



TETRA TECH

Jordan Vaughn
Project Manager

July 30, 2008

Mr. Todd Richardson (3HS32)
On-Scene Coordinator
U.S. Environmental Protection Agency Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19103

Subject: Final Trip Report for Jay-Cee Cleaners Site April 2008 Sampling Event
EPA Contract No. EP-S3-05-02
Technical Direction Document No. E33-020-08-07-024
Document Tracking No. 0519

Dear Mr. Richardson:

Tetra Tech EM Inc. (Tetra Tech) is submitting the final trip report for the Jay-Cee Cleaners site that summarizes the residential well and shallow soil and groundwater sampling activities conducted at the site in April 2008. If you have any questions regarding this report, please contact me by phone at (215) 651-4022 or via electronic mail at jordan.vaughn@ttemi.com.

Sincerely,

Jordan Vaughn
Project Manager

Enclosure(s)
cc: TDD File

**FINAL TRIP REPORT
FOR THE
JAY-CEE CLEANERS SITE
APRIL 2008 SAMPLING EVENT
NELSONIA, ACCOMACK COUNTY, VIRGINIA**

Prepared for

U.S. Environmental Protection Agency Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19103

Submitted by

Tetra Tech EM Inc.
7 Creek Parkway
Boothwyn, Pennsylvania 19061

EPA Contract No. EP-S3-05-02

Technical Direction Document No. E33-020-08-07-024
Document Tracking No. 0519

July 30, 2008

Prepared by



Jordan Vaughn
Environmental Scientist

Approved by



Donna Davies
START Point of Contact

CONTENTS

| <u>Section</u> | <u>Page</u> |
|---|-------------|
| 1.0 INTRODUCTION | 1 |
| 2.0 BACKGROUND | 1 |
| 2.1 SITE LOCATION | 1 |
| 2.2 SITE DESCRIPTION | 3 |
| 2.3 PREVIOUS SITE INVESTIGATIONS | 3 |
| 3.0 SITE GEOLOGY AND HYDROGEOLOGY | 5 |
| 3.1 GEOLOGY | 5 |
| 3.2 HYDROGEOLOGY | 6 |
| 4.0 SITE ACTIVITIES | 7 |
| 4.1 RESIDENTIAL WELL SAMPLING SUMMARY | 7 |
| 4.2 SOIL AND GROUNDWATER SAMPLING | 9 |
| 4.3 SAMPLE MANAGEMENT | 14 |
| 4.4 SAMPLE MANAGEMENT | 14 |
| 4.5 WASTE MANAGEMENT | 14 |
| 5.0 ANALYTICAL RESULTS | 15 |
| 5.1 RESIDENTIAL WELL RESULTS | 15 |
| 5.2 SOIL RESULTS | 15 |
| 5.3 GROUNDWATER RESULTS | 18 |
| 6.0 PLUME ASSESSMENT | 20 |
| 7.0 CONCLUSIONS AND RECOMMENDATIONS | 25 |
| REFERENCES | 27 |

APPENDICES

- A. Photographic Documentation Log
- B. Logbook Notes
- C. Monitoring Point Soil Descriptions
- D. Survey Results
- E. April 2008 Residential Well Results
- F. April 2008 Soil Results
- G. April 2008 Groundwater Results

ATTACHMENT

Validated Analytical Results

FIGURES

| <u>Figure</u> | <u>Page</u> |
|---|-------------|
| FIGURE 1 SITE LOCATION MAP..... | 2 |
| FIGURE 2 SITE LAYOUT MAP..... | 4 |
| FIGURE 3 SAMPLING LOCATION MAP..... | 8 |
| FIGURE 4 ROUNDWATER POTENTIOMETRIC SURFACE MAP..... | 13 |
| FIGURE 5 SOIL CONTAMINATION MAP..... | 22 |
| FIGURE 6 GROUNDWATER PLUME MAP..... | 24 |

TABLES

| <u>Table</u> | <u>Page</u> |
|---|-------------|
| TABLE 1 APRIL 2008 RESIDENTIAL WELL SAMPLING SUMMARY | 9 |
| TABLE 2 APRIL 2008 SOIL SAMPLING SUMMARY | 9 |
| TABLE 3 APRIL 2008 GROUNDWATER SAMPLING SUMMARY | 11 |
| TABLE 4 APRIL 2008 GROUNDWATER ELEVATIONS | 12 |
| TABLE 5 APRIL 2008 SOIL PCE, TCE, AND DCE CONCENTRATIONS..... | 21 |
| TABLE 6 APRIL 2008 GROUNDWATER PCE, TCE, AND DCE CONCENTRATIONS | 23 |

1.0 INTRODUCTION

Under Eastern Area Superfund Technical Assessment and Response Team (START) Contract No. EP-S3-05-02, Technical Direction Document (TDD) No. E23-014-08-02-003, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech EM Inc., (Tetra Tech) to assist with assessment activities at the Jay-Cee Cleaners site (site) in the City of Nelsonia, Accomack County, Virginia. The purpose of the investigation was to confirm the presence of hazardous substances, primarily tetrachloroethene (PCE), trichloroethene (TCE), and *cis*-1,2-dichloroethene (*cis*-1,2-DCE), in the shallow soil and groundwater at the site; to determine the lateral and horizontal extents of contamination; to establish the local groundwater flow direction; and to determine if residential wells near the site have been impacted by contamination of hazardous substances.

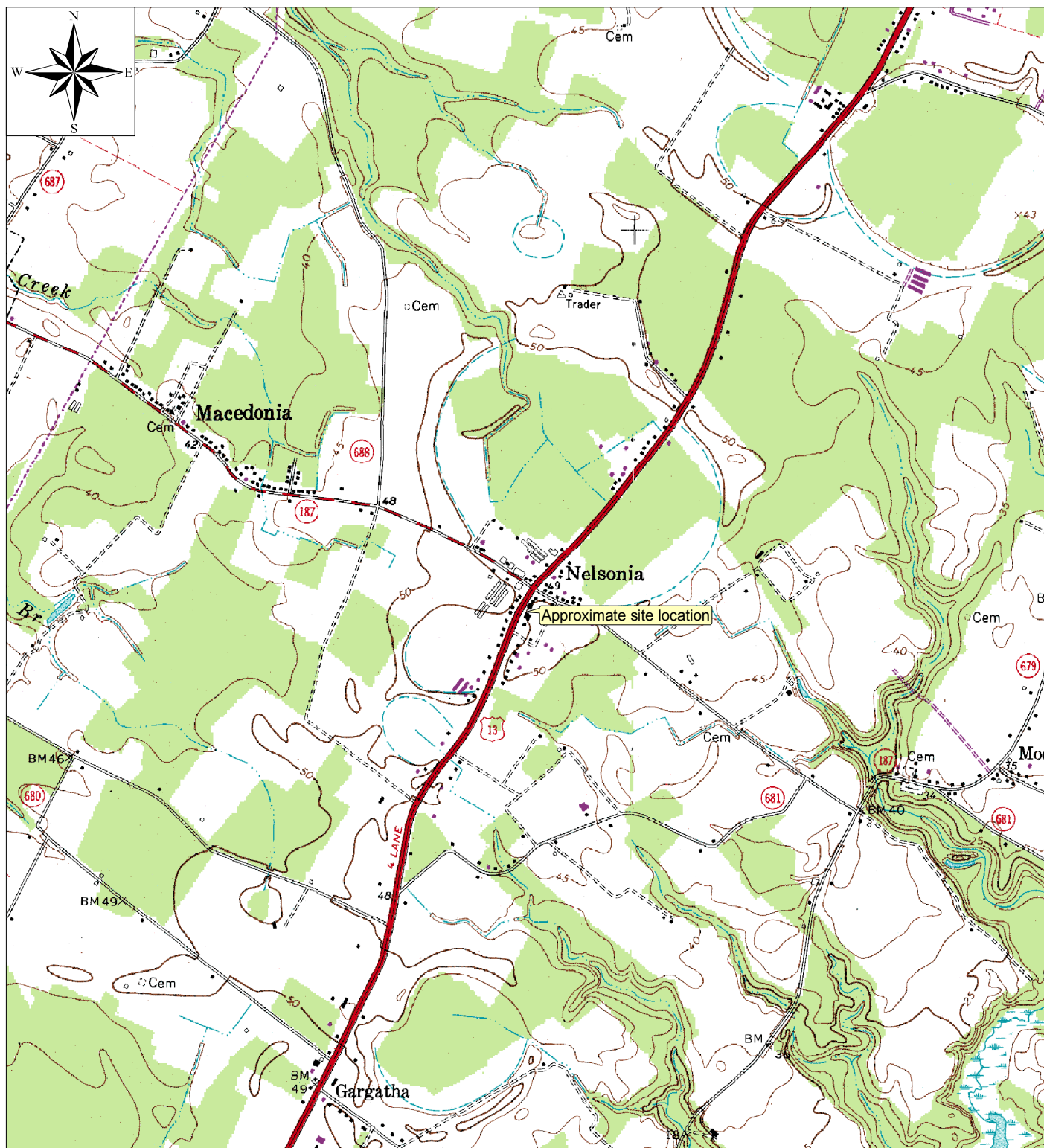
This trip report, which was prepared under TDD Nos. E23-014-08-02-003 and E33-020-08-07-024, provides site background information in Section 2.0, describes geology and hydrogeology in Section 3.0, describes site activities in Section 4.0, summarizes analytical results in Section 5.0, assesses plume characteristics in Section 6.0, and provides conclusions and recommendations in Section 7.0. References are listed after the text.

2.0 BACKGROUND

This section provides background information on the site, including its location, description, and history of site activities and investigations.

2.1 SITE LOCATION

The site is located at 16163 Lankford Highway, approximately 300 feet south of the intersection of Lankford Highway (US Route 13) and Nelsonia Road (State Road 187), in the City of Nelsonia, Accomack County, Virginia. The geographic coordinates of the approximate center of the site are latitude 37.8186 north and longitude 75.5883 west (U.S. Geological Survey [USGS] 1965, photorevised 1986). The Site Location Map is provided as Figure 1.



Source: Modified from USGS 7.5-Minute Series Topographic Quadrangle; Bloxom, Virginia



Quadrangle Location = ■



Jay-Cee Cleaners Site
Nelsonia, Accomack County, Virginia

Figure 1
Site Location Map

TDD No. E33-020-08-07-024
EPA Contract No. EP-S3-05-02

Map created on November 19, 2007
by D. Call, Tetra Tech EM Inc.



2.2 SITE DESCRIPTION

The site is an approximately 1.1-acre parcel of land with an approximately 3,000-square-foot, single-story structure located at the center of the property (ECS Mid-Atlantic, LLC [ECS] 2007). On the site, a dry cleaner operated from approximately 1957 to 2003 (ECS 2007). Currently, a retail store operates on site in the single-story structure. The site is located at approximately 50 feet above mean sea level and slopes gently towards the southwest (USGS 1965, photorevised 1986).

The site is located in a mixed commercial and residential area. Nearby commercial properties include the Royal Farm convenience store and gas station, located immediately northeast of the site, and Complete Auto vehicle maintenance and repair shop, located immediately south of the site. Nearby residential properties are located along Lankford Highway, Nelsonia Road, and Leigh Street. The surrounding area includes additional residential properties, agricultural land, and woodland. Figure 2, Site Layout Map, shows the location of Jay-Cee Cleaners, local streets, and nearby commercial properties (Accomack County 2002).

2.3 PREVIOUS SITE INVESTIGATIONS

In April 2007, a Phase II Environmental Site Assessment (ESA) was completed by ECS for the Jay-Cee Cleaners property. During the ESA, 11 soil borings were completed to maximum depths ranging from 4.0 and 8.0 feet below ground surface (bgs) at various locations of concern throughout the property. Soil samples were collected from three of the borings and analyzed for volatile organic compounds (VOC); groundwater samples were collected from two of the borings and also analyzed for VOCs. Soil and groundwater samples were not collected from the remaining borings. Soil sample analytical results showed elevated concentrations of PCE and several PCE-related compounds, including TCE and *cis*-1,2-DCE. The maximum concentrations of PCE, TCE, and *cis*-1,2-DCE in the soil were 9,200 milligrams per kilogram (mg/kg), 100 mg/kg, and 36 mg/kg, respectively. Both groundwater sample results also showed elevated concentrations of PCE and PCE-related compounds, including TCE and *cis*-1,2-DCE. The maximum concentrations of



Approximate Site Location = ■



Jay-Cee Cleaners Site
Nelsonia, Accomack County, Virginia

Figure 2
Site Layout Map

TDD No. E33-020-08-07-024
EPA Contract No. EP-S3-05-02

Map created on November 19, 2007
by D. Call, Tetra Tech EM Inc.



PCE, TCE, and *cis*-1,2-DCE in groundwater were 100,000 micrograms per liter (µg/L), 6,300 µg/L, and 52,000 µg/L, respectively.

Following completion and review of the ESA, the Virginia Department of Environmental Quality (VADEQ) was notified of the elevated VOC concentrations. VADEQ, in turn, notified EPA of the elevated concentrations. In September 2007, EPA tasked Tetra Tech with collecting groundwater samples from the nearby residences for VOC analysis. In October 2007, Tetra Tech collected groundwater samples from seven residential properties located near the site. All samples were analyzed for VOCs. Analytical results indicated trace amounts of PCE and/or TCE in two of the residential wells. The maximum concentrations of PCE and TCE detected in the residential wells were 0.6 µg/L and 0.06 µg/L, respectively.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

This section discusses the local geology and hydrogeology at the site.

3.1 GEOLOGY

The site is located in the Coastal Plain physiographic province of Virginia. The Virginia Coastal Plain consists of a wedge of generally unconsolidated Jurassic and younger sediments increasing in thickness from nearly 0 feet in the east where the Coastal Plain bounds the Piedmont physiographic province to more than 6,000 feet beneath the northeastern part of the Eastern Shore Peninsula (Meng and Harsh 1988). The sediments consist of Jurassic and Cretaceous clay, sand, and gravel overlain by a thin sequence of Tertiary marine sands overlain by Quaternary sand, mud, and gravel (Bailey 1999). In Virginia, the Coastal Plain is dissected by the Chesapeake Bay, which was created approximately 5000 to 6000 years ago when the lower course of the Susquehanna River was flooded by rising sea level (Hobbs 2004).

The site is directly underlain by Quaternary Columbia Group sediments (Cedarstrom 1957). The sediments can generally be characterized as unconsolidated fining-upwards depositional sequences of gravels, sands, and silts and clays (Meng and Harsh 1988). The sediments were deposited in fluvial-deltaic and estuarine settings similar to those that exist in the modern Chesapeake Bay and its tidal tributaries (Meng and Harsh 1988, Bailey 1999).

3.2 HYDROGEOLOGY

Sediments of the Coastal Plain physiographic province are classified into a series of 19 hydrogeologic units designated as aquifers or confining zones (Meng and Harsh 1988, McFarland and Bruce 2006). The uppermost aquifer is the unconfined surficial aquifer (also called the Columbia aquifer), which is composed of unconsolidated interbedded gravels, sands, and silts and clays (Meng and Harsh 1988, McFarland and Bruce 2006). The surficial aquifer is moderately to widely utilized for private domestic wells (McFarland and Bruce 2006). The aquifer is principally recharged by precipitation infiltration. Due to the stratified nature of the sediments, horizontal hydraulic conductivity is generally greater than vertical hydraulic conductivity, and most of the unconfined groundwater flows relatively short distances before discharging to nearby streams and water bodies (McFarland and Bruce 2006). A small amount, however, reaches deeper, confined aquifers. In the area of Jay-Cee Cleaners, the surficial aquifer is underlain by the Yorktown confining zone (Meng and Harsh 1988, McFarland and Bruce 2006). It consists of finer grained sediments and is generally tens of feet thick (McFarland and Bruce 2006). The Yorktown confining zone is underlain by the Yorktown-Eastover aquifer, which is composed of thick to massively bedded shelly sands and lesser clay intervals (Meng and Harsh 1988, McFarland and Bruce 2006). The Yorktown-Eastover aquifer is used for both commercial and private domestic water supply wells.

Commercial well logs recorded in the vicinity of the site and described by Meng and Harsh (1988) indicate that the surficial aquifer near the site extends from ground surface to between 64 and 66 feet bgs. The well logs indicate a thickness for the Yorktown confining zone of between 60 and 74 feet (from between 64 and 66 feet bgs to between 124 and 140 feet bgs). The described wells are completed in the Yorktown-Eastover aquifer and, based on well total depths, indicate that the aquifer extends from the base of the Yorktown confining zone to greater than 340 feet bgs.

A domestic well log completed by Boggs Water & Sewage (1999) for a residence located approximately 500 feet from the site indicates that “top soil” and “sand” (likely belonging to the surficial aquifer) extend from ground surface to 60 feet bgs. The well log indicates that “sand clay” and “clay” (likely belonging to the Yorktown confining zone) extend from 60 to 215 feet

bgs. The well is completed in “sand gravel shell” (likely the Yorktown-Eastover aquifer), which is described as extending from the base of the confining zone to greater than 235 feet bgs (the total depth of the well).

Shallow borings completed on the Jay-Cee Cleaners property as part of the April 2007 ESA encountered surficial groundwater at approximately 6 feet bgs (ECS 2007). Based on topography, surficial groundwater flow direction is expected to be to the southeast (USGS 1965, photorevised 1986).

4.0 SITE ACTIVITIES

Additional residential well sampling activities and shallow soil and shallow groundwater sampling activities occurred in April 2008. Tetra Tech documented and photographed site activities in accordance with Tetra Tech Standard Operating Procedure (SOP) No. 024, “Recording of Notes in Field Logbook” (Tetra Tech 1999). Photographic documentation is provided in Appendix A and field logbook notes are provided in Appendix B.

4.1 RESIDENTIAL WELL SAMPLING SUMMARY

On April 17, 2008, Tetra Tech and EPA mobilized to the site to sample residential wells located on Lankford Highway, Nelsonia Road, and Lehigh Street near the Jay-Cee Cleaners property. All residential wells sampled during the October 2007 sampling event were re-sampled in April 2008 except for RW-04. RW-04 was not sampled because the residence was vacant and the water was turned off during the April 2008 event. Residential well sampling locations are shown in Figure 3. A total of eight residential well samples were collected, including one duplicate sample and one trip blank. All residential well samples were collected from outside sources prior to any treatment systems. All water systems were flushed by Tetra Tech for a minimum of 15 minutes prior to sampling. Table 1 summarizes the April 17, 2008 residential well sampling activities.



Legend

● Sampling location

Approximate Site Location = ■



Jay-Cee Cleaners Site
Nelsonia, Accomack County, Virginia

Figure 3
Sampling Location Map

TDD No. E33-020-08-07-024
EPA Contract No. EP-S3-05-02

Map created on November 19, 2007
by D. Call, Tetra Tech EM Inc.



TETRA TECH

TABLE 1
APRIL 2008 RESIDENTIAL WELL SAMPLING SUMMARY

| Sample Identifier | Laboratory Identifier | Sample Matrix | Sample Date | Collection Time | Analysis | Comments |
|-------------------|-----------------------|---------------|-------------|-----------------|----------|------------------------|
| JCC-RW-01 | C0528 | Potable Water | 4/17/2008 | 9:30 | VOC | |
| JCC-RW-02 | C0529 | Potable Water | 4/17/2008 | 9:38 | VOC | |
| JCC-RW-03 | C0530 | Potable Water | 4/17/2008 | 9:42 | VOC | |
| JCC-RW-05 | C0531 | Potable Water | 4/17/2008 | 10:13 | VOC | MS/MSD |
| JCC-RW-06 | C0532 | Potable Water | 4/17/2008 | 10:20 | VOC | |
| JCC-RW-07 | C0533 | Potable Water | 4/17/2008 | 10:24 | VOC | |
| JCC-RW-08 | C0534 | Potable Water | 4/17/2008 | 9:33 | VOC | Duplicate of JCC-RW-01 |
| JCC-TB | C0535 | Potable Water | 4/17/2008 | 8:50 | VOC | Trip Blank |

Notes:

MS/MSD = Matrix spike/matrix spike duplicate

VOC = Volatile organic compounds

4.2 SOIL AND GROUNDWATER SAMPLING

On April 23, 2008, Tetra Tech, EPA, and Tetra Tech subcontractor Connelly and Associates Inc. (Connelly) mobilized to the site. On April 23, 2008, Connelly completed 11 Geoprobe[®] direct-push monitoring points to 10 feet bgs. On April 24, 2008, Connelly deepened six of these monitoring points to approximately 14 feet bgs. Tetra Tech screened the soils with a photo-ionization detector (PID), completed soil descriptions, and collected soil samples from each of the 11 monitoring points. A total of 12 soil samples were collected, including one duplicate sample. Monitoring point soil descriptions are provided in Appendix C. Table 2 summarizes the April 23, 2008 soil sampling activities.

TABLE 2
APRIL 2008 SOIL SAMPLING SUMMARY

| Monitoring Point ID | Sample ID | Laboratory ID | Sample Matrix | Sample Date | Collection Time | Analysis | Comments |
|---------------------|-------------|---------------|---------------|-------------|-----------------|----------|----------|
| 01 | JCC-01-0405 | C1G43 | Soil | 4/23/2008 | 9:54 | VOC | |
| 02 | JCC-02-0910 | C1G44 | Soil | 4/23/2008 | 10:21 | VOC | |
| 03 | JCC-03-0203 | C1G45 | Soil | 4/23/2008 | 10:32 | VOC | |
| 04 | JCC-04-0809 | C1G46 | Soil | 4/23/2008 | 10:57 | VOC | MS/MSD |
| 05 | JCC-05-0607 | C1G47 | Soil | 4/23/2008 | 11:24 | VOC | |

TABLE 2
APRIL 2008 SOIL SAMPLING SUMMARY

| Monitoring Point ID | Sample ID | Laboratory ID | Sample Matrix | Sample Date | Collection Time | Analysis | Comments |
|---------------------|-------------|---------------|---------------|-------------|-----------------|----------|--------------------------|
| 06 | JCC-06-0607 | C1G48 | Soil | 4/23/2008 | 11:50 | VOC | |
| 07 | JCC-07-0708 | C1G49 | Soil | 4/23/2008 | 12:09 | VOC | |
| 08 | JCC-08-0708 | C1G50 | Soil | 4/23/2008 | 12:32 | VOC | |
| 09 | JCC-09-0607 | C1G51 | Soil | 4/23/2008 | 13:00 | VOC | |
| 10 | JCC-10-0809 | C1G52 | Soil | 4/23/2008 | 13:23 | VOC | |
| 11 | JCC-11-0809 | C1G54 | Soil | 4/23/2008 | 14:15 | VOC | |
| 12 | JCC-12-0809 | C1G53 | Soil | 4/23/2008 | 10:25 | VOC | Duplicate of JCC-02-0910 |

Notes:

ID = Identifier

MS/MSD = Matrix spike/matrix spike duplicate

VOC = Volatile organic compounds

Upon completion of monitoring points, temporary polyvinylchloride (pvc) screens and casings were installed at each of the monitoring points. On April 24 and 25, 2008, Tetra Tech purged three borehole volumes and collected groundwater samples from each of the 11 temporary monitoring points using bladder pumps. A total of 16 groundwater samples were collected, including one duplicate sample, two trip blanks, one rinsate blank, and one purge/decontamination water sample. Table 3 summarizes April 24 and 25, 2008 groundwater sampling activities.

