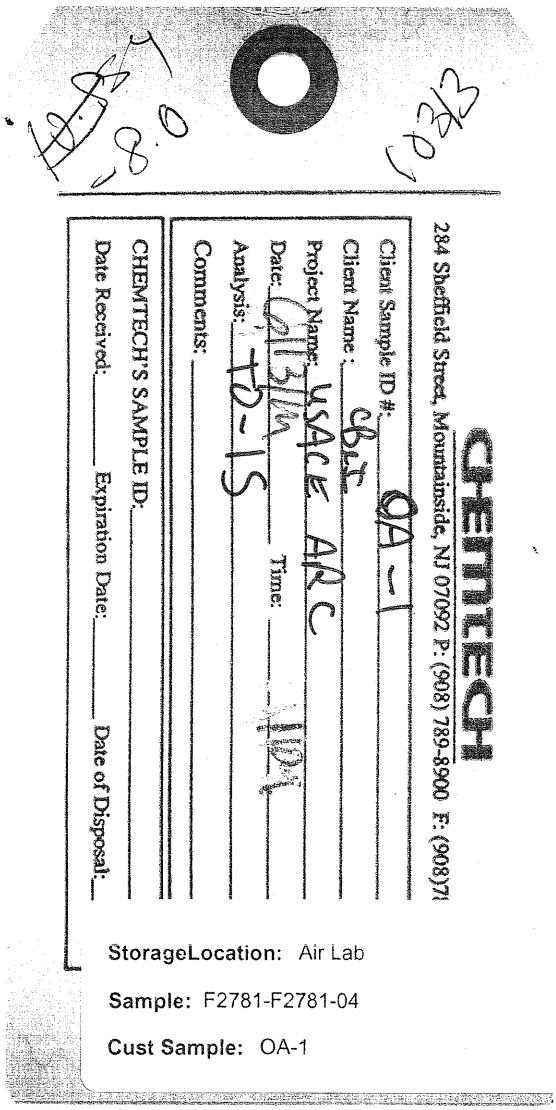


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)78

Client Sample ID #: Duplicate
Client Name: CBLT
Project Name: USACE ARC
Date: [illegible] Time: [illegible]
Analysis: TO-15
Comments:

CHEMTECH'S SAMPLE ID:
Date Received: Expiration Date: Date of Disposal:

StorageLocation: Air Lab
Sample: F2781-F2781-03
Cust Sample: DUPLICATE

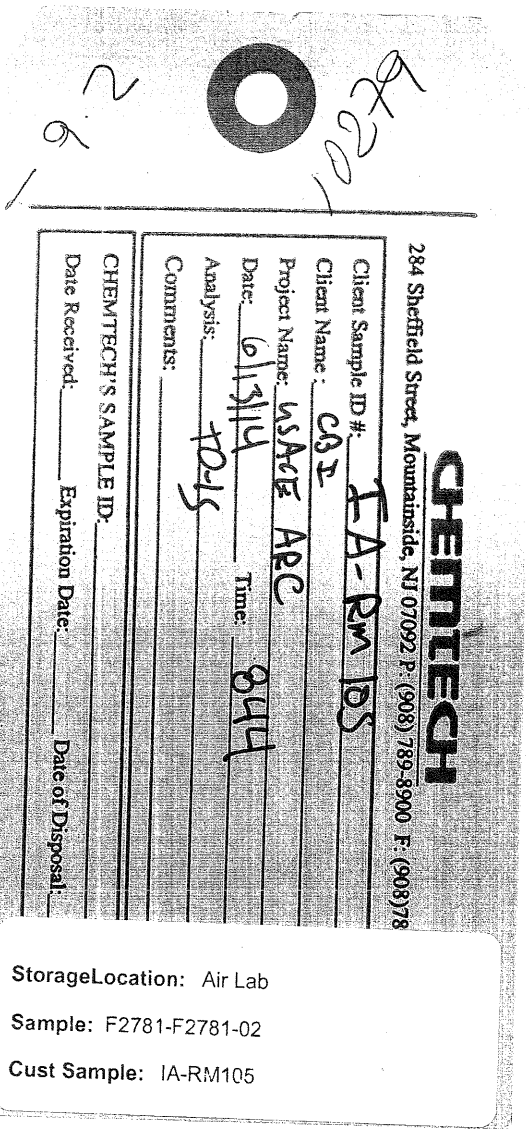


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)71

Client Sample ID #: OA-1
Client Name: CBLT
Project Name: USACE ARC
Date: [illegible] Time: [illegible]
Analysis: TO-15
Comments:

CHEMTECH'S SAMPLE ID:
Date Received: Expiration Date: Date of Disposal:

StorageLocation: Air Lab
Sample: F2781-F2781-04
Cust Sample: OA-1


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-
Client Sample ID #: IA-RM 104
Client Name: C&E
Project Name: USACE ARC
Date: 6/13/14 Time: 1103
Analysis: TO-15
Comments:
CHEMTECH'S SAMPLE ID:
Date Received: Expiration Date: Date of Disposal:
StorageLocation: Air Lab
Sample: F2781-F2781-01
Cust Sample: IA-RM104


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)78
Client Sample ID #: IA-RM 105
Client Name: C&E
Project Name: USACE ARC
Date: 6/13/14 Time: 0944
Analysis: TO-15
Comments:
CHEMTECH'S SAMPLE ID:
Date Received: Expiration Date: Date of Disposal:
StorageLocation: Air Lab
Sample: F2781-F2781-02
Cust Sample: IA-RM105