TABLE 3
APRIL 2008 GROUNDWATER SAMPLING SUMMARY

| Monitoring Point ID | Sample ID | Laboratory ID | Sample Matrix | Sample Date | Collection Time | Analysis | Comments |
|---------------------|-----------|---------------|---------------|-------------|-----------------|----------|------------------------|
| 01 | JCC-GW-01 | C0539 | Groundwater | 4/24/2008 | 10:40 | VOC | |
| 02 | JCC-GW-02 | C0551 | Groundwater | 4/25/2008 | 20:02 | VOC | |
| 03 | JCC-GW-03 | C0548 | Groundwater | 4/25/2008 | 16:53 | VOC | |
| 04 | JCC-GW-04 | C0556 | Groundwater | 4/25/2008 | 19:35 | VOC | MS/MSD |
| 05 | JCC-GW-05 | C0550 | Groundwater | 4/25/2008 | 17:05 | VOC | |
| 06 | JCC-GW-06 | C0547 | Groundwater | 4/25/2008 | 14:41 | VOC | |
| 07 | JCC-GW-07 | C0542 | Groundwater | 4/24/2008 | 19:22 | VOC | |
| 08 | JCC-GW-08 | C0543 | Groundwater | 4/24/2008 | 15:41 | VOC | |
| 09 | JCC-GW-09 | C0545 | Groundwater | 4/25/2008 | 8:55 | VOC | |
| 10 | JCC-GW-10 | C0540 | Groundwater | 4/24/2008 | 13:50 | VOC | |
| 11 | JCC-GW-11 | C0546 | Groundwater | 4/25/2008 | 11:23 | VOC | |
| 12 | JCC-GW-12 | C0553 | Groundwater | 4/25/2008 | 20:08 | VOC | Duplicate of JCC-GW-02 |
| NA | JCC-TB1 | C0541 | Groundwater | 4/24/2008 | 8:44 | VOC | Trip Blank |
| NA | JCC-TB2 | C0544 | Groundwater | 4/24/2008 | 15:26 | VOC | Trip Blank |
| NA | JCC-RB | C0554 | Groundwater | 4/25/2008 | 19:55 | VOC | Rinsate Blank |
| NA | JCC-PW | C0555 | Groundwater | 4/25/2008 | 20:14 | VOC | Purge/Dec on Water |

Notes:

Decon = Decontamination

MS/MSD = Matrix spike/matrix spike duplicate

NA = Not applicable

VOC = Volatile organic compounds

Following sample collection, the pvc screens and casings were removed and the monitoring points were backfilled with bentonite and cement grout. Purge and decontamination water, soil, and other incident-derived waste (IDW) were temporarily stored on site in 55-gallon steel drums pending analytical results.

4.3 SURVEY AND DEPTH TO WATER MEASUREMENTS

On April 25, 2008, Tetra Tech, EPA, and Tetra Tech subcontractor George E Young, III, mobilized to the site and surveyed the top of the monitoring point casings. Survey results are provided in Appendix D. Also on April 25, 2008, Tetra Tech collected depth to water measurements from the monitoring points. Table 4 summarizes surveyed elevations, depth to water measurements, and calculated groundwater elevations from April 25, 2008.




TABLE 4
APRIL 2008 GROUNDWATER ELEVATIONS

| Monitoring Point Identifier | Top Of Casing Elevation (feet) | Depth To Water (feet) | Groundwater Surface Elevation (feet) |
|------------------------------------|---------------------------------------|------------------------------|---|
| 01 | 50.52 | 6.40 | 43.85 |
| 02 | 50.49 | 6.78 | 43.71 |
| 03 | 50.51 | 6.70 | 43.81 |
| 04 | 50.86 | 7.06 | 43.80 |
| 05 | 51.56 | 7.78 | 43.78 |
| 06 | 51.21 | 7.42 | 43.79 |
| 07 | 51.55 | 7.78 | 43.77 |
| 08 | 52.97 | 9.24 | 43.73 |
| 09 | 51.06 | 7.21 | 43.85 |
| 10 | 54.87 | 11.13 | 43.74 |
| 11 | 51.00 | 7.23 | 43.77 |

Due to the close proximity of the monitoring points and the shallow groundwater gradient at the site, Tetra Tech determined the groundwater potentiometric surface using the three farthest apart monitoring points, 01, 10, and 11. Groundwater flow direction was determined to be to the southeast. A potentiometric surface map for the site groundwater is shown in Figure 4.

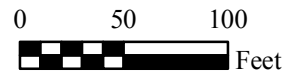


Legend

-  Groundwater monitoring point
-  Groundwater elevation contour (in feet)
-  Groundwater flow direction

Source: Modified from State of Virginia Aerial Photography (Southern areas), 2005.

Notes: Groundwater elevations for monitoring points (if available) are given (in feet) in brackets below the point ID. Due to the close proximity of the on-site monitoring points and the shallow groundwater gradient, the groundwater potentiometric surface was determined using the three monitoring points that are furthest apart.



Approximate Site Location = 



Jay-Cee Cleaners Site
Nelsonia, Accomack County, Virginia

Figure 4
Groundwater Potentiometric Surface Map

TDD No. E33-020-08-07-024
EPA Contract No. EP-S3-05-02

Map created on June 12, 2008
by D. Call, Tetra Tech EM Inc.



4.4. SAMPLE MANAGEMENT

Samples were handled and packaged in accordance with the Tetra Tech SOP No. 019, “Packaging and Shipping Samples” (Tetra Tech 2000) and with the Tetra Tech “Quality Assurance Project Plan (QAPP) for START” (Tetra Tech 2006). All shipping containers were properly labeled with EPA custody seals and were delivered with signed chain-of-custody forms and appropriate hazard warnings for laboratory personnel.

On April 17, 2008, seven residential well samples and one trip blank were shipped to EPA Office of Analytical Services and Quality Assurance (OASQA) Environmental Science Laboratory under Delivery of Analytical Services (DAS) Number R32936 for VOC analysis.

Three sample shipments were made under EPA Contract Laboratory Program (CLP) case number 37373 to Envirosystems, Inc. (Envirosystems) for VOC analysis. On April 23, 2008, 11 soil samples were shipped; on April 24, 2008, one soil sample, two groundwater samples, and one trip blank were shipped; and on April 28, 2008, ten groundwater samples, one trip blank, one rinsate blank, and one purge/decontamination water sample were shipped.

4.5 WASTE MANAGEMENT

On May 28, 2008, Tetra Tech and Tetra Tech subcontractor Clean Harbors Environmental Services Inc. (Clean Harbors) mobilized to the site. Clean Harbors transported from the site one drum containing purge and decontamination water classified as F002 hazardous waste, based on sample analysis, and one drum of soil and IDW classified as nonhazardous waste, based on sample analysis. The drums were transported to the Clean Harbors of Baltimore Inc. disposal facility in Baltimore, MD under manifest tracking number 001876158.

5.0 ANALYTICAL RESULTS

All residential well, shallow soil, and shallow groundwater samples were analyzed for VOCs. Analytical results for residential well, shallow soil, and shallow groundwater are summarized in Appendices E, F, and G, respectively. Copies of the validated laboratory analytical data packages are included in the attachment to this report.

5.1 RESIDENTIAL WELL RESULTS

Residential well samples were analyzed for VOCs by EPA Region 3 OASQA laboratory. Data were qualified as part of the laboratory quality control. Tetra Tech compared the residential well analytical data to EPA's maximum contaminant levels (MCL) established for public drinking water systems, and EPA's risk-based screening levels for tap water published on July 7, 2008, and EPA's emergency removal guidelines (ERG) for tap water (100 times the risk-based screening level). None of the collected samples had concentrations exceeding EPA MCLs, screening levels, or ERGs.

A summary of residential well analytical results from the April 2008 sampling event is provided in Appendix E. A copy of the validated analytical results is provided in the attachment to this report.

5.2 SOIL RESULTS

All soil samples were analyzed for VOCs under EPA's CLP by Envirosystems. Tetra Tech compared soil analytical data to EPA's MCL-based soil screening levels (SSL) for protection of groundwater, and risk-based SSL for protection of groundwater, and ERGs. Soil samples with concentrations exceeding the EPA MCL-based SSLs, risk-based SSLs, or ERGs are provided below.

The MCL-based SSL, risk-based SSL, and ERG for PCE of 2.4 µg/kg, 0.052 µg/kg, and 5.2 µg/kg, respectively, were exceeded in samples, JCC-02-0910 (130,000 µg/kg), JCC-03-0203 (840 µg/kg), JCC-04-0809 (2,000 µg/kg), JCC-05-0607 (34 µg/kg), JCC-06-0607 (7.9 µg/kg), JCC-07-0708 (50 µg/kg), JCC-09-0607 (29 µg/kg), JCC-10-0809 (17 µg/kg), and JCC-12-0910

(110,000 µg/kg). JCC-12-0910 is a duplicate sample of JCC-02-0910. All sample results, except JCC-03-0203, were qualified with a “J,” indicating that PCE was present but the reported value may not be accurate or precise. The CRQL for PCE is 5.0 µg/kg. JCC-03-0203 was qualified with a “+,” indicating that results were reported from a diluted sample.

The MCL-based SSL, risk-based SSL, and ERG for TCE of 1.9 µg/kg, 0.61 µg/kg, and 61 µg/kg, respectively, were exceeded in samples JCC-02-0910 (50,000 µg/kg), JCC-04-0809 (120 µg/kg), and JCC-12-0910 (44,000 µg/kg). JCC-12-0910 is a duplicate sample of JCC-02-0910. All samples were qualified with a “J,” indicating that TCE was present but the reported value may not be accurate or precise. The CRQL for TCE is 5.0 µg/kg. The MCL-based SSL and risk-based SSL of 1.9 µg/kg and 0.61 µg/kg, respectively, were also exceeded in samples JCC-03-0203 (7.3 µg/kg), JCC-05-0607 (3.9 µg/kg) JCC-07-0708 (6.1 µg/kg), JCC-09-0607 (3.3 µg/kg) and JCC-10-0809 (2.8 µg/kg).

The MCL-based SSL and risk-based SSL for *cis*-1,2-DCE of 21 µg/kg and 110 µg/kg, respectively, were exceeded in samples JCC-02-0910 (5,100 µg/kg) and JCC-12-0910 (3,400 µg/kg). JCC-12-0910 is the duplicate sample of JCC-02-0910. Samples JCC-02-0910 and JCC-12-0910 were qualified with a “J,” indicating that *cis*-1,2-DCE was present but the reported value may not be accurate or precise. The MCL-based screening level was also exceeded in sample JCC-04-0809 (35 µg/kg). No samples exceeded the ERG of 11,000 µg/kg. The CRQL for *cis*-1,2-DCE is 5.0 µg/kg.

The risk-based SSL and ERG for chloroform of 0.055 µg/kg and 5.5 µg/kg, respectively, were exceeded in samples JCC-02-0910 (17 µg/kg) and JCC-12-0910 (11 µg/kg). JCC-12-0910 is a duplicate sample of JCC-02-0910. The risk-based SSL for chloroform of 0.055 µg/kg was also exceeded in samples JCC-01-0405 (2.5 µg/kg), JCC-03-0203 (2.5 µg/kg), JCC-04-0809 (1.3 µg/kg), JCC-05-0607 (2.5 µg/kg), JCC-06-0607 (1.8 µg/kg), JCC-07-0708 (2.3 µg/kg), JCC-08-0708 (2.2 µg/kg), JCC-09-0607 (2.5 µg/kg), JCC-10-0809 (2.2 µg/kg), and JCC-11-0607 (2.4 µg/kg). All sample results except those for JCC-02-0910 were qualified with a “B,” indicating that concentrations in the samples were not reported significantly above those in the laboratory or field blanks. The CRQL for chloroform is 5.0 µg/kg.

The risk-based SSL for 1,1-dichloroethane of 0.7 µg/kg was exceeded in samples JCC-02-0910 (13 µg/kg) and JCC-12-0910 (9.1 µg/kg). JCC-12-0910 is a duplicate sample of JCC-02-0910. The ERG of 70 µg/kg was not exceeded. There is no MCL established for 1,1-dichloroethane; therefore, no MCL-based SSL is established.

The MCL-based SSL, risk-based SSL, and ERG for ethylbenzene of 890 µg/kg, 1.9 µg/kg, and 190 µg/kg, respectively, were exceeded in samples JCC-02-0910 (2,300 µg/kg), JCC-04-0809 (700 µg/kg), and JCC-12-0910 (2,100 µg/kg). JCC-12-0910 is a duplicate sample of JCC-02-0910. Sample results were qualified with a “J,” indicating that ethylbenzene was present but that reported values may not be accurate or precise. The CRQL for ethylbenzene is 5.0 µg/kg.

The MCL-based SSL and risk-based SSL for methylene chloride of 1.3 µg/kg and 1.2 µg/kg, respectively, were exceeded in samples JCC-01-0405 (2.6 µg/kg), JCC-02-0910 (13 µg/kg), JCC-03-0203 (8.8 µg/kg), JCC-04-0809 (9.2 µg/kg), JCC-05-0607 (10 µg/kg), JCC-06-0607 (7.8 µg/kg), JCC-07-0708 (10 µg/kg), JCC-08-0708 (8.3 µg/kg), JCC-09-0607 (9.8 µg/kg), JCC-10-0809 (9.9 µg/kg), JCC-11-0607 (10 µg/kg), and JCC-12-0910 (11 µg/kg). JCC-12-0910 is a duplicate sample of JCC-02-0910. Sample results were qualified with a “B,” indicating that concentrations in the samples were not reported significantly above those in the laboratory or field blanks. The ERG for methylene chloride of 120 µg/kg was not exceeded in any sample. The CRQL for methylene chloride is 5.0 µg/kg.

The MCL-based SSL for 1,1,1-trichloroethane of 72 µg/kg was exceeded in samples JCC-02-0910 (340 µg/kg) and JCC-12-0910 (300 µg/kg). JCC-12-0910 is a duplicate sample of JCC-02-0910. Samples were qualified with a “J,” indicating that 1,1,1-trichloroethane was present but that reported values may not be accurate or precise. The CRQL for 1,1,1-trichloroethane is 5.0 µg/kg.. The risk-based SSL and ERG of 3,300 µg/kg and 330,000 µg/kg, respectively were not exceeded in any samples.

The MCL-based SSL, risk-based SSL, and ERG for 1,1,2-trichloroethane of 1.7 µg/kg and 0.082 µg/kg, and 8.2 µg/kg, respectively, were exceeded in sample JCC-04-0809 (17 µg/kg). The result for JCC-04-0809 was qualified with a “K,” indicating that 1,1,2-trichloroethane was present but the reported value may be biased high. The MCL-based SSL and risk-based SSL

for 1,1,2-trichloroethane of 1.7 µg/kg and 0.082 µg/kg, respectively, were also exceeded in sample JCC-03-0203 (2.5 µg/kg). The result for JCC-03-0203 was qualified with a “J,” indicating that 1,1,2-trichloroethane was present but the reported values may not be accurate or precise. The CRQL for 1,1,2-trichloroethane is 5.0 µg/kg.

The risk-based SSL for total xylenes of 230 µg/kg was exceeded by o-xylene in samples JCC-02-0910 (5,700 µg/kg), JCC-04-0809 (1,500 µg/kg), and JCC-12-0910 (5,100 µg/kg) and by m,p-xylene in samples JCC-02-0910 (6,700 µg/kg), JCC-04-0809 (2,200 µg/kg), and JCC-12-0910 (5,900 µg/kg).. JCC-12-0910 is a duplicate sample of JCC-02-0910. The MCL-based SSL of The ERG of 160,000 µg/kg was not exceeded in any samples. Sample results were qualified with a “J,” indicating that o-xylene and m,p-xylene were present but that reported values may not be accurate or precise. The CRQLs for o-xylene and m,p-xylene are 5.0 µg/kg.

A summary of soil analytical results from the April 2008 sampling event is provided in Appendix F. A copy of the validated analytical results is provided in the attachment to this report.

5.3 GROUNDWATER RESULTS

Groundwater samples were analyzed by EnviroSystems for VOCs. Data were qualified as part of the laboratory quality control. Tetra Tech compared groundwater analytical data to EPA MCLs for drinking water, risk-based screening levels for tapwater, and ERGs for tapwater.

Groundwater samples with concentrations exceeding the EPA MCLs, risk-based screening levels, or ERGs are provided below.

The MCL, risk-based screening level and ERG for PCE of 5.0 µg/L, 0.11 µg/L, and 11 µg/L, respectively, were exceeded in samples JCC-GW-02 (94,000 µg/L), JCC-GW-03 (34,000 µg/L), JCC-GW-04 (370 µg/L), JCC-GW-05 (1,400 µg/L), JCC-GW-06 (3,100 µg/L), JCC-GW-07 (140 µg/L), JCC-GW-09 (7,000 µg/L), JCC- GW-11 (13 µg/L), and JCC-GW-12 (92,000 µg/L).

JCC-GW-12 is a duplicate sample of JCC-GW-02. Results from samples JCC-GW-02, JCC-GW-03, JCC-GW-04, JCC-GW-05, JCC-GW-06, JCC-GW-09, and JCC-GW-12 were identified

with a “+” for PCE, indicating that results were reported from a diluted sample. The CRQL for PCE is 5.0 µg/L.

The MCL, risk-based screening level, and ERG for TCE of 5.0 µg/L, 0.026 µg/L and 2.6 µg/L, respectively, were exceeded in samples JCC-GW-02 (6,400 µg/L), JCC-GW-03 (740 µg/L), JCC-GW-04 (23 µg/L), JCC-GW-05 (150 µg/L), JCC-GW-06 (250 µg/L), JCC-GW-07 (18 µg/L), JCC-GW-09 (61 µg/L), and JCC-GW-12 (6,200 µg/L). JCC-GW-12 is a duplicate sample of JCC-GW-02. Results for samples JCC-GW-02, JCC-GW-06, and JCC-GW-12 were identified with a “+” for TCE, indicating that results were reported from a diluted sample. The CRQL for TCE is 5.0 µg/L.

The MCL and risk-based screening level for *cis*-1,2-DCE of 70 µg/L and 370 µg/L, respectively, were exceeded in samples JCC-GW-02 (5,000 µg/L), JCC-GW-03 (740 µg/L), JCC-GW-05 (2,300 µg/L), JCC-GW-06 (950 µg/L), and JCC-GW-12 (4,800 µg/L). JCC-GW-12 is a duplicate sample for JCC-GW-02. The MCL for *cis*-1,2-DCE of 70 µg/L was also exceeded in samples JCC-GW-04 (89 µg/L), JCC-GW-07 (200 µg/L), and JCC-GW-09 (140 µg/L). JCC-GW-02, JCC-GW-05, JCC-GW-06, JCC-GW-07, and JCC-GW-12 were identified with a “+” for *cis*-1,2-DCE, indicating that results were reported from a diluted sample. The ERG of 37,000 µg/L was not exceeded in any sample. The CRQL for *cis*-1,2-DCE is 5.0 µg/L.

The risk-based screening level for chloroform of 0.19 µg/L and was exceeded in samples JCC-GW-01 (2.6 µg/L), JCC-GW-05 (1.1 µg/L), JCC-GW-07 (2.8 µg/L), JCC-GW-08 (2.9 µg/L), JCC-GW-09 (3.2 µg/L), JCC-GW-10 (2.6 µg/L), and JCC-GW-11 (2.8 µg/L). Sample results were qualified with a “B,” indicating that chloroform concentrations were not detected substantially above concentrations reported in the laboratory or field blanks. The CRQL for chloroform is 5.0 µg/L.

The risk-based screening level for ethylbenzene of 1.5 µg/L was exceeded in samples JCC-GW-02 (25 µg/L), JCC-GW-04 (1.8 µg/L), and JCC-GW-12 (26 µg/L). JCC-GW-12 is a duplicate sample of JCC-GW-02. Sample results were qualified with a “J,” indicating that ethylbenzene is present but the reported value may not be accurate or precise. The CRQL for ethylbenzene is 5.0 µg/L.

The MCL and risk-based screening level for methylene chloride of 5.0 µg/L and 4.8 µg/L, respectively, were exceeded in samples JCC-GW-01 (9.8 µg/L), JCC-GW-02 (41 µg/L), JCC-GW-03 (21 µg/L), JCC-GW-10 (7.0 µg/L), and JCC-GW-12 (39 µg/L). JCC-GW-12 is a duplicate sample of JCC-GW-02. Results were qualified with a “B,” indicating that methylene chloride concentrations were not detected substantially above concentrations reported in the laboratory or field blanks. The CRQL for methylene chloride is 5.0 µg/L.

The MCL, risk-based screening level, and ERG for 1,1,2-trichloroethane of 5.0 µg/L, 0.24 µg/L and 24 µg/L, respectively, were exceeded in samples JCC-GW-02 (830 µg/L), JCC-GW-03 (280 µg/L), and JCC-GW-12 (810 µg/L). JCC-GW-12 is a duplicate sample of JCC-GW-02. The MCL and risk-based screening level for 1,1,2-trichloroethane of 5.0 µg/L and 0.24 µg/L, respectively, were also exceeded in samples JCC-GW-05 (12 µg/L) and JCC-GW-06 (23 µg/L). The risk-based screening level for 1,1,2-trichloroethane of 0.24 µg/L was exceeded in samples JCC-GW-04 (3.3 µg/L) and JCC-GW-07 (1.1 µg/L). Results for samples JCC-GW-04 and JCC-GW-07 were qualified with a “J,” indicating that 1,1,2-trichloroethane is present but the reported value may not be accurate or precise. The CRQL for 1,1,2-trichloroethane is 5.0 µg/L.

A summary of groundwater analytical results from the April 2008 sampling event is provided in Appendix G. A copy of the validated analytical results is provided in the attachment to this report.

6.0 PLUME ASSESSMENT

Tetra Tech did not prepare an analysis of a possible plume in the drinking water at this time because constituents were not detected in the April 2008 residential well sample results above their corresponding MCLs, risk-based screening levels or ERGs.

To evaluate the presence and migration of contaminants in the shallow aquifers, Tetra Tech prepared PCE, *cis*-1,2-DCE, and TCE soil contamination and shallow groundwater maps. PCE, TCE, and *cis*-1,2-DCE were chosen for closer examination because: (1) previous investigations indicated their possible presence, including the 2007 ESA completed by ECS and October 2007 residential well samples collected by Tetra Tech; (2) these contaminants are commonly associated with dry cleaning operations; and (3) initial review of the shallow soil and shallow

groundwater data indicated their presence at concentrations up to four orders of magnitude greater than established MCLs, risk-based screening levels and ERGs. The CRQLs of 5.0 µg/kg for PCE, TCE, and *cis*-1,2-DCE in soil and 5.0 µg/L in groundwater were used to delineate the plume boundary.

April 2008 PCE, TCE, and *cis*-1,2-DCE concentrations in soil are shown in Table 5.

TABLE 5
APRIL 2008 SOIL PCE, TCE, AND DCE CONCENTRATIONS

| Monitoring Point ID | Sample ID | PCE (µg/kg) | TCE (µg/kg) | DCE (µg/kg) |
|---------------------|-------------|-------------|-------------|-------------|
| 01 | JCC-01-0405 | 4.5 | ND | ND |
| 02 | JCC-02-0910 | 130,000 | 50,000 | 5,100 |
| 03 | JCC-03-0203 | 840 | 7.3 | 7.0 |
| 04 | JCC-04-0809 | 2,000 | 120 | 35 |
| 05 | JCC-05-0607 | 34 | 3.9 | 7.1 |
| 06 | JCC-06-0607 | 7.9 | ND | ND |
| 07 | JCC-07-0708 | 50 | 6.1 | 10 |
| 08 | JCC-08-0708 | 3.4 | ND | ND |
| 09 | JCC-09-0607 | 29 | 3.3 | 5.1 |
| 10 | JCC-10-0809 | 17 | 2.8 | 4.2 |
| 11 | JCC-11-0607 | ND | ND | ND |

NOTES:

DCE = *cis*-1,2-Dichloroethene

ID = Identifier

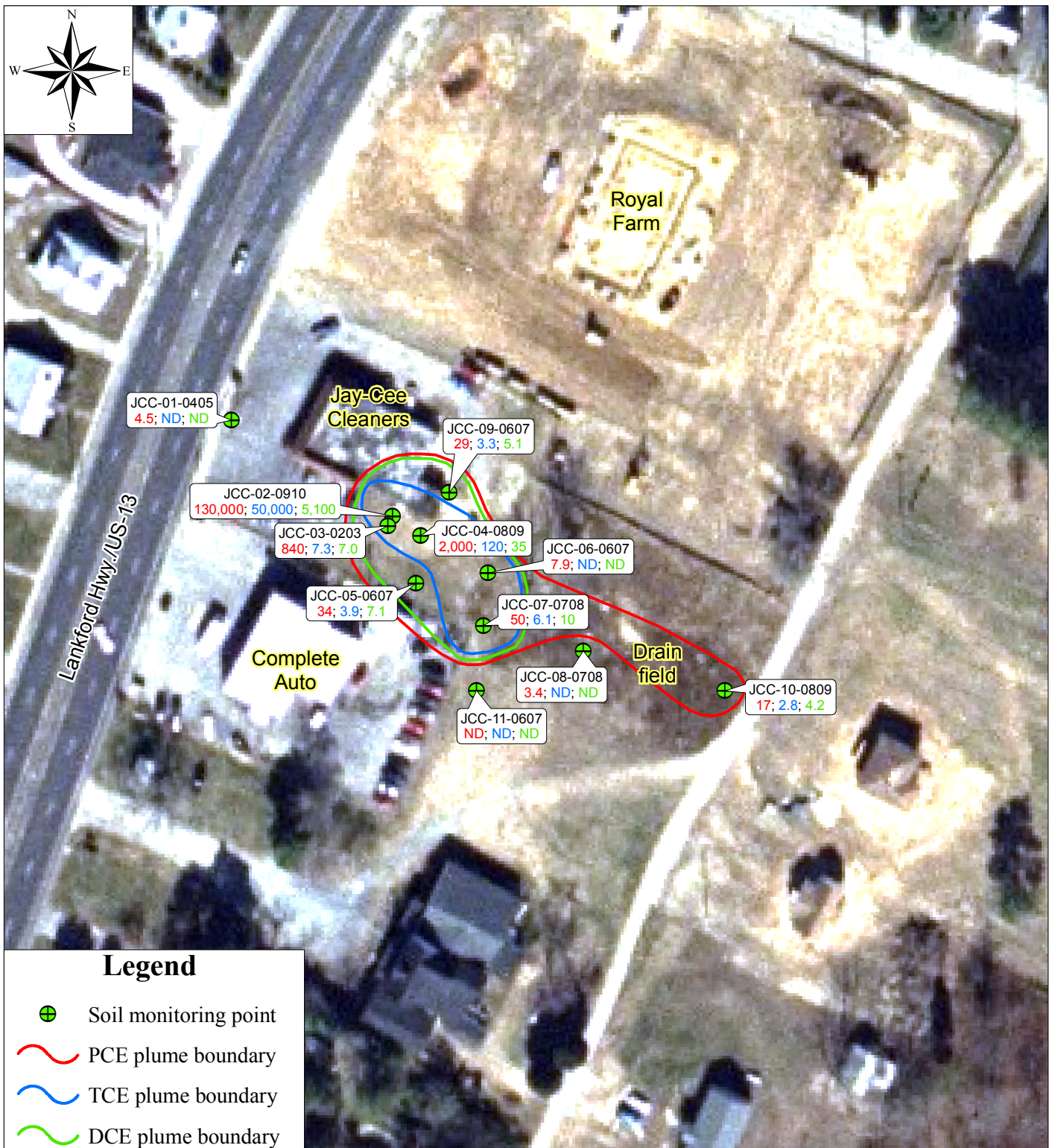
ND = Not detected

PCE = Tetrachloroethene

TCE = Trichloroethene

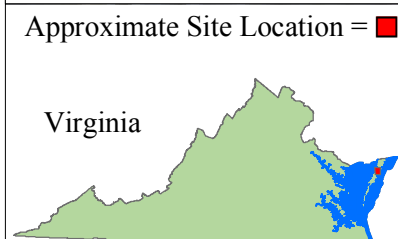
µg/kg = Micrograms per kilogram

The April 2008 soil contamination map is shown in Figure 5. PCE concentrations exceeding the CRQL of 5.0 µg/kg were reported in soil collected from monitoring points 02, 03, 04, 05, 06, 07, 09, and 10. Lesser concentrations of PCE were also detected in soils from monitoring points 01 and 08. TCE concentrations exceeding the CRQL were observed in soil collected from monitoring points 02, 03, 04, and 07. TCE concentrations below the CRQL were also reported in soil from monitoring points 05, 09, and 10. *Cis*-1,2-DCE concentrations exceeding the CRQL were observed in soil collected from monitoring points 02, 03, 04, 05, 07, and 09. *Cis*-1,2-DCE was also reported at a concentration below the CRQL from the soil collected from monitoring point 10. Results indicate that PCE-, TCE-, and DCE-contaminated soil is located in an



Source: Modified from State of Virginia Aerial Photography (Southern areas), 2005.

Notes: Analyte concentrations (in µg/kg) are given below each sample ID. PCE concentration is in red text, TCE concentration is in blue text, and DCE concentration is in green text. ND=Non-detect.



Jay-Cee Cleaners Site
Nelsonia, Accomack County, Virginia

Figure 5
Soil Contamination Map

TDD No. E33-020-08-07-024
EPA Contract No. EP-S3-05-02

Map created on June 12, 2008
by D. Call, Tetra Tech EM Inc.



approximately 130- by 70-foot area on the site southeast of the Jay-Cee Cleaners building. PCE soil contamination extends an additional 120 feet to the southeast. The vertical extent of contamination is unknown but is at least 10 feet deep, as soil collected from between 9 and 10 feet bgs from monitoring point 02 showed high concentrations of PCE, TCE, and *cis*-1,2-DCE.

April 2008 PCE, TCE, and *cis*-1,2-DCE concentrations in shallow groundwater are shown in Table 6.

TABLE 6
APRIL 2008 GROUNDWATER PCE, TCE, AND DCE CONCENTRATIONS

| Monitoring Point ID | Sample ID | PCE (µg/L) | TCE (µg/L) | DCE (µg/L) |
|---------------------|-----------|------------|------------|------------|
| 01 | JCC-GW-01 | 3.1 | ND | ND |
| 02 | JCC-GW-02 | 94,000 | 6,400 | 5,000 |
| 03 | JCC-GW-03 | 34,000 | 740 | 740 |
| 04 | JCC-GW-04 | 370 | 23 | 89 |
| 05 | JCC-GW-05 | 1,400 | 150 | 2,300 |
| 06 | JCC-GW-06 | 3,100 | 250 | 950 |
| 07 | JCC-GW-07 | 140 | 18 | 200 |
| 08 | JCC-GW-08 | ND | ND | ND |
| 09 | JCC-GW-09 | 7,000 | 61 | 140 |
| 10 | JCC-GW-10 | ND | ND | ND |
| 11 | JCC-GW-11 | 13 | ND | ND |

NOTES:

DCE = *cis*-1,2-Dichloroethene

ID = Identifier

ND = Not detected

PCE = Tetrachloroethene

TCE = Trichloroethene

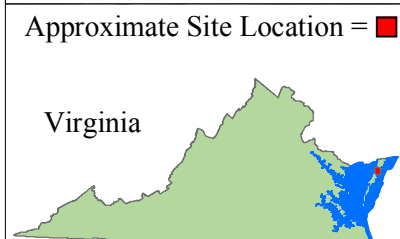
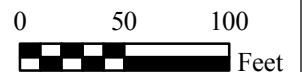
µg/L = Micrograms per liter

The April 2008 shallow groundwater plume map is shown in Figure 6. PCE concentrations exceeding the CRQL of 5.0 µg/L were observed in groundwater collected from monitoring points 02, 03, 04, 05, 06, 07, 09, and 11. TCE concentrations exceeding the CRQL were observed in groundwater collected from monitoring points 02, 03, 04, 05, 06, 07, and 09. *Cis*-1,2-DCE concentrations exceeding the CRQL were observed in groundwater collected from monitoring points 02, 03, 04, 05, 06, 07, and 09. Results indicate the presence of a PCE, TCE, and *cis*-1,2-DCE plume in the shallow groundwater beneath the site. The plume is located



Source: Modified from State of Virginia Aerial Photography (Southern areas), 2005.

Notes: Analyte concentrations (in µg/l) are given below each location ID. PCE concentration is in red text, TCE concentration is in blue text, and DCE concentration is in green text. ND=Non-detect.



Jay-Cee Cleaners Site Nelsonia, Accomack County, Virginia

Figure 6
Groundwater Plume Map

TDD No. E33-020-08-07-024
EPA Contract No. EP-S3-05-02

Map created on June 12, 2008
by D. Call, Tetra Tech EM Inc.



beneath the site and southeast (downgradient) of the Jay-Cee Cleaners building. Results indicate that the current PCE, TCE, *cis*-1,2-DCE plume is approximately 130- by 100-feet, with elevated PCE concentrations extending an additional 50 feet to the southeast. The depth of the plume is unknown as the deepest monitoring points were screened above 14 feet bgs.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Tetra Tech collected drinking water samples from six residential properties located near the Jay-Cee Cleaners site and 11 soil and 11 shallow groundwater samples from beneath the site. All samples were analyzed for VOCs. Shallow monitoring points at the site were surveyed and depth to water measurements collected.

Analytical results indicate that drinking water samples from the residential properties are below EPA MCLs, risk-based screening levels, and ERGs. However, because previous drinking water samples collected from nearby properties have shown levels of PCE and TCE exceeding EPA's risk-based screening levels, Tetra Tech recommends continuing quarterly monitoring of residential wells.

Analytical results indicate that soil samples collected from monitoring points beneath the site contained VOCs, including PCE, TCE, and *cis*-1,2-DCE, with concentrations exceeding MCL-based SSLs, risk-based SSLs, and ERGs. A soil contamination map delineating soil samples with concentrations greater than the CRQLs indicate that the approximate lateral extent of contamination is an approximately 250- by 70-foot area for PCE and approximately 130- by 70-foot area for PCE and *cis*-1,2-DCE located beneath the site southeast of the Jay-Cee Cleaners building. The vertical extent of soil contamination below 10 feet is unknown. In order to evaluate the depth of contamination below 10 feet, Tetra Tech recommends installing an intermediate borehole to the base of the shallow aquifer, or approximately 75 feet bgs. Tetra Tech recommends screening of soils for VOCs on site using a PID and collecting further soil samples for VOC analysis. Upon establishing the vertical extent of contamination, Tetra Tech recommends evaluating the feasibility of excavating contaminated soil at the site. Additionally, because VOC-contaminated soil is present in soils adjacent to the Jay-Cee Cleaners building and

the building is occupied, Tetra Tech recommends collecting air samples from inside of the building to determine whether VOC vapors are present in the building.

Analytical results indicate that shallow groundwater collected from monitoring points beneath the site contained VOCs, including PCE, TCE, and *cis*-1,2-DCE, with concentrations exceeding EPA MCLs, risk-based screening levels and ERGs. A groundwater plume map delineating samples with concentrations greater than the CRQLs, indicates that the approximate lateral extent of the plume is approximately 180 by 100 feet for PCE and approximately 130 by 100 feet for TCE and *cis*-1,2-DCE located beneath the site, southeast (downgradient) of the Jay-Cee Cleaners building. In order to evaluate the depth of shallow groundwater contamination, Tetra Tech recommends installing an intermediate well to the base of the shallow aquifer, or approximately 75 feet bgs. Tetra Tech recommends screening the well at the base of the aquifer and collecting a groundwater sample for VOC analysis.

REFERENCES

- Accomack County. 2002. AccoMap. On-line address: <http://www.co.accomack.va.us>.
- Bailey, C. M. 1999. Simplified Geologic Map of Virginia. College of William & Mary Department of Geology.
- Boggs Water & Sewage, Inc. 1999. Commonwealth of Virginia Uniform Water Well Completion Report and Water Well Drillers Log. Accomack County Health Department.
- Cedarstrom, D. J. 1957. *Geology and Ground-Water Resources of the York-James Peninsula*. U.S. Geological Survey (USGS) Water Supply Paper 1361.
- Department of Transportation (DOT). 2008. Emergency Response Guidebook (ERG).
- ECS Mid-Atlantic, LLC (ECS). 2007. Phase II ESA, Jay-Cee Cleaner Property, 16163 Lankford Highway, Nelsonia, Virginia. ECS Project No. 04:7896. April.
- Environmental Protection Agency (EPA). 2005. National Primary and Secondary Drinking Water Regulations.
- Hobbs, Carl H., III. 2004. "Geologic History of Chesapeake Bay, USA." *Quaternary Science Reviews*, Vol. 23, Issues 5-6, pp. 641-661.
- McFarland, E. Randolph and T. Scott Bruce. 2006. *The Virginia Coastal Plain Hydrogeologic Framework*. USGS Professional Paper 1731.
- Meng, Andrew A., III and John F. Harsh. 1988. *Hydrogeologic Framework of the Virginia Coastal Plain*. USGS Professional Paper 1404-C.
- Oak Ridge National Laboratory (ORNL). 2008. Regional Screen Levels for Chemical Contaminants at Superfund Sites. July 7.
- Tetra Tech EM Inc. (Tetra Tech). 1999. "Recording of Notes in Field Logbook." Standard Operating Procedure (SOP) No. 024. November.
- Tetra Tech. 2000. "Packaging and Shipping Samples." SOP No. 019. January.
- Tetra Tech. 2006. "Quality Assurance Project Plan [QAPP] for START." August.
- USGS. 1965. 7.5-Minute Series Topographic Quadrangle Map, Bloxom, Virginia. Photorevised 1986.

APPENDIX A

Photographic Documentation Log



Client: U.S. EPA Region 3
Site Name: Jay-Cee Cleaners Site
Location: Nelsonia, Virginia

Photographic Documentation

Prepared by: Tetra Tech EM Inc.
Photographer: Jordan Vaughn
TDD Number: E33-020-08-07-024

Photograph No. 1

Photograph Date: 04/17/08

Orientation: Northeast
Time: 10:15

Description: View of the Jay-Cee Cleaners site, which is currently operating as a retail store.



Photograph No. 2

Photograph Date: 04/17/08

Orientation: North

Time: 10:11

Description: Sample supplies at RW-05.





Client: U.S. EPA Region 3
Site Name: Jay-Cee Cleaners Site
Location: Nelsonia, Virginia

Photographic Documentation

Prepared by: Tetra Tech EM Inc.
Photographer: Jordan Vaughn
TDD Number: E33-020-08-07-024

Photograph No. 3

Photograph Date: 04/23/08

Orientation: NA

Time: 09:51

Description: Photo-ionization detection (PID) of vapors from soil boring 01.



Photograph No. 4

Photograph Date: 04/23/08

Orientation: East

Time: 10:14

Description: Geoprobe activities at soil boring 02.





Client: U.S. EPA Region 3
Site Name: Jay-Cee Cleaners Site
Location: Nelsonia, Virginia

Photographic Documentation

Prepared by: Tetra Tech EM Inc.
Photographer: Jordan Vaughn
TDD Number: E33-020-08-07-024

Photograph No. 5

Photograph Date: 04/23/08

Orientation: NA

Time: 10:28

Description: Approximately 3-inch thick section of concrete encountered in soil boring 02.



Photograph No. 6

Photograph Date: 04/23/08

Orientation: NA

Time: 10:21

Description: Describing soils from soil boring 02.





Client: U.S. EPA Region 3
Site Name: Jay-Cee Cleaners Site
Location: Nelsonia, Virginia

Photographic Documentation

Prepared by: Tetra Tech EM Inc.
Photographer: Jordan Vaughn
TDD Number: E33-020-08-07-024

Photograph No. 7

Photograph Date: 04/23/08

Orientation: NA

Time: 11:26

Description: Collecting soil sample JCC-05-0607 from soil boring 05 for volatile organic compound (VOC) analysis.



Photograph No. 8

Photograph Date: 04/23/08

Orientation: West

Time: 12:52

Description: Geoprobe activities at soil boring 09.





Client: U.S. EPA Region 3
Site Name: Jay-Cee Cleaners Site
Location: Nelsonia, Virginia

Photographic Documentation

Prepared by: Tetra Tech EM Inc.
Photographer: Jordan Vaughn
TDD Number: E33-020-08-07-024

Photograph No. 9

Photograph Date: 04/23/08

Orientation: Southeast

Time: 16:21

Description: Temporary wells 08 and 11.



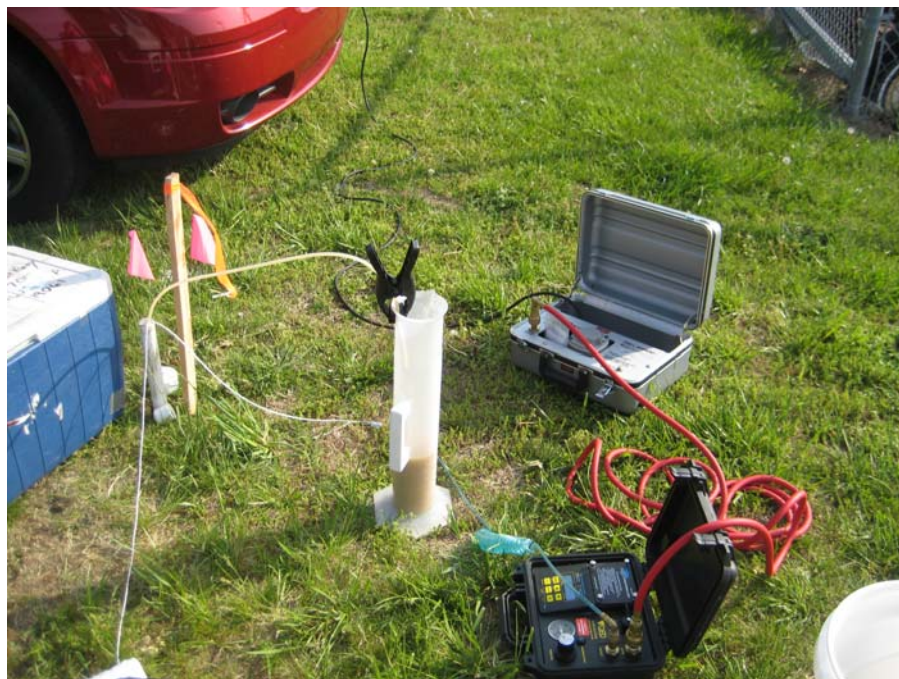
Photograph No. 10

Photograph Date: 04/24/08

Orientation: NA

Time: 17:01

Description: Purging temporary well 05 prior to sample collection.





Client: U.S. EPA Region 3
Site Name: Jay-Cee Cleaners Site
Location: Nelsonia, Virginia

Photographic Documentation

Prepared by: Tetra Tech EM Inc.
Photographer: Jordan Vaughn
TDD Number: E33-020-08-07-024

Photograph No. 11

Photograph Date: 04/24/08

Orientation: NA

Time: 11:19

Description: Collection
groundwater sample JCC-
GW-11 for VOC analysis.



Photograph No. 12

Photograph Date: 04/24/08

Orientation: West

Time: 18:58

Description: Purging
groundwater from temporary
wells 04 (foreground) and 02.





Client: U.S. EPA Region 3
Site Name: Jay-Cee Cleaners Site
Location: Nelsonia, Virginia

Photographic Documentation

Prepared by: Tetra Tech EM Inc.
Photographer: Jordan Vaughn
TDD Number: E33-020-08-07-024

Photograph No. 13

Photograph Date: 04/25/08

Orientation: Northwest

Time: 09:32

Description: Survey setup at site.



Photograph No. 14

Photograph Date: 04/25/08

Orientation: Northeast

Time: 19:00

Description: Soil boring 07 after being plugged with bentonite chips.



APPENDIX B

Logbook Notes

Jay-Cee Cleaners

Thursday, 4-17-08

- 0835 Arrive at site. START personnel: Jordan Vaughn
- 0850 Collect JCC-TB. trip blank. 2 VOAS.
- 0910 Water on at 16147 Leigh St. _____ w
- 0917 Water on at 16177 Leigh St. _____ w
- 0924 Water on at 16191 Lankford Highway _____ w
- 0930 Collect ~~JCC-GW-0~~ JCC-RW-01 + JCC-RW-08
- ~~0933 (dup)~~ (duplicate) from 16147 Leigh St.
- 0933 Assigned time for JCC-RW-08, duplicate of JCC-RW-01
- 0938 Collect JCC-RW-02 from 16177 Leigh St.
- 0942 Collect JCC-RW-03 from 16191 Lankford Highway
- 0949 Attempted to collect water at 16190. Water off. House vacant. _____ w
- 0951 Water on at 16178 Lankford Hwy _____ w
- 0954 Water on at 16158 Lankford Hwy _____ w
- 1007 Water on at 28149 Nelsonia Rd _____ w
- 1010 Jay-Cee Cleaner owner John Darby on site. OSC Todd Richardson meeting w/ J. Darby. _____ w
- 1013 Collect JCC-RW-05 from 16178 Lankford Hwy. MS/MSD
- 1020 Collect JCC-RW-06 from 16158 Lankford Hwy
- 1024 Collect JCC-RW-07 from 28149 Nelsonia Rd _____ w
- 1030 OSC T. Richardson received access to Jay-Cee property for sampling / Geoprobe work next week.
- 1058 Sampling complete. START and EPA off site.
- 1153 Went to County Assessors office in Accomac to get Tax parcel numbers and to Co. Health also in Accomac to get well logs for properties. Co Health will call when find well logs. _____ w
- 1155 Depart Accomac _____

DM

Jay-Cee Cleaners

Tuesday 4-22-08

- 10:30 Call with Dr. Kerry, EnviroSystems, regarding sample deliver. Dr. Kerry say OK to ship soil VOAs collected after 2PM to lab on following day. Soil samples collected after 2PM on wed. can be shipped via FedEx early next day on Th. to arrive at the lab on Fri. by 10 AM.
- 0630 Phone call w/ OSC Todd Richardson. Cannot begin drilling until property owner is on site. Owner expects to be on site by 9 AM.
- 0830 Phone call w/ Connelly Driller E. Connelly. Will plan to meet at site 8:30 for Health + Safety and set up and begin drilling once owner arrives.
- 0840 Call w/ Marian Murphy Re. late morning meeting time and EnviroSystems ability to accept samples collected after 2PM, - 2 mornings later.

Jay-Cee Cleaners Wednesday 4-23-08

0832 START Jordan Vaughn & Lori Coleman on site. Connolly
Drilling Eamon Connolly & Brendon Vaughn already on site.

0835 Health & Safety Mtg. Slip trips, falls, TCE & PCE, acids, overhead

0850 Property owner Mr. Darby on site. OK from Darby to
set up on first borehole location. n

0908 EPA Todd Richardson & Bob Guarni on site. Health & Safety Mtg. Francisco
Cruz. HAS update. H₂S PID on. fresh air cal. using multi. RAE.

0940 Health & Safety mtg w/ Mr. Darby n

0946 Begin Geoprobe of JCC-01 Soil Boring SB-01. n

0954 TD at 10.0 ft ², water at 5.0 ft bgs. Collect soil sample
JCC-01-0405 from 4.5 ft. No PID reading (0.0 ppm). No odor.

10:00 Temp well w/ screen to 10 ft. n

1016 Begin Geoprobe of SB-02. n

1021 TD at 10.0. water at 6.5'. concrete from 6.5-6.8. high PID reading
(max = 224 ppm) and odor. Note: near location of Phase 2 high concentrations
Temp well w/ screen to 10 ft. n

1032 Begin coring SB-03. n

1021 collect JCC-02-0910 from 9 to 10 ft. collect n. n

1025 collect ~~JCC-02~~ JCC-12-0910 - duplicate of JCC-02-0910.

1032 Begin Geoprobe of SB-03. n

1039 TD at 10.0 ft. water at 6.0. Collect JCC-03-0203 from 2 to 3 ft.

1045 Temp well w/ screen to 10 ft. NOTE: max PID of 34.0 ppm at 3 ft. n

1052 Begin Geoprobe of SB-04

1057 TD at 10.0 Collect JCC-04-0809 from 8 to 9 ft. MS/MSD sample n

11:10 Temp well w/ screen to 10 ft n

1113 Begin Geoprobe of SB-05. n

1124 TD at 10.0. Collect JCC-05-0607 from 7 to 8 ft. n

1130 Temp well w/ screen to 10 ft. n

1144 Begin Geoprobe of SB-06 n

1150 TD at 10.0. Collect JCC-06-0405 from 4 to 5 ft. n

1205 Begin Geoprobe of SB-07. n

1209 TD at 10.0. water at 8 ft. Collect JCC-07-0708 from 7 to 8 ft. n

1212 Temp well to 10 ft. n

1226 Begin Geoprobe of SB-08. n

1232 TD at ~~10.0~~ ^{10.0} ft. water at 8.5' Collect JCC-08-0708 from 7 to 8. n

1239 Temp well w/ screen to 10 ft. n

1255 Begin Geoprobe of SB-09. n

1300 TD at 10 ft. water at 6.8 ft. Collect JCC-09-0607 from 6 to 6.8 ft. n

1304 Temp well w/ screen to 10.0 ft. n

1323 Begin Geoprobe of SB-10. n

TD at 10.0 Water at 9.0. Collect JCC-10-0809 from 8 to 9

JayCee Cleaners

Thursday 4-24-08

- 0740 START Jordan Vaughn + Lori Coleman on site.
All wells intact ~~has~~ mfg: Solvent contaminants, acids.
- 0815 EPA OSC Todd Richardson on site.
- 0825 Setting up at Temp Well 01. w
- 0830 DTW = 6.14 ft bTDC. TD = 9.70 ft. TD of 9.70 - DTW of 6.14 = water column of 3.56 ft \times 0.16 gal/ft² (2-in borehole) = 1 well bore vol of 0.57 gal \times 3 = 3 well bores of 1.7 gal.
= 6.4 liters. w
- 0844 Collect trip blank JCC-TB
- 0922 check DTW in temp well 07. Dry at 9.9 ft. bTDC
- 0926 check DTW in temp well 08. Dry at 9D. w
- 0930 Call to E. Connelly (driller) and make arrangements for Connelly to return to site and deepen boreholes.
- 1005 Drillers on site. Wells do not have end caps. It appears that sand flowed into well to ~ top of water table. Drillers will redrill wells w/ no water and in wells w/ less water will dr. 71 to 15 ft bgs. New Temp wells will be set w/ end caps. Not: @ 0942 temp well 10 dry at 9.65'. At 0950 temp well 09 ^{DTW at} dry at 7.20'. At 0955 temp well 11 dry 8.54 ft. At 0958 Temp well 05 dry at 8.08 ft bgs. w
- 1012 6.4 liters purged from temp well 01. Well now dry. Allowing to recharge. w
- 1021 Temp well 06. DTW 7.39 ft bTDC. TD 8.65 ft bTDC. foam.
- 1026 temp well 03. DTW 6.66 ft bTDC. w
- 1028 temp well 04. DTW 6.99 ft bTDC w
- 1029 temp well 02. DTW 6.69' bTDC. w
- 1030 Drillers begin Redrill of borehole 10. w
- 1040 Collect JCC-GW-01 from temp well 01 w
- 1041 TD borehole 10 redrill at 15'. Set temp to ~13 ft: w/ 2' above ground
- 1055 Begin redrill of temp well 08. w
- 1101 DTW in temp well 10 = 11.09' bTDC. TD of 15.12' bTDC - DTW of 11.09' = water column of 4.03 ft \times 0.16 gal/ft (2 in borehole) = 0.65 gal/bore vol. \times 3 = 1.9 gal/3 bore vol = 7.2 liters / 3 bore vol. w
- 1105 Begin purging Temp well 10. w
- 1108 Driller TD Temp well 08 redrill w
- 1112 Begin temp well 11 redrill w
- 1117 Property owner Mr. Darby on site. w
- 1128 TD temp well 11 redrill at 10 ft bgs w
- ~~1130~~ Begin temp well 05 w
- 1135 ~~TD~~ Begin temp well 07. w

Jay-Cee Cleaners

Thursday 4-24-08

- 1145 TD temp 07 redrill _____ n
- 1150 Begin drilling temp well 05 redrill _____ n
- 1207 TD temp well 05 redrill. _____ n
- 1214 temp well 08 redrill DTW = 9.19 ft b TDC, TD = 11.20 ft b TDC
- 1216 temp well 11 redrill DTW = 7.22 ft b TDC TD = 10.79 ft b TDC
- 1220 temp well 07 redrill DTW = 7.77 ft b TDC TD = 12.73 ft b TDC
- 1225 temp well 05 redrill DTW 7.75 ft b TDC TD = 14.66 ft b TDC
- 1229 Temp Original boreholes for 10, 08, 11, 07 + 05 plugged by Connelly drilling w/ bentonite chips. _____ n
- 1239 Connelly Drilling off site. _____ n
- 1350 Collect JCC-GW-10 from temp well 10 ^{After 3 bore vol. purged 4-24-08} _____ n
- TD of _____ n
- 1400 Set up at temp well 08. TD of 11.20 ft - DTW 9.19 = water column 2.01 ft x 0.163 gal / bore vol. (2-in borehole) = 0.33 gal / 1 bore vol x 3 = 0.98 gal / 3 bore vol ~~x~~ = 3.7 Liters / 3 bore vol. _____ n
- 1444 Lori Coleman off site to deliver samples to FedEx _____ n
- 1526 Collect JCC-TB2 _____ n
- 1528 temp well 08 dry after 3.7 liters purged. Allowing to recharge. _____ n
- 1536 L. Coleman Return from FedEx _____ n
- 1541 Collect JCC-GW-08 _____ n
- 1552 Temp well 07 TD 12.73 - DTW 7.77 ft = 4.96 ft water column x 0.16 gal / bore vol. (2-in borehole) = 0.79 gal / bore vol. x 3 = 2.4 gal / 3 bore vol. = 9.1 liters / 3 bore vol. _____ n
- 1608 Begin purging temp well 07. _____ n
- 1916 9.1 Liters purged. _____ n
- 1922 Collect JCC-GW-07 _____ n
- 1927 START + EPA off site _____ n

Am

Friday 4-25-08

Jay-Cee

0711 START Jordan Vaughn + Lori Coleman on site. H+S mty.
 0720 Set up at temp well 09. DTW = 7.21 ft b TDC. TD = 9.55 ft b TDC.
 TD 9.55 ft - DTW 7.21 ft = water column 2.34' x 0.16 gal/ft (2-in borehole) = 0.37 gal / 1 bore vol x 3 = 1.1 gal / 3 bore vol = 4.2 liters / 3 bore vol. w

0725 Begin purging temp well 09. w

0735 Property owner Mr. Darby on site w

0815 Surveyors George Young on site. Will survey 11 well plus 1 benchmark. w

0855 Collect JCC-GW-09 from temp well 09. w

0907 Temp well 11. TD 10.79 - DTW 7.23 ft b TDC = water column 3.56 ft x 0.16 gal/ft = 0.57 gal / well bore x 3 = 1.7 gal / 3 well bores = 6.4 liters / 3 well bores. w

1123 Collect JCC-GW-11 from Temp well 11. w

1125 Temp well 05. TD 14.65 ft b TDC - DTW 7.78 ft b TDC = water column 6.87 ft x 0.16 gal/ft = 1.1 gal / well bore x 3 = 3.3 gal / 3 well bore = 12.5 g Liters / 3 well bore vol. w

1145 Surveyors off site. Survey complete for 11 temp wells and one bench mark. w

1220 Property owner on/off site w

1326 Fed Ex on site w 2nd bladder pump. w

1329 Temp well 06. TD 8.64 ft b TDC - DTW 7.42 ft b TDC = 1.22 ft water column x 0.16 gal/ft (2-in borehole) = 0.20 gal / well bore x 3 = 0.60 gal / 3 well bore. = 2.3 liters / 3 well bore vol. w

1339 Begin purging temp well 06 (~ End time = 1430) w

1356 DTW = 11.13 ft b TDC. in Temp well 10. w

1359 Temp well 08 DTW = 9.24 ft b TDC. w

1401 Temp well 11 DTW = 7.25 ft b TDC w

1403 Temp well 07 DTW 7.78 ft b TDC w

1404 Temp well 09 DTW 7.23 ft b TDC w

1407 Temp well 01 DTW 6.40 ft b TDC w

1407 2.3 liters purged from temp well 06 w

1441 Collect JCC-GW-06 from temp well 06 w

1443 temp well 02 DTW 6.78. TD 9.70 ft b TDC w

1445 temp well 03 DTW 6.70. TD 9.57 ft. TD 9.57 ft b TDC - DTW 6.70 ft b TDC = 2.87 ft water column x 0.16 gal/ft (2-in well bore vol) = 0.46 gal / 1 well bore vol. x 3 = 1.38 gal / 3 well bore vol = 5.3 liters / 3 well bore vol. w

1451 Began purging temp well 03. Estimated purge end time = 1651 w

1507 temp well 04. DTW 7.06 ft b TDC. DTW 9.77 ft b TDC w

1653 Collect JCC-GW-03 from temp well 03 after purg'n 5.3 L. w

Jay-Cee Cleaners

JCC-GW-05

Friday 4-25-08

- 1705 Collected ~~JCC-GW-04~~ after purging 12.5 L from temp well ~~04~~⁰⁵.
- 1731 Begin purging ~~JCC~~ temp well ~~04~~⁰². TD of 9.77 ft b TDC - DTW of 7.06 ft b TDC = water column of 2.71 ft $\times 0.163^2$ gal/ft (2-in diameter bore hole) = 0.43 gal / 1 bore vol $\times 3 = 1.3$ gal / 3 bore vol. = 5.0 L / 3 bore vol. W
- 1800 Begin purging temp well 02. TD of 9.70 ft b TDC - DTW of 6.78 ft b TDC = 2.92 ft water column $\times 0.16$ gal/ft (2-in bore hole) = ~~4.7 gal~~^{0.47 gal} / 1 bore vol. $\times 3 = 1.4$ gal / 3 bore vol = 5.4 L / 3 bore vol. W
- 1935 Collect JCC-GW-04 from temp well 04 after purging 5.3 L MS/MSD. W
- 1955 Collect Rinse Blank JCC-RB W
- 2002 Collect JCC-GW-02 after purging 5.4 L from temp well 02.
- 2008 Collect JCC-GW-12, duplicate sample from temp well 02.
- 2014 Collect JCC-PW, purge + decon water. ~~at 5 gal~~^{at 20 gal} of purge/decon water in 55 gal drum stored on site. 55-gal drum containing soil + ~~containing~~^{containing} IDW also stored on site. W
- 0830 Check in w/ OSC Todd Richardson via phone to let him know we are done Sampling.
- 0834 START off site. W

Saturday 4-26-08

Jay-Cee Cleaners

0840

START Jordan Vaughn on site after purchasing concrete
Back filled remaining boreholes w/ concrete grout + bentonite
chips.

1018

START off site. Demobing to PA.

Am

Jay-Cee Cleaners


Wednesday May 28, 2008

10:40 Arrive at Jay-Cee Cleaners site
1100 Call to ~~drift~~ Clean Harbor. Cell phone has no reception so used pay phone. Clean Harbor delayed due to wind restrictions on bridge.

1125 Clean Harbor arrives at Jay-Cee Cleaners site. Picks up 2 55-gal. drums - one containing purg/decon water, one containing soil + contact waste. Manifest tracking No. 001876158.

NOTE: Observed 3 more dead birds on site. Possibly starlings.

1158 Clean Harbor + START personnel Jordan Vaughn off site.



APPENDIX C

Monitoring Point Soil Descriptions



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-014-08-02103

Page: 1 of 1

Boring No.: SBC1

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: direct push

Project Location: Jay-Lee Cleaners

Drill Crew: E. Connelly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | 0.0 | 0.0 | | 0.0-0.5 ash fault |
| 2 | | 0.0 | 0.0 | | 0.5-3.0 sand (SP), light brown, loose, non plastic, moist, subrounded quartz. |
| 3 | | | | | |
| 4 | JCC 01-0405 | 0.0 | 0.0 | | 3.0-5.0 sand (SP), very light yellowish gray, loose, non-plastic, moist, sub rounded quartz |
| 5 | | 100b | 0.0 | | 5.0-10.0 sand (SP), very light yellowish gray, loose, non-plastic, wet, sub rounded qtz w/ trace mafics. |
| 6 | | | 0.0 | | |
| 7 | | | 0.0 | | |
| 8 | | | 0.0 | | |
| 9 | | | 0.0 | | |
| 10 | | | | | TD at 10.0 |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

5.0 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-014-08 02 DD3

Page: 1 of 1

Boring No.: 02

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: Direct push

Project Location: Jey-Cee Cleaners

Drill Crew: E. Connelly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|---------------------------|---|
| 1 | | 100 to | 0.0 | 1" sch 40 PVC, 0.010 slot | 0.0 - 6.5 sand (SP), pale orange, loose, non-plastic, most subrounded quartz, trace mafics + shell fragments. |
| 2 | | | 0.0 | | |
| 3 | | | 0.3 | | |
| 4 | | | 0.4 | | |
| 5 | | | 2.1 | | |
| 6 | | 100 to | 4.3 | 1" sch 40 PVC, 0.010 slot | 6.5 - 10.0, sand (SP), pale gray, loose, non-plastic, wet, subrounded quartz. |
| 7 | | | 46.1 | | |
| 8 | | | ~ 113 | | |
| 9 | | | 46.3 | | |
| 10 | JCC-02-0910 | | 224 | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

6.5 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-014-08-02-003

Page: 1 of 1

Boring No.: SB-03

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: direct push

Project Location: Jay-Cee Cleaners

Drill Crew: E. Connelly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | | 1.2 | | 0.0 - 6.0, sand (SP), pale grayish to pale brownish gray, loose, non-plastic, moist, sub rounded quartz w/ shell fragments. |
| 2 | JCL-030203 | | 27.9 | | |
| 3 | | | 26.1 | | |
| 4 | | | 34.0 | | |
| 5 | | 100% | 26.7 | | |
| 6 | | | 27.1 | | 6.0 - 9.0, sand (SP), very light gray, loose, non-plastic, wet, subrounded qtz, |
| 7 | | | 32.5 | | |
| 8 | | | 6.0 | | |
| 9 | | | 2.5 | | 9.0 - 9.5, sand (SP), light brownish gray, loose, non-plastic, wet, subrounded qtz, trace mafics. |
| 10 | | | 24.5 | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

6.0 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-014-08-02-003

Page: 1 of 1

Boring No.: 04

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: direct push

Project Location: Jay-Zee Cleaners

Drill Crew: E. Connelly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | | 0.1 | | 0.0 - 1.5, sand with gravel (SW), orangish brown, loose, non-plastic, moist, subrounded qtz, trace matrix & shell fragments |
| 2 | | | 0.2 | | 1.5 - 5.0, sand (SP) ^{very n} , pale orangish brown, loose, non-plastic, moist, subrounded qtz, trace shell fragments |
| 3 | | | 0.3 | | |
| 4 | | | 0.1 | | |
| 5 | | 100% | 0.1 | | 5.0 - 6.0, sand (SP) ^{very n} , light gray, loose, non-plastic, moist, subrounded qtz. |
| 6 | | | 0.1 | | |
| 7 | | | 0.1 | | 6.0 - 9.0, sand (SP) very light gray, loose, non-plastic, wet, subrounded qtz, trace shell fragments |
| 8 | | | 34.1 | | |
| 9 | | | 45.2 | | |
| 10 | | | 24.5 | | 9.0 - 10.0, sand (SP), light brownish gray, loose, non-plastic, wet, subrounded qtz, |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

6.0 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23 014 0802-08

Page: 1 of 1

Boring No.: 05

Drilling Rig: Geoprobe

Contractor: Connolly

Drilling Method: direct push

Project Location: Jay-Cee Cleaners

Drill Crew: E. Connolly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | | 0.1 | | 0.0 - 3.0, sand (SP), orangish brown, loose, non-plastic, moist, subrounded grt, trace mafics + shell fragments. |
| 2 | | | 0.1 | | |
| 3 | | | 0.3 | | 3.0 - 7.0 sand (SP), very pale gray, loose, non-plastic, moist, subrounded grt, trace mafics + shell fragments. |
| 4 | | | 1.1 | | |
| 5 | | 100% | 0.3 | | |
| 6 | | | 1.3 | | |
| 7 | <u>JCC-05-0607</u> | | 0.6 | | |
| 8 | <u>JCC-05-0607</u> | | 1.1 | | 7.0 - 10.0, sand (SP), very pale gray, loose, non-plastic, wet, subrounded grt, trace shell fragments. |
| 9 | | | 0.2 | | |
| 10 | | | 0.2 | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | 0% | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

7.0 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-04-08-02003

Page: 1 of 1

Boring No.: 06

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: direct push

Project Location: Jay-Cee Cleaners

Drill Crew: E. Connelly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | | 0.0 | | 0.0 - 6.5 sand (SR), pale orangish brown, loose, non-plastic, moist, subrounded quartz, trace mafics + shell fragments |
| 2 | | | 0.1 | | |
| 3 | | | 0.6 | | |
| 4 | | | 3.2 | | |
| 5 | sec-06 0405 | | 1.1 | | |
| 6 | | 100% | 1.5 | | 6.5 - 7.5 sand (SR), very pale gray, loose, non-plastic, moist, subrounded gtz, shell fragments |
| 7 | | | 0.5 | | |
| 8 | | | 1.2 | | 7.5 - 10.0 sand (SR), very pale gray, loose, non-plastic, wet, subrounded gtz, shell fragments |
| 9 | | | 0.3 | | |
| 10 | | | 0.3 | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | 0% | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

7.5 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-14-08-0208

Page: 1 of 1

Boring No.: 07

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: Direct Push

Project Location: Skyline Cleaners

Drill Crew: E. Connelly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|---|
| 1 | | NA | c.c. | | 0.0-2.5, sand (SP), pale brownish gray, loose, non-plastic, moist, subrounded gtz, shell fragments. |
| 2 | | | c.c. | | |
| 3 | | | c.c. | | 2.5-5.5, sand (SA), light orangish brown, loose, non-plastic, moist, subrounded gtz, shell fragments. |
| 4 | | | c.c. | | |
| 5 | | 100% | c.c. | | |
| 6 | | | c.c. | | 5.5-8.0, sand (SA), very pale gray, loose, non-plastic, moist, subrounded gtz, shell fragments, trace mafics. |
| 7 | | | c.c. | | |
| 8 | 500-07-0708 | | c.c. | | 8.0-10.0, sand (SP), very pale gray, loose, non-plastic, wet, subrounded gtz, shell fragments, trace mafics. |
| 9 | | | c.c. | | |
| 10 | | | c.c. | | |
| 11 | | | c.c. | | |
| 12 | | | | | |
| 13 | | 0% | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

§C = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-044-08-01-003 Page: 1 of 1

Boring No.: 25

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: Direct Push

Project Location: Jay Lee Cleaners

Drill Crew: E. Connelly

Sampling Method: Continuous Core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | NA | 0.0 | | 0.0-3.5. clayey sand (SC), light orange/brown, stiff, low plasticity, most rounded qtz & shell fragments. |
| 2 | | | 0.0 | | |
| 3 | | | 0.0 | | |
| 4 | | | 0.0 | | 3.5-8.5. sand (SP), Very fine pale orange, loose, non-plastic, most subrounded qtz, shell fragments. |
| 5 | | 100% | 0.0 | | |
| 6 | | | 0.0 | | |
| 7 | | | 0.0 | | |
| 8 | sec 08 0708 | | 0.0 | | |
| 9 | | | 0.0 | | 8.5-10.0. sand (SP), very pale yellowish gray, loose, non-plastic, wet, subrounded qtz, trace mafic shell fragments. |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | 0% | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

8.5 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-014-08-02-06 Page: 1 of 1

Boring No.: 09

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: Direct Push

Project Location: Jay-Cee Cleaners

Drill Crew: E. Connelly

Sampling Method: Continuous Core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | | 0.0 | | 0.0-2.5 - sand (SP), light brownish gray, loose, non-plastic, moist, rounded gtz, trace mafics. |
| 2 | | | 0.0 | | |
| 3 | | | 0.0 | | 2.5-4.0, SP Super sand (SC), light to pale orange, SP st , low-plasticity, moist, sub- rounded gtz, shell fragments, trace mafics |
| 4 | | | 0.0 | | |
| 5 | | | 0.2 | | 4.0 - 6.8, sand (SP) very pale yellow loose, non-plastic, moist, subrounded gtz, shell fragments |
| 6 | | | 0.7 | | |
| 7 | JCC-09-0607 | | 0.6 | | 6.8 - 10.0, sand (SP), very pale gray, loose, non-plastic, wet, subrounded gtz, shell fragments, trace mafics |
| 8 | | | 0.1 | | |
| 9 | | | 0.0 | | |
| 10 | | | 0.1 | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

6.8 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E23-014 08-02-003

Page: 1 of 1

Boring No.: 10

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: direct push

Project Location: Jay-Cee Cleaners

Drill Crew: E. Connelly

Sampling Method: continuous core

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | ↑ | 0.0 | | 0.0 - 2.5. clayey sand (SC), light orange, sh. known, stiff, low plasticity, moist, sub rounded quartz, shell fragments, trace mafics. |
| 2 | | | 0.0 | | |
| 3 | | | 0.0 | | 2.5 - 6.0. sand (SP), light orange, loose, non-plastic, moist, sub rounded qtz, shell fragments, trace mafics |
| 4 | | | 0.0 | | |
| 5 | | 100% | 0.0 | | |
| 6 | | | 0.0 | | 6.0 - 9.0 sand (SP) very pale gray, loose, non-plastic, moist, sub rounded qtz, shell fragments, |
| 7 | | | 0.0 | | |
| 8 | | | 0.0 | | |
| 9 | JCC-10-0809 | ↓ | 0.0 | | 9.0 - 10.0, sand (SP), very pale gray, loose, non-plastic, wet, sub rounded qtz, shell fragments, |
| 10 | | | 0.0 | | |
| 11 | | ↑ | | | |
| 12 | | | | | |
| 13 | | 0% | | | |
| 14 | | ↓ | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

9.0 = Depth to Water



Tetra Tech EMI
7 Creek Parkway, Suite 700
Boothwyn, Pennsylvania 19061

Project No.: E2314-08-02-003

Page: 1 of 1

Boring No.: 11

Drilling Rig: Geoprobe

Contractor: Connelly

Drilling Method: Direct push

Drill Crew: E. Connelly

Sampling Method: continuous core

Project Location: Jay-Cee Cleaner

Logged by: J. Vaughn

Date Started: 4-23-08

Date Finished: 4-23-08

| DEPTH (feet) | SAMPLE INTERVAL (feet) | Recovered/ Attempted (inches) | PID (ppm) | WELL COMPLETION | LITHOLOGY DESCRIPTION |
|-----------------|------------------------------|-------------------------------------|--------------|--------------------|--|
| 1 | | ↑ | 0.0 | 1" | 0.0-1.5, sand (SP), light orangish brown, loose, non-plastic, moist, subrounded qtz, trace mafics |
| 2 | | | 0.3 | 1" | 1.5-4.0 sand (SP), light orange, loose, non-plastic, moist, subrounded quartz & shell fragments, trace mafics. |
| 3 | | | 0.4 | 1" | |
| 4 | | | 0.2 | 1" | 4.0-7.0 sand (SP), very pale gray, loose, non-plastic, moist, subrounded qtz, shell fragments, trace mafics |
| 5 | | 100% | 0.4 | 1" | |
| 6 | | | 1.2 | 1" | |
| 7 | JCC-11-0607 | | 0.8 | 1" | 7.0-10.0 sand (SP), very pale gray, loose, non-plastic, wet, subrounded quartz, shell fragments, trace mafics. |
| 8 | | | 0.5 | 1" | |
| 9 | | | 0.1 | 1" | |
| 10 | | | 0.3 | 1" | |
| 11 | | | | 1" | |
| 12 | | | | 1" | |
| 13 | | 0% | | 1" | |
| 14 | | | | 1" | |
| 15 | | | | 1" | |
| 16 | | | | 1" | |
| 17 | | | | 1" | |
| 18 | | | | 1" | |
| 19 | | | | 1" | |
| 20 | | | | 1" | |
| 21 | | | | 1" | |
| 22 | | | | 1" | |

ppm = parts per million

ND = Non-Detect

bgs = below ground surface

7.0 = Depth to Water

APPENDIX D

Survey Results

LOCATION OF MONITORING WELLS
ON THE LANDS OF
JAYCEE CLEANERS

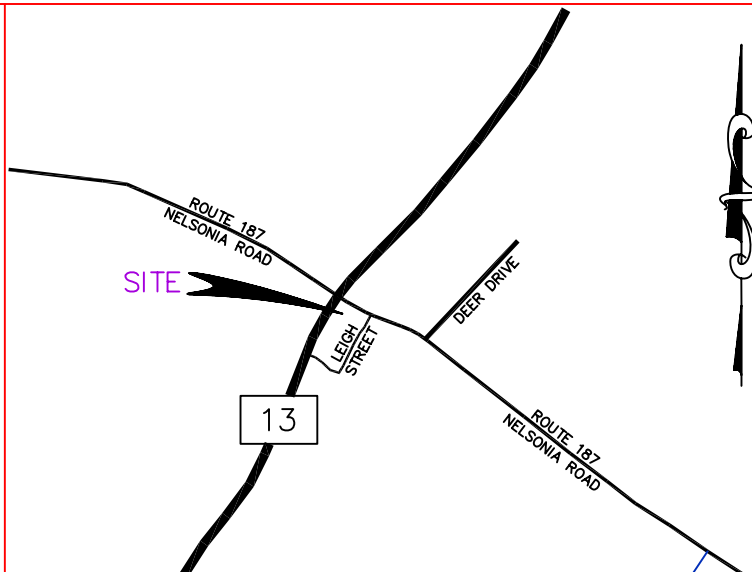
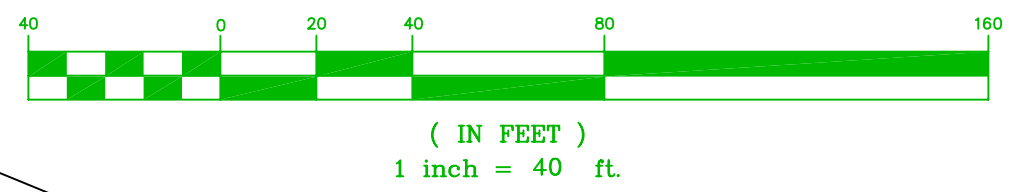
TAX MAP 69C-A-PARCEL 39
PARCEL ID#069C0A000003900
METOMPKIN ELECTION DISTRICT
ACCOMACK COUNTY,VIRGINIA

PARCEL 40
N/F
CLOVERLAND FARMS, INC.

PARCEL 39
N/F
JAYCEE CLEANERS, INC.

PARCEL 38
N/F
COMPLETE CAR CARE, INC.

GRAPHIC SCALE



VICINITY MAP
SCALE 1" = 2000'

COORDINATE CHART

| DESCRIPTION | LATITUDE | LONGITUDE | TOP OF CASING ELEVATION |
|-------------|--------------|---------------|-------------------------|
| MW1 | N37-49-06.77 | W075-35-19.59 | 50.25 |
| MW2 | N37-49-06.13 | W075-35-18.33 | 50.49 |
| MW3 | N37-49-06.07 | W075-35-18.37 | 50.51 |
| MW4 | N37-49-06.00 | W075-35-18.11 | 50.86 |
| MW5 | N37-49-05.70 | W075-35-18.16 | 51.56 |
| MW6 | N37-49-05.75 | W075-35-17.58 | 51.21 |
| MW7 | N37-49-05.42 | W075-35-17.63 | 51.55 |
| MW8 | N37-49-05.24 | W075-35-16.84 | 52.97 |
| MW9 | N37-49-06.27 | W075-35-17.87 | 51.06 |
| MW10 | N37-49-04.96 | W075-35-15.72 | 54.87 |
| MW11 | N37-49-05.01 | W075-35-17.70 | 51.00 |
| BM1 | N37-49-05.79 | W075-35-17.79 | 50.87 |

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I HAVE MADE A SURVEY
OF THE PROPERTY SHOWN FOR THE PURPOSE OF
LOCATING THE IMPROVEMENTS THEREON ONLY AND
THAT THEY ARE AS SHOWN. THIS PLAT IS NOT
INTENDED FOR USE IN ESTABLISHING THE PROPERTY
LINES.

George E. Young, III
Professional Land Surveyor MD No. 10854
VA No. 1700
DE No. 534
DATE

LEGEND

- BM1 - BENCHMARK
- MW5 - MONITORING WELL

NOTE:
1) ALL ELEVATIONS ARE BASED ON NAD 27 HORIZONTAL AND NGVD
1929 VERTICAL DATUM TIED TO VIRGINIA STATE PLANE COORDINATES.
2) THE BENCHMARK SHOWN IS AN IRON ROD w/YELLOW CAP AT ELEV. 50.87'

GEY
GEORGE E. YOUNG, III, P.C.
ENGINEERS & SURVEYORS

2317 STOCKTON ROAD
POCOMOKE MARYLAND 21851
PHONE: (410)-957-2149
(410)-632-2434
(410)-957-2928
FAX:

| | |
|-------------|------------------|
| DATE DRAWN: | 05/01/08 |
| CADD NAME: | V08037TETRA TECH |
| JOB # : | 08037-A |
| SHEET | 1 OF 1 |

APPENDIX E

April 2008 Residential Well Results

April 2008 Residential Well Results
Jay-Cee Cleaners Site

| Sampling Location : JCC-RW-01 | | | | | | JCC-RW-02 | | JCC-RW-03 | | JCC-RW-05 | | JCC-RW-06 | | JCC-RW-07 | | JCC-RW-08 Duplicate of JCC-RW-01 | | JCC-TB | |
|-------------------------------|------|------|---------|-----|-----------|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|-----|--|-----|-----------|-----|
| Field QC : | | | | | | Water | | Water | | Water | | Water | | Water | | Water | | Water | |
| Matrix : | | | | | | 4/17/2008 | | 4/17/2008 | | 4/17/2008 | | 4/17/2008 | | 4/17/2008 | | 4/17/2008 | | 4/17/2008 | |
| Date Sampled : | | | | | | 9:30 | | 9:38 | | 9:42 | | 10:13 | | 10:20 | | 10:24 | | 9:33 | |
| Time Sampled : | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CRQL | MCL | RBC | C/N | ERG | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q |
| Acetone | 5.0 | NE | 22,000 | N | 2,200,000 | 5.6 | B,J | 4.3 | B,J | 4.8 | B,J | 3.5 | B,J | 3.6 | B,J | 5.2 | B,J | 7.5 | B,J |
| Benzene | 0.5 | 5.0 | 0.41 | C | 41 | | | | | | | | | | | | | 0.03 | J |
| Bromobenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| Bromochloromethane | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| Bromodichloromethane | 0.5 | NE | 1.1 | C | 110 | | | | | | | | | | | | | 0.09 | J |
| Bromoform | 0.5 | NE | 8.5 | C | 850 | | | | | | | | | | | | | | |
| Bromomethane | 0.5 | NE | 8.7 | N | 870 | | | | | | | | | | | | | | |
| 2-Butanone | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | |
| sec-Butylbenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| tert-Butylbenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| n-Butylbenzene | 0.5 | NE | NE | | NE | 0.03 | B,J | 0.02 | B,J | | | | | | | | | 0.04 | B,J |
| Carbon disulfide | 0.5 | NE | 1,000 | N | 100,000 | | | | | | | | | | | | | | |
| Carbon Tetrachloride | 0.5 | 5.0 | 0.2 | C | 20 | | | | | | | | | | | | | | |
| Chlorobenzene | 0.5 | 100 | 91 | N | 9,100 | | | | | | | | | | | | | | |
| Chlorodibromomethane | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| Chloroethane | 0.5 | NE | NE | | NE | | | 0.1 | J | | | | | | | | | | |
| Chloroform | 0.5 | NE | 0.19 | C | 19 | | | | | | | | | 0.04 | B,J | | | 8.6 | |
| Chloromethane | 0.5 | NE | 1.8 | C | 180 | | | 0.04 | B,J | | | | | | | | | 0.05 | J |
| 2-Chlorotoluene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| 4-Chlorotoluene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| Cyclohexane | 0.5 | NE | 13,000 | N | 130 | | | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 1.0 | 0.2 | 0.00032 | C | 0.03 | | | | | | | | | | | | | | |
| 1,2-Dibromoethane | 0.5 | 0.05 | 0.0065 | C | 0.65 | | | | | | | | | | | | | | |
| Dibromomethane | 0.5 | NE | 370 | N | 37,000 | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.5 | 600 | 370 | N | 37,000 | | | | | | | | | | | | | | |
| 1,3-Dichlorobenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.5 | 75 | 0.43 | C | 43 | | | | | | | | | | | | | | |
| Dichlorodifluoromethane | 0.5 | NE | 390 | N | 39,000 | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 0.5 | NE | 2.4 | C | 240 | | | | | | | | | | | | | | |
| 1,2-Dichloroethane | 0.5 | 5.0 | 0.15 | C | 15 | | | | | | | | | | | | | | |
| 1,1-Dichloroethene | 0.5 | 7.0 | 340 | N | 34,000 | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.5 | 70 | 370 | N | 37,000 | | | | | | | | | | | | | | |
| 1,2-Dichloropropane | 0.5 | 5.0 | 0.39 | C | 39 | | | | | | | | | | | | | | |
| 1,3-Dichloropropane | 0.5 | NE | 730 | N | 73,000 | | | | | | | | | | | | | | |
| 2,2-Dichloropropane | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| 1,1-Dichloropropene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| Ethylbenzene | 0.5 | 700 | 1.5 | C | 150 | | | | | | | | | | | | | 0.4 | J |
| Freon 113 | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| Hexachlorobutadiene | 0.5 | NE | 0.86 | C | 86 | | | | | | | | | | | | | | |
| 2-Hexanone | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | |
| Isopropylbenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| p-Isopropyltoluene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | |
| Methyl Acetate | 1.0 | NE | 37,000 | N | 3,700,000 | | | | | | | | | | | | | | |
| Methylcyclohexane | 0.5 | NE | 6,300 | N | 630,000 | | | | | | | | | | | | | | |

April 2008 Residential Well Results
Jay-Cee Cleaners Site

| Sampling Location : Field QC : Matrix : Date Sampled : Time Sampled : | | | | | | JCC-RW-01 | | JCC-RW-02 | | JCC-RW-03 | | JCC-RW-05 MS/MSD | | JCC-RW-06 | | JCC-RW-07 | | JCC-RW-08 Duplicate of JCC-RW-01 Water | | JCC-TB | |
|---|------|-------|--------|-----|---------|----------------------------|---|----------------------------|---|----------------------------|-----|-----------------------------|---|-----------------------------|---|-----------------------------|---|---|---|----------------------------|-----|
| | | | | | | Water 4/17/2008 9:30 | | Water 4/17/2008 9:38 | | Water 4/17/2008 9:42 | | Water 4/17/2008 10:13 | | Water 4/17/2008 10:20 | | Water 4/17/2008 10:24 | | 4/17/2008 9:33 | | Water 4/17/2008 8:50 | |
| ANALYTE | CRQL | MCL | RBC | C/N | ERG | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q |
| Methyl-ter-butyl ether | 0.5 | NE | 12 | C | 1,200 | | | | | | | | | | | | | | | | |
| Methylene Chloride | 0.5 | 5.0 | 4.8 | C | 480 | | | | | | | | | | | | | | | 0.5 | |
| 4-Methyl-2-pentanone | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| Naphthalene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | | 0.1 | B,J |
| n-Prpylbenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | | 0.02 | J |
| Styrene | 1.0 | 100 | 1,600 | N | 160,000 | | | | | | | | | | | | | | | 0.06 | J |
| 1,1,2,2-Tetrachloroethane | 0.5 | NE | 0.067 | C | 6.7 | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.5 | NE | 0.52 | C | 52 | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 0.5 | 5.0 | 0.11 | C | 11 | | | | | | | | | | | | | | | | |
| Toluene | 0.5 | 1000 | 2,300 | N | 230,000 | | | | | | | | | | | | | | | 0.4 | J |
| 1,2,3-Trichlorobenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.5 | 70 | 19 | C | 1,900 | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.5 | 200 | 9,100 | N | 910,000 | | | | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.5 | 5.0 | 0.24 | C | 24 | | | | | | | | | | | | | | | | |
| Trichloroethene | 0.5 | 5.0 | 1.7 | C | 170 | | | | | | | | | | | | | | | | |
| Trichlorofluoromethane | 0.5 | NE | 1,300 | N | 130,000 | | | | | | | | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.5 | NE | 0.0096 | C | 0.96 | | | | | | | | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.5 | NE | 15 | N | 1,500 | | | | | 0.03 | B,J | | | | | | | | | 0.06 | J |
| 1,3,5-Trimethylbenzene | 0.5 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| Vinyl acetate | 0.5 | NE | 410 | N | 41,000 | | | | | | | | | | | | | | | | |
| Vinyl chloride | 0.5 | 2.0 | 0.016 | C | 1.6 | | | | | | | | | | | | | | | | |
| m-Xylene/o-Xylene* | 1.0 | 10000 | 200 | N | 20,000 | | | | | | | | | | | | | | | 1.2 | |
| p-Xylene* | 1.0 | 10000 | 200 | N | 20,000 | | | | | | | | | | | | | | | 0.4 | J |

Notes:

A blank results cell indicates that the analyte was not detected

All values are presented in parts per billion

B = Not detected at a concentration substantially above the level reported in laboratory or field blanks

C/N = Carcinogenic or non-carcinogenic contaminants; EPA Region 3 recommends
clean-up levels for carcinogenic contaminants of 10-times less than listed SSL

CRQL = Contract-required quantitation limit

EPA = U.S. Environmental Protection Agency

ERG = Emergency Removal Guideline concentration

J = Analyte present; reported value is estimated; concentration is outside the range of accurate quantitation

MCL = Maximum contaminant level

MS/MSD = Matrix spike/matrix spike duplicate

NE = Not established

Q = Analytical Data Qualifier

QC = Quality control

RBC = Risk-based concentration established for tapwater

* = MCL and RBC are for total xylenes

APPENDIX F

April 2008 Soil Results

April 2008 Soil Results
Jay-Cee Cleaners Site

| Sampling Location : Matrix : Date Sampled : Time Sampled : | | | | | | JCC-01-0405 Soil 4/23/2008 09:54 | | JCC-02-0910 Soil 4/23/2008 10:21 | | JCC-03-0203 Soil 4/23/2008 10:32 | | JCC-04-0809 Soil 4/23/2008 10:57 | | JCC-05-0607 Soil 4/23/2008 11:24 | | JCC-06-0607 Soil 4/23/2008 11:50 | | JCC-07-0708 Soil 4/23/2008 12:09 | | JCC-08-0708 Soil 4/23/2008 12:32 | |
|---|------|------------------|-------------------|-----|----------|---|---|---|----|---|---|---|----|---|---|---|---|---|---|---|---|
| ANALYTE | CRQL | MCL-based SSL | Risk-based SSL | C/N | ERG | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q | Result | Q |
| Acetone | 10 | NE | 4400 | N | 440000 | | | 27 | B | | | 16 | B | | | | | 7.6 | B | | |
| Benzene | 5.0 | NE | 0.23 | C | 23 | | | | | | | | R | | | | | | | | |
| Bromochloromethane | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| Bromodichloromethane | 5.0 | NE | 0.3 | C | 30 | | | | | | | | | | | | | | | | |
| Bromoform | 5.0 | NE | 2.3 | C | 230 | | | | UJ | | | | | | | | | | | | |
| Bromomethane | 5.0 | NE | 2.2 | N | 220 | | | | | | | | | | | | | | | | |
| 2-Butanone | 10 | NE | NE | | NE | | | | | | | 7.4 | J | | | | | | | | |
| Carbon Disulfide | 5.0 | NE | 270 | N | 27000 | | | 3.6 | J | | | | | | | | | | | | |
| Carbon tetrachloride | 5.0 | 2.0 | 0.079 | C | 7.9 | | | | | | | | UL | | | | | | | | |
| Chlorobenzene | 5.0 | 75 | 68 | N | 6800 | | | | | | | | UL | | | | | | | | |
| Chloroethane | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| Chloroform | 5.0 | NE | 0.055 | N | 5.5 | 2.5 | B | 17 | | 2.5 | B | 1.3 | B | 2.5 | B | 1.8 | B | 2.3 | B | 2.2 | B |
| Chloromethane | 5.0 | NE | 0.46 | C | 46 | | | | | | | | | | | | | | | | |
| Cyclohexane | 5.0 | NE | 13000 | N | 1300000 | | | | | | | 45 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | 0.092 | 0.00015 | C | 0.015 | | | | UJ | | | | | | | | | | | | |
| Dibromochloromethane | 5.0 | NE | 0.22 | C | 22 | | | | | | | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | 0.015 | 0.0019 | C | 0.19 | | | | | | | | UL | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | 660 | 400 | N | 40000 | | | | UJ | | | | UL | | | | | | | | |
| 1,3-Dichlorobenzene | 5.0 | NE | NE | | NE | | | | UJ | | | | UL | | | | | | | | |
| 1,4-Dichlorobenzene | 5.0 | 81 | 0.46 | C | 46 | | | | UJ | | | | UL | | | | | | | | |
| Dichlorodifluoromethane | 5.0 | NE | 610 | N | 61000 | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5.0 | NE | 0.7 | C | 70 | | | 13 | | | | | | | | | | | | | |
| 1,2-Dichloroethane | 5.0 | 1.5 | 0.044 | C | 4.4 | | | | | | | | UL | | | | | | | | |
| 1,1-Dichloroethene | 5.0 | 2.6 | 120 | N | 12000 | | | | | | | | UL | | | | | | | | |
| cis-1,2-Dichloroethene | 5.0 | 21 | 110 | N | 11000 | | | 5100 | J | 7.0 | | 35 | | 7.1 | | | | 10 | | | |
| trans-1,2-Dichloroethene | 5.0 | 32 | 34 | N | 3400 | | | 22 | | | | | | | | | | | | | |
| 1,2-Dichloropropane | 5.0 | 1.7 | 0.13 | C | 13 | | | | | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| 1,4-Dioxane | 100 | NE | 1.2 | N | 120 | | R | | R | | R | | R | | R | | R | | R | | R |
| Ethylbenzene | 5.0 | 890 | 1.9 | C | 190 | | | 2300 | J | | | 700 | J | | | | | | | | |
| 2-Hexanone | 10 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| Isopropylbenzene | 5.0 | NE | NE | | NE | | | | | | | 480 | J | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | NE | NE | | NE | | | | | | | | | | | | | | | | |
| Methyl acetate | 5.0 | NE | 7600 | N | 760000 | | | | | | | | UL | | | | | | | | |
| Methyl tert-butyl ether | 5.0 | NE | 2.7 | C | 270 | | | | | | | | UL | | | | | | | | |
| Methylcyclohexane | 5.0 | NE | 14000 | N | 1400000 | | | | | | | 360 | J | | | | | | | | |
| Methylene chloride | 5.0 | 1.3 | 1.2 | C | 120 | 2.6 | B | 13 | B | 8.8 | B | 9.2 | B | 10 | B | 7.8 | B | 10 | B | 8.3 | B |
| Styrene | 5.0 | 120 | 2000 | N | 200000 | | | | | | | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | NE | NE | | NE | | | | UJ | | | | UL | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | 110 | 30 | | NE | | | | UJ | | | | UL | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 5.0 | NE | 0.028 | C | 2.8 | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 5.0 | 2.4 | 0.052 | C | 5.2 | 4.5 | J | 130000 | J | 840+ | | 2000 | J | 34 | J | 7.9 | J | 50 | J | 3.4 | J |
| Toluene | 5.0 | 760 | 1700 | N | 170000 | | | 250 | J | | | 200 | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | NE | 150000 | N | 15000000 | | | 3.4 | J | | | | UL | | | | | | | | |
| 1,1,1-Trichloroethane | 5.0 | 72 | 3,300 | N | 330000 | | | 340 | J | | | 2.9 | J | | | | | | | | |
| 1,1,2-Trichloroethane | 5.0 | 1.7 | 0.082 | C | 8.2 | | | | | 2.5 | J | 17 | K | | | | | | | | |
| Trichloroethene | 5.0 | 1.9 | 0.61 | C | 61 | | | 50000 | J | 7.3 | J | 120 | J | 3.9 | J | | | 6.1 | J | | |
| Trichlorofluoromethane | 5.0 | NE | 840 | N | 84000 | | | | | | | | UL | | | | | | | | |
| Vinyl chloride | 5.0 | 0.7 | 0.0056 | C | 0.56 | | | | | | | | | | | | | | | | |
| o-Xylene* | 5.0 | 11000 | 230 | N | 23000 | | | 5700 | J | | | 1500 | J | | | | | | | | |
| m,p-Xylene* | 5.0 | 11000 | 230 | N | 23000 | | | 6700 | J | | | 2200 | J | | | | | | | | |

April 2008 Soil Results
Jay-Cee Cleaners Site

| Sampling Location : Matrix : Date Sampled : Time Sampled : | | | | | | JCC-09-0607 Soil 4/23/2008 13:00 | | JCC-10-0809 Soil 4/23/2008 13:23 | | JCC-11-0607 Soil 4/23/2008 14:15 | | JCC-12-0910 Soil 4/23/2008 10:25 | |
|---|------|------------------|-------------------|-----|----------|---|---|---|---|---|---|---|---|
| ANALYTE | CRQL | MCL-based SSL | Risk-based SSL | C/N | ERG | Result | Q | Result | Q | Result | Q | Result | Q |
| Acetone | 10 | NE | 4400 | N | 440000 | | | | | | | 25 | B |
| Benzene | 5.0 | NE | 0.23 | C | 23 | | | | | | | 7.2 | K |
| Bromochloromethane | 5.0 | NE | NE | | NE | | | | | | | | |
| Bromodichloromethane | 5.0 | NE | 0.3 | C | 30 | | | | | | | | |
| Bromoform | 5.0 | NE | 2.3 | C | 230 | | | | | | | | |
| Bromomethane | 5.0 | NE | 2.2 | N | 220 | | | | | | | | |
| 2-Butanone | 10 | NE | NE | | NE | | | | | | | | |
| Carbon Disulfide | 5.0 | NE | 270 | N | 27000 | | | | | | | 3.2 | J |
| Carbon tetrachloride | 5.0 | 2.0 | 0.079 | C | 7.9 | | | | | | | | |
| Chlorobenzene | 5.0 | 75 | 68 | N | 6800 | | | | | | | | |
| Chloroethane | 5.0 | NE | NE | | NE | | | | | | | | |
| Chloroform | 5.0 | NE | 0.055 | N | 5.5 | 2.5 | B | 2.2 | B | 2.4 | B | 11 | B |
| Chloromethane | 5.0 | NE | 0.46 | C | 46 | | | | | | | | |
| Cyclohexane | 5.0 | NE | 13000 | N | 1300000 | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | 0.092 | 0.00015 | C | 0.015 | | | | | | | | |
| Dibromochloromethane | 5.0 | NE | 0.22 | C | 22 | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | 0.015 | 0.0019 | C | 0.19 | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | 660 | 400 | N | 40000 | | | | | | | | |
| 1,3-Dichlorobenzene | 5.0 | NE | NE | | NE | | | | | | | | |
| 1,4-Dichlorobenzene | 5.0 | 81 | 0.46 | C | 46 | | | | | | | | |
| Dichlorodifluoromethane | 5.0 | NE | 610 | N | 61000 | | | | | | | | |
| 1,1-Dichloroethane | 5.0 | NE | 0.7 | C | 70 | | | | | | | 9.1 | |
| 1,2-Dichloroethane | 5.0 | 1.5 | 0.044 | C | 4.4 | | | | | | | | |
| 1,1-Dichloroethene | 5.0 | 2.6 | 120 | N | 12000 | | | | | | | | |
| cis-1,2-Dichloroethene | 5.0 | 21 | 110 | N | 11000 | 5.1 | J | 4.2 | J | | | 3400 | J |
| trans-1,2-Dichloroethene | 5.0 | 32 | 34 | N | 3400 | | | | | | | 15 | |
| 1,2-Dichloropropane | 5.0 | 1.7 | 0.13 | C | 13 | | | | | | | | |
| cis-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | |
| trans-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | |
| 1,4-Dioxane | 100 | NE | 1.2 | N | 120 | | R | | R | | R | | R |
| Ethylbenzene | 5.0 | 890 | 1.9 | C | 190 | | | | | | | 2100 | J |
| 2-Hexanone | 10 | NE | NE | | NE | | | | | | | | |
| Isopropylbenzene | 5.0 | NE | NE | | NE | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | NE | NE | | NE | | | | | | | | |
| Methyl acetate | 5.0 | NE | 7600 | N | 760000 | | | | | | | | |
| Methyl tert-butyl ether | 5.0 | NE | 2.7 | C | 270 | | | | | | | | |
| Methylcyclohexane | 5.0 | NE | 14000 | N | 1400000 | | | | | | | | |
| Methylene chloride | 5.0 | 1.3 | 1.2 | C | 120 | 9.8 | B | 9.9 | B | 10 | B | 11 | B |
| Styrene | 5.0 | 120 | 2000 | N | 200000 | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | NE | NE | | NE | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | 110 | 30 | | NE | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 5.0 | NE | 0.028 | C | 2.8 | | | | | | | | |
| Tetrachloroethene | 5.0 | 2.4 | 0.052 | C | 5.2 | 29 | J | 17 | J | | | 110000 | J |
| Toluene | 5.0 | 760 | 1700 | N | 170000 | | | | | | | 240 | J |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | NE | 150000 | N | 15000000 | | | | | 4.2 | J | | |
| 1,1,1-Trichloroethane | 5.0 | 72 | 3,300 | N | 330000 | | | | | | | 300 | J |
| 1,1,2-Trichloroethane | 5.0 | 1.7 | 0.082 | C | 8.2 | | | | | | | | |
| Trichloroethene | 5.0 | 1.9 | 0.61 | C | 61 | 3.3 | J | 2.8 | J | | | 44000 | J |
| Trichlorofluoromethane | 5.0 | NE | 840 | N | 84000 | | | | | | | | |
| Vinyl chloride | 5.0 | 0.7 | 0.0056 | C | 0.56 | | | | | | | | |
| o-Xylene* | 5.0 | 11000 | 230 | N | 23000 | | | | | | | 5100 | J |
| m,p-Xylene* | 5.0 | 11000 | 230 | N | 23000 | | | | | | | 5900 | J |

April 2008 Soil Results
Jay-Cee Cleaners Site

Notes:

A blank results cell indicates that the analyte was not detected

All values are presented in parts per billion

B = Not detected at a concentration substantially above the level reported in laboratory or field blanks

C/N = Carcinogenic/non-carcinogenic risk-based screening level due to accumulative effects of carcinogenic contaminants, EPA Region 3 recommends cleanup levels for carcinogenic contaminants to 10-times less than listed EPA soil screening level

CRQL = Contract-required quantitation limit

EPA = U.S. Environmental Protection Agency

ERG = Emergency Removal Guideline concentration from "Emergency Response Guidebook" (DOT 2008)

J = Analyte present; reported value is estimated; concentration is outside the range of accurate quantitation

K = Analyte present; reported value may be biased high; actual value is expected to be lower

MCL = Maximum contaminant level

MCL-Based = MCL-based soil screening levels recommended for protection of groundwater

MS/MSD = Matrix spike/matrix spike duplicate

Q = Analytical Data Qualifier

QC = Quality control

R = Unreliable result; analyte may or may not be present in the sample; supporting data necessary to confirm result

SSL= Soil screening levels recommended for protection of groundwater

UL = Not detected, quantitation limit is probably higher

+ = Results reported from diluted sample

* = SSL is for total xylenes

APPENDIX G

April 2008 Groundwater Results

April 2008 Groundwater Results

| Sampling Location : Field QC : Matrix : Date Sampled : Time Sampled : | | | | | | JCC-GW-01 | | JCC-GW-02 Duplicate of JCC-GW-12 | | JCC-GW-03 | | JCC-GW-04 | | JCC-GW-05 | | JCC-GW-06 | | JCC-GW-07 | | JCC-GW-08 | | JCC-GW-09 | | JCC-GW-10 | | JCC-GW-11 | |
|---|------|-------|---------|-----|-----------|-----------------------------|------|--|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|
| | | | | | | Water 4/24/2008 10:40 | | Water 4/25/2008 20:02 | | Water 4/25/2008 16:53 | | Water 4/25/2008 19:35 | | Water 4/25/2008 17:05 | | Water 4/25/2008 14:41 | | Water 4/24/2008 19:22 | | Water 4/24/2008 15:41 | | Water 4/25/2008 08:55 | | Water 4/24/2008 13:50 | | Water 4/25/2008 11:23 | |
| ANALYTE | CRQL | MCL | RBC | C/N | ERG | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Acetone | 10 | NE | 22,000 | N | 2,200,000 | 15 | B | 85 | B | | | 7.3 | B | | | 8.7 | B | 5.2 | | 3.6 | B | 7.0 | B | 4.8 | B | 3.5 | |
| Benzene | 5.0 | 5.0 | 0.41 | C | 41 | | | | | | | | | | | | | | | | | | | | | | |
| Bromochloromethane | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| Bromodichloromethane | 5.0 | NE | 1.1 | C | 110 | | | | | | | | | | | | | | | | | | | | | | |
| Bromoform | 5.0 | NE | 8.5 | C | 850 | | | | | | | | | | | | | | | | | | | | | | |
| Bromomethane | 5.0 | NE | 8.7 | N | 870 | | | | | | | | | | | | | | | | | | | | | | |
| 2-Butanone | 10 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| Carbon Disulfide | 5.0 | NE | 1,000 | N | 100,000 | | | | | | | | | | | | | | | | | | | | | | |
| Carbon tetrachloride | 5.0 | 5.0 | 0.2 | C | 20 | | | | | | | | | | | | | | | | | | | | | | |
| Chlorobenzene | 5.0 | 100 | 91 | N | 9100 | | | | | | | | | | | | | | | | | | | | | | |
| Chloroethane | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| Chloroform | 5.0 | NE | 0.19 | C | 19 | 2.6 | B | | | | | 1.1 | B | | | 2.8 | B | 2.9 | B | 3.2 | B | 2.6 | B | 2.8 | B | | |
| Chloromethane | 5.0 | NE | 1.8 | C | 180 | | | | | | | | | | | | | | | | | | | | | | |
| Cyclohexane | 5.0 | NE | 13,000 | N | 1,300,000 | | | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | 0.2 | 0.00032 | C | 0.032 | | | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | 0.05 | 0.0065 | C | 0.65 | | | | | | | | | | | | | | | | | | | | | | |
| Dibromochloromethane | 5.0 | NE | 0.8 | C | 80 | | | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | 600 | 370 | N | 37,000 | | | 20 | J | | | | | | | | | | | | | | | | | | |
| Dichlorodifluoromethane | 5.0 | NE | 390 | N | 39,000 | | | | | | | | | | | | | | | | | | | | | | |
| 1,3-Dichlorobenzene | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | 5.0 | 75 | 0.43 | C | 43 | | | | | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5.0 | NE | 2.4 | C | 240 | | | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichloroethane | 5.0 | 5.0 | 0.15 | C | 15 | | | | | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethene | 5.0 | 7.0 | 340 | N | 34,000 | | | | | | | | | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | 5.0 | 70 | 370 | N | 37,000 | | | 5000 + | | 740 | | 89 | | 2300 + | | 950 + | | 200+ | | 140 | | | | | | | |
| trans-1,2-Dichloroethene | 5.0 | 100 | 110 | N | 11,000 | | | | | | | | | 4.4 | J | 3.6 | J | | | | | | | | | | |
| 1,2-Dichloropropane | 5.0 | 5.0 | 0.39 | C | 39 | | | | | | | | | | | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| 1,4-Dioxane | 100 | NE | 6.1 | C | 610 | | R | | | R | | R | | R | | R | | R | | R | | R | | R | | R | |
| Ethylbenzene | 5.0 | 700 | 1.5 | N | 150 | | | 25 | J | | | 1.8 | J | | | | | | | | | | | | | | |
| 2-Hexanone | 10 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| Isopropylbenzene | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| Methyl acetate | 5.0 | NE | 37,000 | N | 3,700,000 | | | | | | | | | | | | | | | | | | | | | | |
| Methyl tert-butyl ether | 5.0 | NE | 12 | C | 1,200 | | | | | | | | | 1.8 | J | | | | | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| Methylcyclohexane | 5.0 | NE | 6,300 | N | 630,000 | | | | | | | | | | | | | | | | | | | | | | |
| Methylene chloride | 5.0 | 5.0 | 4.8 | C | 480 | 9.8 | B | 41 | B | 21 | B | 1.8 | B | 1.9 | B | 1.7 | B | 2.8 | B | 2.9 | B | 3.1 | B | 7.0 | B | 2.7 | B |
| 1,1,2,2-Tetrachloroethane | 5.0 | NE | 0.067 | C | 6.7 | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | NE | 59,000 | N | 5,900,000 | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | NE | NE | | NE | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | 70 | 19 | C | 1,900 | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 5.0 | 200 | 9,100 | N | 910,000 | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | 5.0 | 5.0 | 0.24 | C | 24 | | | 830 | | 280 | | 3.3 | J | 12 | | 23 | | 1.1 | J | | | | | | | | |
| Trichloroethene | 5.0 | 5.0 | 1.7 | C | 170 | | | 6400 + | | 740 | | 23 | | 150 | | 250 + | | 18 | | 61 | | | | | | | |
| Trichlorofluoromethane | 5.0 | NE | 1,300 | N | 130,000 | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | 5.0 | 100 | 1,600 | N | 160,000 | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 5.0 | 5.0 | 0.11 | C | 11 | 3.1 | J | 94000 + | | 34000 + | | 370 + | | 1400 + | | 3100 + | | 140 | | 7000+ | | | | | 13 | | |
| Toluene | 5.0 | 1000 | 2,300 | N | 230,000 | | | | | | | 2.9 | J | | | | | | | | | | | | | | |
| Vinyl chloride | 5.0 | 2.0 | 0.016 | C | 1.6 | | | | | | | | | | | | | | | | | | | | | | |
| m,o-Xylene* | 5.0 | 10000 | 200 | N | 20,000 | | | 89 | J | | | 5.6 | | | | | | | | | | | | | | | |
| p-Xylene* | 5.0 | 10000 | 200 | N | 20,000 | | | 70 | J | | | 3.9 | J | | | | | | | | | | | | | | |

April 2008 Groundwater Results

| Sampling Location : | | | | | | JCC-GW-12 Duplicate of JCC-GW-02 Water 4/25/2008 20:08 | | JCC-RB Rinsate Blank Water 4/25/2008 19:55 | | JCC-TB1 Trip Blank Water 4/24/2008 08:44 | | JCC-TB2 Trip Blank Water 4/24/2008 15:26 | | JCC-PW Purge Water Water 4/25/2008 20:14 | |
|---------------------------------------|------|-------|---------|-----|-----------|---|------|--|------|--|------|--|------|--|------|
| Field QC : | | | | | | Matrix : | | Date Sampled : | | Time Sampled : | | | | | |
| ANALYTE | CRQL | MCL | RBC | C/N | ERG | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Acetone | 10 | NE | 22,000 | N | 2,200,000 | | | 9.2 | J | 16 | J | 14 | J | | |
| Benzene | 5.0 | 5.0 | 0.41 | C | 41 | | | | | | | | | | |
| Bromochloromethane | 5.0 | NE | NE | | NE | | | | | | | | | | |
| Bromodichloromethane | 5.0 | NE | 1.1 | C | 110 | | | | | | | | | | |
| Bromoform | 5.0 | NE | 8.5 | C | 850 | | | | | | | | | | |
| Bromomethane | 5.0 | NE | 8.7 | N | 870 | | | | | | | | | | |
| 2-Butanone | 10 | NE | NE | | NE | | | | | | | | | | |
| Carbon Disulfide | 5.0 | NE | 1,000 | N | 100,000 | | | | | | | | | | |
| Carbon tetrachloride | 5.0 | 5.0 | 0.2 | C | 20 | | | | | | | | | | |
| Chlorobenzene | 5.0 | 100 | 91 | N | 9100 | | | | | | | | | | |
| Chloroethane | 5.0 | NE | NE | | NE | | | | | | | | | | |
| Chloroform | 5.0 | NE | 0.19 | C | 19 | | | 5.8 | B | 12 | B | 9.8 | B | | |
| Chloromethane | 5.0 | NE | 1.8 | C | 180 | | | | | | | | | | |
| Cyclohexane | 5.0 | NE | 13,000 | N | 1,300,000 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | 0.2 | 0.00032 | C | 0.032 | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | 0.05 | 0.0065 | C | 0.65 | | | | | | | | | | |
| Dibromochloromethane | 5.0 | NE | 0.8 | C | 80 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | 600 | 370 | N | 37,000 | | | | | | | | | | |
| Dichlorodifluoromethane | 5.0 | NE | 390 | N | 39,000 | | | | | | | | | | |
| 1,3-Dichlorobenzene | 5.0 | NE | NE | | NE | | | | | | | | | | |
| 1,4-Dichlorobenzene | 5.0 | 75 | 0.43 | C | 43 | | | | | | | | | | |
| 1,1-Dichloroethane | 5.0 | NE | 2.4 | C | 240 | | | | | | | | | | |
| 1,2-Dichloroethane | 5.0 | 5.0 | 0.15 | C | 15 | | | | | | | | | | |
| 1,1-Dichloroethene | 5.0 | 7.0 | 340 | N | 34,000 | | | | | | | | | | |
| cis-1,2-Dichloroethene | 5.0 | 70 | 370 | N | 37,000 | 4800+ | | | | | | | | 730 | |
| trans-1,2-Dichloroethene | 5.0 | 100 | 110 | N | 11,000 | | | | | | | | | | |
| 1,2-Dichloropropane | 5.0 | 5.0 | 0.39 | C | 39 | | | | | | | | | | |
| cis-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | | | |
| trans-1,3-Dichloropropene | 5.0 | NE | NE | | NE | | | | | | | | | | |
| 1,4-Dioxane | 100 | NE | 6.1 | C | 610 | | | | R | | R | | R | | R |
| Ethylbenzene | 5.0 | 700 | 1.5 | N | 150 | 26 | J | | | | | | | | |
| 2-Hexanone | 10 | NE | NE | | NE | | | | | | | | | | |
| Isopropylbenzene | 5.0 | NE | NE | | NE | | | | | | | | | | |
| Methyl acetate | 5.0 | NE | 37,000 | N | 3,700,000 | | | | | | | | | | |
| Methyl tert-butyl ether | 5.0 | NE | 12 | C | 1,200 | | | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | NE | NE | | NE | | | | | | | | | | |
| Methylcyclohexane | 5.0 | NE | 6,300 | N | 630,000 | | | | | | | | | | |
| Methylene chloride | 5.0 | 5.0 | 4.8 | C | 480 | 39 | B | 2.3 | B | 7.1 | B | 3.0 | B | 21 | B |
| 1,1,2,2-Tetrachloroethane | 5.0 | NE | 0.067 | C | 6.7 | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | NE | 59,000 | N | 5,900,000 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | NE | NE | | NE | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | 70 | 19 | C | 1,900 | | | | | | | | | | |
| 1,1,1-Trichloroethane | 5.0 | 200 | 9,100 | N | 910,000 | | | | | | | | | | |
| 1,1,2-Trichloroethane | 5.0 | 5.0 | 0.24 | C | 24 | 810 | | | | | | | | 120 | |
| Trichloroethene | 5.0 | 5.0 | 1.7 | C | 170 | 6200+ | | | | | | | | 680 | |
| Trichlorofluoromethane | 5.0 | NE | 1,300 | N | 130,000 | | | | | | | | | | |
| Styrene | 5.0 | 100 | 1,600 | N | 160,000 | | | | | | | | | | |
| Tetrachloroethene | 5.0 | 5.0 | 0.11 | C | 11 | 92000 + | | | | | | | | 14000 + | |
| Toluene | 5.0 | 1000 | 2,300 | N | 230,000 | | | | | | | | | | |
| Vinyl chloride | 5.0 | 2.0 | 0.016 | C | 1.6 | | | | | | | | | | |
| m,o-Xylene* | 5.0 | 10000 | 200 | N | 20,000 | 85 | J | | | | | | | 10 | J |
| p-Xylene* | 5.0 | 10000 | 200 | N | 20,000 | 71 | J | | | | | | | 16 | J |

April 2008 Groundwater Results
Jay-Cee Cleaners Site

Notes:

A blank results cell indicates that the analyte was not detected

All values are presented in parts per billion

B = Not detected at a concentration substantially above the level reported in laboratory or field blanks

C/N = Carcinogenic/non-carcinogenic contaminant; due to the accumulative effects of carcinogenic contaminants, EPA Region 3 recommends cleanup levels for carcinogenic compounds to 10-times less than listed EPA soil screening level

CRQL = Contract-required quantitation limit

EPA = U.S. Environmental Protection Agency

ERG = Emergency Removal Guideline

J = Analyte present; reported value is estimated; concentration is outside the range of accurate quantitation

MCL = Maximum contaminant level

MS/MSD = Matrix spike/matrix spike duplicate

NE = Not established

Q = Analytical Data Qualifier

QC = Quality control

RBC = Risk-based concentration established for tap water

+ = Results reported from diluted sample

* = MCL and RBC for total xylenes

ATTACHMENT

Validated Analytical Results



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Final Analytical Report

| | |
|--------------------------------|--------------------------------|
| Site Name..... | JayCee Cleaners |
| Sample Collection Date(s)..... | 04/17/08 08:50- 04/17/08 10:24 |
| Contact..... | Todd Richardson |
| Report Date..... | 05/12/08 12:53 |
| Project #..... | DAS R32936 |
| Work Orders..... | 0804013 |

Analyses included in this report:

VOCs by CLP Equivalent (trace)

Approved for Release

C. Caporale

OASQA Representative

0804013 FINAL 05 12 08 1253
Page 1 of 44



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: **JayCee Cleaners**

Project #: **DAS R32936**

ANALYTICAL REPORT FOR SAMPLES

| Station ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|------------|---------------|----------------|----------------|----------------|
| JCC-RW-01 | 0804013-01 | Drinking Water | 04/17/08 09:30 | 04/18/08 15:06 |
| JCC-RW-02 | 0804013-02 | Drinking Water | 04/17/08 09:38 | 04/18/08 15:06 |
| JCC-RW-03 | 0804013-03 | Drinking Water | 04/17/08 09:42 | 04/18/08 15:06 |
| JCC-RW-05 | 0804013-04 | Drinking Water | 04/17/08 10:13 | 04/18/08 15:06 |
| JCC-RW-06 | 0804013-05 | Drinking Water | 04/17/08 10:20 | 04/18/08 15:06 |
| JCC-RW-07 | 0804013-06 | Drinking Water | 04/17/08 10:24 | 04/18/08 15:06 |
| JCC-RW-08 | 0804013-07 | Drinking Water | 04/17/08 09:33 | 04/18/08 15:06 |
| JCC-TB | 0804013-08 | Drinking Water | 04/17/08 08:50 | 04/18/08 15:06 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:
DAS No: R32936
SDG No: L

| | | | |
|---|---|--|---|
| Date Shipped: 4/17/2008 Carrier Name: FedEx Airbill: 8574956839010215 Shipped to: US EPA region 3 OAS/QA Lab Environmental Science 701 Mapes Road Ft. George Meade MD 20755 | Chain of Custody Record Relinquished By (Date / Time) 1 <i>Jm</i> 4-17-08/19:20 2 3 4 | Sampler Signature: <i>Jm</i> Received By (Date / Time) <i>P. J. K.</i> 4/19/08 15:00 | For Lab Use Only Lab Contract No: Unit Price: Transfer To: Lab Contract No: Unit Price: |
|---|---|--|---|

| ORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | INORGANIC SAMPLE No. | FOR LAB USE ONLY Sample Condition On Receipt |
|-----------------------|----------------------|---------------|-------------------------|---|---------------------|-----------------------------|-------------------------|---|
| C0528 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC682 (HCL), JCC683 (HCL), JCC684 (HCL) (3) | JCC-RW-01 | S: 4/17/2008 9:30 | 0804013-01 | |
| C0529 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC685 (HCL), JCC686 (HCL), JCC687 (HCL) (3) | JCC-RW-02 | S: 4/17/2008 9:38 | 0804013-02 | |
| C0530 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC688 (HCL), JCC689 (HCL), JCC690 (HCL) (3) | JCC-RW-03 | S: 4/17/2008 9:42 | 0804013-03 | |
| C0531 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC691 (HCL), JCC692 (HCL), JCC693 (HCL), JCC694 (HCL), JCC695 (HCL), JCC696 (HCL), JCC697 (HCL), JCC698 (HCL), JCC699 (HCL) (9) | JCC-RW-05 | S: 4/17/2008 10:13 | 0804013-04 | |
| C0532 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC700 (HCL), JCC701 (HCL), JCC702 (HCL) (3) | JCC-RW-06 | S: 4/17/2008 10:20 | 0804013-05 | |
| C0533 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC703 (HCL), JCC704 (HCL), JCC705 (HCL) (3) | JCC-RW-07 | S: 4/17/2008 10:24 | 0804013-06 | |
| C0534 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC706 (HCL), JCC707 (HCL), JCC708 (HCL) (3) | JCC-RW-08 | S: 4/17/2008 9:33 | 0804013-07 | |
| C0535 | PW/ Jordan Vaughn | L/G | VOA (14) | JCC709 (HCL) (1) | JCC-TB | S: 4/17/2008 8:50 | 0804013-08 | |

| | | | | |
|--|--|---|--|--|
| Shipment for Case Complete? <input checked="" type="checkbox"/> | Sample(s) to be used for laboratory QC: <i>MS/MSD = C0531</i> | Additional Sampler Signature(s): | Cooler Temperature Upon Receipt: <i>2.0°C</i> | Chain of Custody Seal Number: |
| Analysis Key: VOA = CLP TCL Volatiles | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Custody Seal Intact? <input checked="" type="checkbox"/> | Shipment Iced? <input checked="" type="checkbox"/> |

TR Number: 3-023200937-041708-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4200

LABORATORY COPY

F2/SL 047 Page 1 of 1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-01**Station ID: **JCC-RW-01**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | 5.6 | B, J | 5.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Benzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Bromodichloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| n-Butylbenzene | 0.03 | B, J | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Chloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Chloroform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Chloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-01

Station ID: JCC-RW-01

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|---------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Ethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Methylene Chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Naphthalene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| n-Propylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Styrene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Toluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,2,4-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-01**Station ID: **JCC-RW-01**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result ug/L | Analyte Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|-------------------|----------------|-----------------------|-----------------------|----------|----------|----------------|-------------|
| m-Xylene/p-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| o-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 16:53 | R3QA210 |

Surrogates

| Analyte | Result ug/L | Analyte Qualifiers | %Recovery | Limits | Prepared | Analyzed | Method/SOP# |
|----------------------------------|----------------|-----------------------|--------------|--------|----------|----------------|-------------|
| Surrogate: 4-Bromofluorobenzene | 3.910 | | 98 % | 86-115 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Surrogate: 1,2-Dichloroethane-d4 | 4.100 | | 102 % | 76-114 | 04/24/08 | 04/24/08 16:53 | R3QA210 |
| Surrogate: Toluene-d8 | 4.050 | | 101 % | 88-110 | 04/24/08 | 04/24/08 16:53 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-02**Station ID: **JCC-RW-02**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | 4.3 | B, J | 5.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Benzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Bromodichloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| n-Butylbenzene | 0.02 | B, J | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Chloroethane | 0.1 | J | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Chloroform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Chloromethane | 0.04 | B, J | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-02

Station ID: JCC-RW-02

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|---------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Ethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Methylene Chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Naphthalene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| n-Propylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Styrene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Toluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,2,4-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-02**Station ID: **JCC-RW-02**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|-------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| m-Xylene/p-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| o-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:25 | R3QA210 |

Surrogates

| Analyte | Result | Analyte | %Recovery | | Prepared | Analyzed | Method/SOP# |
|----------------------------------|--------|------------|-----------|--------|----------|----------------|-------------|
| | ug/L | Qualifiers | %Recovery | Limits | | | |
| Surrogate: 4-Bromofluorobenzene | 3.860 | | 96 % | 86-115 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Surrogate: 1,2-Dichloroethane-d4 | 4.200 | | 105 % | 76-114 | 04/24/08 | 04/24/08 17:25 | R3QA210 |
| Surrogate: Toluene-d8 | 4.000 | | 100 % | 88-110 | 04/24/08 | 04/24/08 17:25 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-03

Station ID: JCC-RW-03

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | 4.8 | B, J | 5.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Benzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Bromodichloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| n-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Chloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Chloroform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Chloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-03

Station ID: JCC-RW-03

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|-------------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Ethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Methylene Chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Naphthalene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| n-Propylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Styrene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Toluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,2,4-Trimethylbenzene | 0.03 | B, J | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-03**Station ID: **JCC-RW-03**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|-------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| m-Xylene/p-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| o-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 17:55 | R3QA210 |

Surrogates

| Analyte | Result | Analyte | %Recovery | | Prepared | Analyzed | Method/SOP# |
|----------------------------------|--------|------------|-----------|--------|----------|----------------|-------------|
| | ug/L | Qualifiers | %Recovery | Limits | | | |
| Surrogate: 4-Bromofluorobenzene | 3.890 | | 97 % | 86-115 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Surrogate: 1,2-Dichloroethane-d4 | 4.070 | | 102 % | 76-114 | 04/24/08 | 04/24/08 17:55 | R3QA210 |
| Surrogate: Toluene-d8 | 4.020 | | 100 % | 88-110 | 04/24/08 | 04/24/08 17:55 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-04

Station ID: JCC-RW-05

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | 3.5 | B, J | 5.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Benzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Bromodichloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| n-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Chloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Chloroform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Chloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-04

Station ID: JCC-RW-05

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|---------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Ethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Methylene Chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Naphthalene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| n-Propylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Styrene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Toluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,2,4-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-04**Station ID: **JCC-RW-05**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|-------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| m-Xylene/p-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| o-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:26 | R3QA210 |

Surrogates

| Analyte | Result | Analyte | %Recovery | | Prepared | Analyzed | Method/SOP# |
|----------------------------------|--------|------------|-----------|--------|----------|----------------|-------------|
| | ug/L | Qualifiers | %Recovery | Limits | | | |
| Surrogate: 4-Bromofluorobenzene | 3.880 | | 97 % | 86-115 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Surrogate: 1,2-Dichloroethane-d4 | 3.960 | | 99 % | 76-114 | 04/24/08 | 04/24/08 18:26 | R3QA210 |
| Surrogate: Toluene-d8 | 4.050 | | 101 % | 88-110 | 04/24/08 | 04/24/08 18:26 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-05**Station ID: **JCC-RW-06**Batch: **BD82402**Sample Type: **Drinking Water**Date Collected: **04/17/2008**

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | 3.6 | B, J | 5.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Benzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Bromodichloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| n-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Chloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Chloroform | 0.04 | B, J | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Chloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-05

Station ID: JCC-RW-06

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|---------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Ethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Methylene Chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Naphthalene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| n-Propylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Styrene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Toluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,2,4-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-05**Station ID: **JCC-RW-06**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result ug/L | Analyte Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|-------------------|----------------|-----------------------|-----------------------|----------|----------|----------------|-------------|
| m-Xylene/p-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| o-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 18:57 | R3QA210 |

Surrogates

| Analyte | Result ug/L | Analyte Qualifiers | %Recovery | Limits | Prepared | Analyzed | Method/SOP# |
|----------------------------------|----------------|-----------------------|--------------|--------|----------|----------------|-------------|
| Surrogate: 4-Bromofluorobenzene | 3.870 | | 97 % | 86-115 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Surrogate: 1,2-Dichloroethane-d4 | 3.980 | | 100 % | 76-114 | 04/24/08 | 04/24/08 18:57 | R3QA210 |
| Surrogate: Toluene-d8 | 4.010 | | 100 % | 88-110 | 04/24/08 | 04/24/08 18:57 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-06**Station ID: **JCC-RW-07**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | 5.2 | B, J | 5.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Benzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Bromodichloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| n-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Chloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Chloroform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Chloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

**Site Name: JayCee Cleaners****Project #: DAS R32936****Lab ID: 0804013-06****Station ID: JCC-RW-07****Batch: BD82402****Date Collected: 04/17/2008****Sample Type: Drinking Water****Volatile Organic Compounds****Targets (Continued)**

| Analyte | Result | Analyte | Quantitation | | | | |
|---------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Ethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Methylene Chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Naphthalene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| n-Propylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Styrene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Toluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,2,4-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-06**Station ID: **JCC-RW-07**Batch: **BD82402**Sample Type: **Drinking Water**Date Collected: **04/17/2008**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result ug/L | Analyte Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|-------------------|----------------|-----------------------|-----------------------|----------|----------|----------------|-------------|
| m-Xylene/p-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| o-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 19:28 | R3QA210 |

Surrogates

| Analyte | Result ug/L | Analyte Qualifiers | %Recovery | Limits | Prepared | Analyzed | Method/SOP# |
|----------------------------------|----------------|-----------------------|--------------|--------|----------|----------------|-------------|
| Surrogate: 4-Bromofluorobenzene | 3.940 | | 98 % | 86-115 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Surrogate: 1,2-Dichloroethane-d4 | 4.060 | | 102 % | 76-114 | 04/24/08 | 04/24/08 19:28 | R3QA210 |
| Surrogate: Toluene-d8 | 4.080 | | 102 % | 88-110 | 04/24/08 | 04/24/08 19:28 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-07

Station ID: JCC-RW-08

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | 7.5 | B, J | 5.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Benzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Bromodichloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| n-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Chloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Chloroform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Chloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-07

Station ID: JCC-RW-08

Batch: BD82402

Sample Type: Drinking Water

Date Collected: 04/17/2008

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|---------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Ethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Methylene Chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Naphthalene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| n-Propylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Styrene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Toluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,2,4-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-07**Station ID: **JCC-RW-08**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|-------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| m-Xylene/p-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| o-Xylene | U | | 1.0 | 1 | 04/24/08 | 04/24/08 20:00 | R3QA210 |

Surrogates

| Analyte | Result | Analyte | %Recovery | | Prepared | Analyzed | Method/SOP# |
|----------------------------------|--------|------------|-----------|--------|----------|----------------|-------------|
| | ug/L | Qualifiers | %Recovery | Limits | | | |
| Surrogate: 4-Bromofluorobenzene | 3.870 | | 97 % | 86-115 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Surrogate: 1,2-Dichloroethane-d4 | 4.070 | | 102 % | 76-114 | 04/24/08 | 04/24/08 20:00 | R3QA210 |
| Surrogate: Toluene-d8 | 4.010 | | 100 % | 88-110 | 04/24/08 | 04/24/08 20:00 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-08**Station ID: **JCC-TB**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| Acetone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Benzene | 0.03 | J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Bromobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Bromochloromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Bromodichloromethane | 0.09 | J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Bromoform | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Bromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 2-Butanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| sec-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| tert-Butylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| n-Butylbenzene | 0.04 | B, J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Carbon disulfide | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Carbon Tetrachloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Chlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Chlorodibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Chloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Chloroform | 8.6 | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Chloromethane | 0.05 | J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 2-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 4-Chlorotoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Cyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2-Dibromo-3-chloropropane | U | | 1.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2-Dibromoethane (EDB) | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Dibromomethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,3-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,4-Dichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Dichlorodifluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,1-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2-Dichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,1-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| cis-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| trans-1,2-Dichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-08**Station ID: **JCC-TB**Batch: **BD82402**Sample Type: **Drinking Water**Date Collected: **04/17/2008**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|-------------------------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| 1,3-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 2,2-Dichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,1-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| cis-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| trans-1,3-Dichloropropene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Ethylbenzene | 0.4 | J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Freon 113 | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Hexachlorobutadiene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 2-Hexanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Isopropylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| p-Isopropyltoluene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Methyl Acetate | U | | 1.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Methylcyclohexane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Methyl-tert-butyl ether | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Methylene Chloride | 0.5 | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 4-Methyl-2-pentanone | U | | 5.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Naphthalene | 0.1 | B, J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| n-Propylbenzene | 0.02 | J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Styrene | 0.06 | J | 1.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,1,2,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,1,1,2-Tetrachloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Tetrachloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Toluene | 0.4 | J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2,3-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2,4-Trichlorobenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,1,1-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,1,2-Trichloroethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Trichloroethene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Trichlorofluoromethane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2,3-Trichloropropane | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,2,4-Trimethylbenzene | 0.06 | J | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| 1,3,5-Trimethylbenzene | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Vinyl acetate | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| Vinyl chloride | U | | 0.5 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| m-Xylene/p-Xylene | 1.2 | | 1.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

Site Name: **JayCee Cleaners**Project #: **DAS R32936**Lab ID: **0804013-08**Station ID: **JCC-TB**Batch: **BD82402**Date Collected: **04/17/2008**Sample Type: **Drinking Water**

Volatile Organic Compounds

Targets (Continued)

| Analyte | Result | Analyte | Quantitation | | | | |
|-----------------|--------|------------|--------------|----------|----------|----------------|-------------|
| | ug/L | Qualifiers | Limit | Dilution | Prepared | Analyzed | Method/SOP# |
| o-Xylene | 0.4 | J | 1.0 | 1 | 04/24/08 | 04/24/08 16:22 | R3QA210 |

Surrogates

| Analyte | Result | Analyte | %Recovery | | Prepared | Analyzed | Method/SOP# |
|---|--------|------------|--------------|--------|----------|----------------|-------------|
| | ug/L | Qualifiers | %Recovery | Limits | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 3.980 | | 100 % | 86-115 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 3.970 | | 99 % | 76-114 | 04/24/08 | 04/24/08 16:22 | R3QA210 |
| <i>Surrogate: Toluene-d8</i> | 4.040 | | 101 % | 88-110 | 04/24/08 | 04/24/08 16:22 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-01

Station ID: JCC-RW-01

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|

None Detected



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-02

Station ID: JCC-RW-02

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|

None Detected



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-03

Station ID: JCC-RW-03

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|

None Detected



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-04

Station ID: JCC-RW-05

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|

None Detected



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-05

Station ID: JCC-RW-06

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|

None Detected



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-06

Station ID: JCC-RW-07

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|

| | | | | | | |
|-----------|---------------------|-----|---|------|----------------|---------|
| 1066-40-6 | Silanol, trimethyl- | 0.7 | T | 3.68 | 04/24/08 19:28 | R3QA210 |
|-----------|---------------------|-----|---|------|----------------|---------|



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-07

Station ID: JCC-RW-08

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|
|------------|----------|----------------|-----------------------|-------------------|----------|-------------|

None Detected



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Lab ID: 0804013-08

Station ID: JCC-TB

Sample Type: Drinking Water

Date Collected: 04/17/2008

Tentatively Identified Compound (TIC) Report

| CAS Number | Compound | Result ug/L | Analyte Qualifiers | Retention Time | Analyzed | Method/SOP# |
|------------|-------------------|----------------|-----------------------|-------------------|----------------|-------------|
| 67-63-0 | Isopropyl alcohol | 3.0 | T | 2.32 | 04/24/08 16:22 | R3QA210 |
| 7647-01-0 | Hydrochloric Acid | 1.7 | T | 3.41 | 04/24/08 16:22 | R3QA210 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Result | Quantitation | | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
| | | Limit | Units | | | | | | | |

Batch BD82402 - VOC Purge and Trap

Blank (BD82402-BLK1)

Prepared: 04/24/08 09:00 Analyzed: 04/24/08 15:51

| | | | | | | | | | | |
|-----------------------------|------|-----|------|--|--|--|--|--|--|---|
| Acetone | 3.5 | 5.0 | ug/L | | | | | | | J |
| Benzene | U | 0.5 | " | | | | | | | |
| Bromobenzene | U | 0.5 | " | | | | | | | |
| Bromochloromethane | U | 0.5 | " | | | | | | | |
| Bromodichloromethane | U | 0.5 | " | | | | | | | |
| Bromoform | U | 0.5 | " | | | | | | | |
| Bromomethane | U | 0.5 | " | | | | | | | |
| 2-Butanone | U | 5.0 | " | | | | | | | |
| sec-Butylbenzene | U | 0.5 | " | | | | | | | |
| tert-Butylbenzene | U | 0.5 | " | | | | | | | |
| n-Butylbenzene | 0.06 | 0.5 | " | | | | | | | J |
| Carbon disulfide | U | 0.5 | " | | | | | | | |
| Carbon Tetrachloride | U | 0.5 | " | | | | | | | |
| Chlorobenzene | U | 0.5 | " | | | | | | | |
| Chlorodibromomethane | U | 0.5 | " | | | | | | | |
| Chloroethane | U | 0.5 | " | | | | | | | |
| Chloroform | U | 0.5 | " | | | | | | | |
| Chloromethane | U | 0.5 | " | | | | | | | |
| 2-Chlorotoluene | U | 0.5 | " | | | | | | | |
| 4-Chlorotoluene | U | 0.5 | " | | | | | | | |
| Cyclohexane | U | 0.5 | " | | | | | | | |
| 1,2-Dibromo-3-chloropropane | U | 1.0 | " | | | | | | | |
| 1,2-Dibromoethane (EDB) | U | 0.5 | " | | | | | | | |
| Dibromomethane | U | 0.5 | " | | | | | | | |
| 1,2-Dichlorobenzene | U | 0.5 | " | | | | | | | |
| 1,3-Dichlorobenzene | U | 0.5 | " | | | | | | | |
| 1,4-Dichlorobenzene | 0.03 | 0.5 | " | | | | | | | J |
| Dichlorodifluoromethane | U | 0.5 | " | | | | | | | |
| 1,1-Dichloroethane | U | 0.5 | " | | | | | | | |
| 1,2-Dichloroethane | U | 0.5 | " | | | | | | | |
| 1,1-Dichloroethene | U | 0.5 | " | | | | | | | |
| cis-1,2-Dichloroethene | U | 0.5 | " | | | | | | | |
| trans-1,2-Dichloroethene | U | 0.5 | " | | | | | | | |
| 1,2-Dichloropropane | U | 0.5 | " | | | | | | | |
| 1,3-Dichloropropane | U | 0.5 | " | | | | | | | |
| 2,2-Dichloropropane | U | 0.5 | " | | | | | | | |
| 1,1-Dichloropropene | U | 0.5 | " | | | | | | | |
| cis-1,3-Dichloropropene | U | 0.5 | " | | | | | | | |
| trans-1,3-Dichloropropene | U | 0.5 | " | | | | | | | |
| Ethylbenzene | U | 0.5 | " | | | | | | | |
| Freon 113 | U | 0.5 | " | | | | | | | |
| Hexachlorobutadiene | U | 0.5 | " | | | | | | | |
| 2-Hexanone | U | 5.0 | " | | | | | | | |
| Isopropylbenzene | U | 0.5 | " | | | | | | | |
| p-Isopropyltoluene | U | 0.5 | " | | | | | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Result | Quantitation | | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| | | Limit | Units | | | | | | | |

Batch BD82402 - VOC Purge and Trap

Blank (BD82402-BLK1)

Prepared: 04/24/08 09:00 Analyzed: 04/24/08 15:51

| | | | | | | | | | | |
|----------------------------------|-------|-----|------|--------|--|-----|--------|--|--|---|
| Methyl Acetate | U | 1.0 | ug/L | | | | | | | |
| Methylcyclohexane | U | 0.5 | " | | | | | | | |
| Methyl-tert-butyl ether | U | 0.5 | " | | | | | | | |
| Methylene Chloride | U | 0.5 | " | | | | | | | |
| 4-Methyl-2-pentanone | U | 5.0 | " | | | | | | | |
| Naphthalene | 0.1 | 0.5 | " | | | | | | | J |
| n-Propylbenzene | U | 0.5 | " | | | | | | | |
| Styrene | U | 1.0 | " | | | | | | | |
| 1,1,2,2-Tetrachloroethane | U | 0.5 | " | | | | | | | |
| 1,1,1,2-Tetrachloroethane | U | 0.5 | " | | | | | | | |
| Tetrachloroethene | U | 0.5 | " | | | | | | | |
| Toluene | U | 0.5 | " | | | | | | | |
| 1,2,3-Trichlorobenzene | U | 0.5 | " | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.06 | 0.5 | " | | | | | | | J |
| 1,1,1-Trichloroethane | U | 0.5 | " | | | | | | | |
| 1,1,2-Trichloroethane | U | 0.5 | " | | | | | | | |
| Trichloroethene | U | 0.5 | " | | | | | | | |
| Trichlorofluoromethane | U | 0.5 | " | | | | | | | |
| 1,2,3-Trichloropropane | U | 0.5 | " | | | | | | | |
| 1,2,4-Trimethylbenzene | U | 0.5 | " | | | | | | | |
| 1,3,5-Trimethylbenzene | U | 0.5 | " | | | | | | | |
| Vinyl acetate | U | 0.5 | " | | | | | | | |
| Vinyl chloride | U | 0.5 | " | | | | | | | |
| m-Xylene/p-Xylene | U | 1.0 | " | | | | | | | |
| o-Xylene | U | 1.0 | " | | | | | | | |
| Hydrochloric Acid | 1.5 | | " | | | | | | | T |
| Surrogate: 4-Bromofluorobenzene | 3.910 | | " | 4.0000 | | 98 | 86-115 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 3.970 | | " | 4.0000 | | 99 | 76-114 | | | |
| Surrogate: Toluene-d8 | 4.050 | | " | 4.0000 | | 101 | 88-110 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

Batch BD82402 - VOC Purge and Trap

LCS (BD82402-BS1)

Prepared: 04/24/08 09:00

Analyzed: 04/24/08 14:49

| | | | | | | | | | | |
|-----------------------------|------|-----|------|--------|--|-----|--------|--|--|--|
| Acetone | 5.55 | 5.0 | ug/L | | | | 80-120 | | | |
| Benzene | 4.98 | 0.5 | " | 5.0000 | | 100 | 80-120 | | | |
| Bromobenzene | 4.73 | 0.5 | " | 5.0000 | | 95 | 80-120 | | | |
| Bromochloromethane | 4.92 | 0.5 | " | 5.0000 | | 98 | 80-120 | | | |
| Bromodichloromethane | 4.90 | 0.5 | " | 5.0000 | | 98 | 80-120 | | | |
| Bromoform | 4.51 | 0.5 | " | 5.0000 | | 90 | 80-120 | | | |
| Bromomethane | 4.64 | 0.5 | " | 5.0000 | | 93 | 80-120 | | | |
| 2-Butanone | U | 5.0 | " | | | | 80-120 | | | |
| sec-Butylbenzene | 4.78 | 0.5 | " | 5.0000 | | 96 | 80-120 | | | |
| tert-Butylbenzene | 4.72 | 0.5 | " | 5.0000 | | 94 | 80-120 | | | |
| n-Butylbenzene | 4.81 | 0.5 | " | 5.0000 | | 96 | 80-120 | | | |
| Carbon disulfide | U | 0.5 | " | | | | 80-120 | | | |
| Carbon Tetrachloride | 4.68 | 0.5 | " | 5.0000 | | 94 | 80-120 | | | |
| Chlorobenzene | 4.70 | 0.5 | " | 5.0000 | | 94 | 80-120 | | | |
| Chlorodibromomethane | 4.65 | 0.5 | " | 5.0000 | | 93 | 80-120 | | | |
| Chloroethane | 4.29 | 0.5 | " | 5.0000 | | 86 | 80-120 | | | |
| 2-Chloroethylvinyl ether | U | 1.0 | " | | | | 80-120 | | | |
| Chloroform | 4.90 | 0.5 | " | 5.0000 | | 98 | 80-120 | | | |
| Chloromethane | 4.23 | 0.5 | " | 5.0000 | | 85 | 80-120 | | | |
| 2-Chlorotoluene | 4.84 | 0.5 | " | 5.0000 | | 97 | 80-120 | | | |
| 4-Chlorotoluene | 4.83 | 0.5 | " | 5.0000 | | 97 | 80-120 | | | |
| Cyclohexane | U | 0.5 | " | | | | 80-120 | | | |
| 1,2-Dibromo-3-chloropropane | 5.31 | 1.0 | " | 5.0000 | | 106 | 80-120 | | | |
| 1,2-Dibromoethane (EDB) | 4.80 | 0.5 | " | 5.0000 | | 96 | 80-120 | | | |
| Dibromomethane | 5.11 | 0.5 | " | 5.0000 | | 102 | 80-120 | | | |
| 1,2-Dichlorobenzene | 4.82 | 0.5 | " | 5.0000 | | 96 | 80-120 | | | |
| 1,3-Dichlorobenzene | 4.73 | 0.5 | " | 5.0000 | | 95 | 80-120 | | | |
| 1,4-Dichlorobenzene | 4.85 | 0.5 | " | 5.0000 | | 97 | 80-120 | | | |
| Dichlorodifluoromethane | 4.36 | 0.5 | " | 5.0000 | | 87 | 80-120 | | | |
| 1,1-Dichloroethane | 4.40 | 0.5 | " | 5.0000 | | 88 | 80-120 | | | |
| 1,2-Dichloroethane | 4.92 | 0.5 | " | 5.0000 | | 98 | 80-120 | | | |
| 1,1-Dichloroethene | 4.94 | 0.5 | " | 5.0000 | | 99 | 80-120 | | | |
| cis-1,2-Dichloroethene | 4.78 | 0.5 | " | 5.0000 | | 96 | 80-120 | | | |
| trans-1,2-Dichloroethene | 4.03 | 0.5 | " | 5.0000 | | 81 | 80-120 | | | |
| 1,2-Dichloropropane | 5.06 | 0.5 | " | 5.0000 | | 101 | 80-120 | | | |
| 1,3-Dichloropropane | 4.87 | 0.5 | " | 5.0000 | | 97 | 80-120 | | | |
| 2,2-Dichloropropane | 4.49 | 0.5 | " | 5.0000 | | 90 | 80-120 | | | |
| 1,1-Dichloropropene | 4.71 | 0.5 | " | 5.0000 | | 94 | 80-120 | | | |
| cis-1,3-Dichloropropene | 4.85 | 0.5 | " | 5.0000 | | 97 | 80-120 | | | |
| trans-1,3-Dichloropropene | 4.58 | 0.5 | " | 5.0000 | | 92 | 80-120 | | | |
| Ethylbenzene | 4.60 | 0.5 | " | 5.0000 | | 92 | 80-120 | | | |
| Freon 113 | U | 0.5 | " | | | | 80-120 | | | |
| Hexachlorobutadiene | 4.42 | 0.5 | " | 5.0000 | | 88 | 80-120 | | | |
| 2-Hexanone | U | 5.0 | " | | | | 80-120 | | | |
| Isopropylbenzene | 4.51 | 0.5 | " | 5.0000 | | 90 | 80-120 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Result | Quantitation | | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| | | Limit | Units | | | | | | | |

Batch BD82402 - VOC Purge and Trap

LCS (BD82402-BS1)

Prepared: 04/24/08 09:00

Analyzed: 04/24/08 14:49

| | | | | | | | | | | |
|----------------------------------|-------|-----|------|--------|--|-----|--------|--|--|---|
| p-Isopropyltoluene | 4.67 | 0.5 | ug/L | 5.0000 | | 93 | 80-120 | | | |
| Methyl Acetate | U | 1.0 | " | | | | 80-120 | | | |
| Methylcyclohexane | U | 0.5 | " | | | | 80-120 | | | |
| Methyl-tert-butyl ether | U | 0.5 | " | | | | 80-120 | | | |
| Methylene Chloride | 4.59 | 0.5 | " | 5.0000 | | 92 | 80-120 | | | |
| 4-Methyl-2-pentanone | U | 5.0 | " | | | | 80-120 | | | |
| Naphthalene | 5.46 | 0.5 | " | 5.0000 | | 109 | 80-120 | | | |
| n-Propylbenzene | 4.75 | 0.5 | " | 5.0000 | | 95 | 80-120 | | | |
| 1,1,2,2-Tetrachloroethane | 5.02 | 0.5 | " | 5.0000 | | 100 | 80-120 | | | |
| 1,1,1,2-Tetrachloroethane | 4.54 | 0.5 | " | 5.0000 | | 91 | 80-120 | | | |
| Tetrachloroethene | 4.49 | 0.5 | " | 5.0000 | | 90 | 80-120 | | | |
| Toluene | 4.60 | 0.5 | " | 5.0000 | | 92 | 80-120 | | | |
| 1,2,3-Trichlorobenzene | 5.22 | 0.5 | " | 5.0000 | | 104 | 80-120 | | | |
| 1,2,4-Trichlorobenzene | 4.91 | 0.5 | " | 5.0000 | | 98 | 80-120 | | | |
| 1,1,1-Trichloroethane | 4.77 | 0.5 | " | 5.0000 | | 95 | 80-120 | | | |
| 1,1,2-Trichloroethane | 4.84 | 0.5 | " | 5.0000 | | 97 | 80-120 | | | |
| Trichloroethene | 4.71 | 0.5 | " | 5.0000 | | 94 | 80-120 | | | |
| Trichlorofluoromethane | 3.37 | 0.5 | " | 5.0000 | | 67 | 80-120 | | | A |
| 1,2,3-Trichloropropane | 5.30 | 0.5 | " | 5.0000 | | 106 | 80-120 | | | |
| 1,2,4-Trimethylbenzene | 4.82 | 0.5 | " | 5.0000 | | 96 | 80-120 | | | |
| 1,3,5-Trimethylbenzene | 4.68 | 0.5 | " | 5.0000 | | 94 | 80-120 | | | |
| Vinyl acetate | U | 0.5 | " | | | | 80-120 | | | |
| Vinyl chloride | 4.51 | 0.5 | " | 5.0000 | | 90 | 80-120 | | | |
| m-Xylene/p-Xylene | 8.99 | 1.0 | " | 10.000 | | 90 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 3.950 | | " | 4.0000 | | 99 | 86-115 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 3.970 | | " | 4.0000 | | 99 | 76-114 | | | |
| Surrogate: Toluene-d8 | 3.980 | | " | 4.0000 | | 100 | 88-110 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Result | Quantitation | | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| | | Limit | Units | | | | | | | |

Batch BD82402 - VOC Purge and Trap

| Matrix Spike (BD82402-MS1) | Source: 0804013-05 | | | Prepared: 04/24/08 09:00 | | Analyzed: 04/24/08 21:03 | | | | |
|-----------------------------|--------------------|-----|------|--------------------------|------|--------------------------|--------|--|--|---|
| Acetone | 7.81 | 5.0 | ug/L | 5.0000 | 3.65 | 83 | 70-130 | | | |
| Benzene | 4.83 | 0.5 | " | 5.0000 | 0.00 | 97 | 76-127 | | | |
| Bromobenzene | 4.55 | 0.5 | " | 5.0000 | 0.00 | 91 | 70-130 | | | |
| Bromochloromethane | 4.62 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| Bromodichloromethane | 4.53 | 0.5 | " | 5.0000 | 0.00 | 91 | 70-130 | | | |
| Bromoform | 3.61 | 0.5 | " | 5.0000 | 0.00 | 72 | 70-130 | | | |
| Bromomethane | 5.17 | 0.5 | " | 5.0000 | 0.00 | 103 | 70-130 | | | |
| 2-Butanone | 5.02 | 5.0 | " | 5.0000 | 0.00 | 100 | 70-130 | | | |
| sec-Butylbenzene | 4.55 | 0.5 | " | 5.0000 | 0.00 | 91 | 70-130 | | | |
| tert-Butylbenzene | 4.49 | 0.5 | " | 5.0000 | 0.00 | 90 | 70-130 | | | |
| n-Butylbenzene | 4.61 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| Carbon disulfide | 5.31 | 0.5 | " | 5.0000 | 0.00 | 106 | 70-130 | | | |
| Carbon Tetrachloride | 4.28 | 0.5 | " | 5.0000 | 0.00 | 86 | 70-130 | | | |
| Chlorobenzene | 4.55 | 0.5 | " | 5.0000 | 0.00 | 91 | 75-130 | | | |
| Chlorodibromomethane | 4.16 | 0.5 | " | 5.0000 | 0.00 | 83 | 70-130 | | | |
| Chloroethane | 5.27 | 0.5 | " | 5.0000 | 0.00 | 105 | 70-130 | | | |
| 2-Chloroethylvinyl ether | U | 1.0 | " | | 0.00 | | 70-130 | | | |
| Chloroform | 4.80 | 0.5 | " | 5.0000 | 0.04 | 95 | 70-130 | | | |
| Chloromethane | 5.15 | 0.5 | " | 5.0000 | 0.00 | 103 | 70-130 | | | |
| 2-Chlorotoluene | 4.68 | 0.5 | " | 5.0000 | 0.00 | 94 | 70-130 | | | |
| 4-Chlorotoluene | 4.66 | 0.5 | " | 5.0000 | 0.00 | 93 | 70-130 | | | |
| Cyclohexane | 4.78 | 0.5 | " | 5.0000 | 0.00 | 96 | 70-130 | | | |
| 1,2-Dibromo-3-chloropropane | 4.47 | 1.0 | " | 5.0000 | 0.00 | 89 | 70-130 | | | |
| 1,2-Dibromoethane (EDB) | 4.52 | 0.5 | " | 5.0000 | 0.00 | 90 | 70-130 | | | |
| Dibromomethane | 4.97 | 0.5 | " | 5.0000 | 0.00 | 99 | 70-130 | | | |
| 1,2-Dichlorobenzene | 4.60 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| 1,3-Dichlorobenzene | 4.60 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| 1,4-Dichlorobenzene | 4.61 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| Dichlorodifluoromethane | 5.08 | 0.5 | " | 5.0000 | 0.00 | 102 | 70-130 | | | |
| 1,1-Dichloroethane | 4.46 | 0.5 | " | 5.0000 | 0.00 | 89 | 70-130 | | | |
| 1,2-Dichloroethane | 4.84 | 0.5 | " | 5.0000 | 0.00 | 97 | 70-130 | | | |
| 1,1-Dichloroethene | 5.88 | 0.5 | " | 5.0000 | 0.00 | 118 | 61-145 | | | |
| cis-1,2-Dichloroethene | 4.65 | 0.5 | " | 5.0000 | 0.00 | 93 | 70-130 | | | |
| trans-1,2-Dichloroethene | 5.90 | 0.5 | " | 5.0000 | 0.00 | 118 | 70-130 | | | |
| 1,2-Dichloropropane | 4.91 | 0.5 | " | 5.0000 | 0.00 | 98 | 70-130 | | | |
| 1,3-Dichloropropane | 4.84 | 0.5 | " | 5.0000 | 0.00 | 97 | 70-130 | | | |
| 2,2-Dichloropropane | 4.34 | 0.5 | " | 5.0000 | 0.00 | 87 | 70-130 | | | |
| 1,1-Dichloropropene | 4.74 | 0.5 | " | 5.0000 | 0.00 | 95 | 70-130 | | | |
| cis-1,3-Dichloropropene | 4.61 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| trans-1,3-Dichloropropene | 4.35 | 0.5 | " | 5.0000 | 0.00 | 87 | 70-130 | | | |
| Ethylbenzene | 4.47 | 0.5 | " | 5.0000 | 0.00 | 89 | 70-130 | | | |
| Freon 113 | 6.10 | 0.5 | " | 5.0000 | 0.00 | 122 | 70-130 | | | |
| Hexachlorobutadiene | 4.23 | 0.5 | " | 5.0000 | 0.00 | 85 | 70-130 | | | |
| 2-Hexanone | 4.53 | 5.0 | " | 5.0000 | 0.00 | 91 | 70-130 | | | J |
| Isopropylbenzene | 4.42 | 0.5 | " | 5.0000 | 0.00 | 88 | 70-130 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Result | Quantitation | | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| | | Limit | Units | | | | | | | |

Batch BD82402 - VOC Purge and Trap

| Matrix Spike (BD82402-MS1) | Source: 0804013-05 | | | Prepared: 04/24/08 09:00 | | Analyzed: 04/24/08 21:03 | | | | |
|----------------------------------|--------------------|-----|------|--------------------------|------|--------------------------|--------|--|--|---|
| p-Isopropyltoluene | 4.52 | 0.5 | ug/L | 5.0000 | 0.00 | 90 | 70-130 | | | |
| Methyl Acetate | 6.33 | 1.0 | " | 5.0000 | 0.00 | 127 | 70-130 | | | |
| Methylcyclohexane | 4.59 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| Methyl-tert-butyl ether | 5.85 | 0.5 | " | 5.0000 | 0.00 | 117 | 70-130 | | | |
| Methylene Chloride | 5.79 | 0.5 | " | 5.0000 | 0.00 | 116 | 70-130 | | | |
| 4-Methyl-2-pentanone | 4.57 | 5.0 | " | 5.0000 | 0.00 | 91 | 70-130 | | | J |
| Naphthalene | 4.57 | 0.5 | " | 5.0000 | 0.00 | 91 | 70-130 | | | |
| n-Propylbenzene | 4.61 | 0.5 | " | 5.0000 | 0.00 | 92 | 70-130 | | | |
| 1,1,2,2-Tetrachloroethane | 4.78 | 0.5 | " | 5.0000 | 0.00 | 96 | 70-130 | | | |
| 1,1,1,2-Tetrachloroethane | 4.26 | 0.5 | " | 5.0000 | 0.00 | 85 | 70-130 | | | |
| Tetrachloroethene | 4.22 | 0.5 | " | 5.0000 | 0.00 | 84 | 70-130 | | | |
| Toluene | 4.53 | 0.5 | " | 5.0000 | 0.00 | 91 | 76-125 | | | |
| 1,2,3-Trichlorobenzene | 4.51 | 0.5 | " | 5.0000 | 0.00 | 90 | 70-130 | | | |
| 1,2,4-Trichlorobenzene | 4.32 | 0.5 | " | 5.0000 | 0.00 | 86 | 70-130 | | | |
| 1,1,1-Trichloroethane | 4.42 | 0.5 | " | 5.0000 | 0.00 | 88 | 70-130 | | | |
| 1,1,2-Trichloroethane | 4.72 | 0.5 | " | 5.0000 | 0.00 | 94 | 70-130 | | | |
| Trichloroethene | 4.47 | 0.5 | " | 5.0000 | 0.00 | 89 | 71-120 | | | |
| Trichlorofluoromethane | 3.81 | 0.5 | " | 5.0000 | 0.00 | 76 | 70-130 | | | |
| 1,2,3-Trichloropropane | 5.04 | 0.5 | " | 5.0000 | 0.00 | 101 | 70-130 | | | |
| 1,2,4-Trimethylbenzene | 4.57 | 0.5 | " | 5.0000 | 0.00 | 91 | 70-130 | | | |
| 1,3,5-Trimethylbenzene | 4.51 | 0.5 | " | 5.0000 | 0.00 | 90 | 70-130 | | | |
| Vinyl acetate | 4.18 | 0.5 | " | 5.0000 | 0.00 | 84 | 70-130 | | | |
| Vinyl chloride | 5.21 | 0.5 | " | 5.0000 | 0.00 | 104 | 70-130 | | | |
| m-Xylene/p-Xylene | 8.80 | 1.0 | " | 10.000 | 0.00 | 88 | 70-130 | | | |
| Surrogate: 4-Bromofluorobenzene | 3.970 | | " | 4.0000 | | 99 | 86-115 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 4.040 | | " | 4.0000 | | 101 | 76-114 | | | |
| Surrogate: Toluene-d8 | 4.020 | | " | 4.0000 | | 100 | 88-110 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Quantitation | | | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------------|-------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| | Result | Limit | Units | | | | | | | |

Batch BD82402 - VOC Purge and Trap

| Matrix Spike Dup (BD82402-MSD1) | Source: 0804013-05 | | | Prepared: 04/24/08 09:00 | | Analyzed: 04/24/08 21:34 | | | | |
|---------------------------------|--------------------|-----|------|--------------------------|------|--------------------------|--------|-----|----|---|
| Acetone | 7.88 | 5.0 | ug/L | 5.0000 | 3.65 | 85 | 70-130 | 0.9 | 20 | |
| Benzene | 4.28 | 0.5 | " | 5.0000 | 0.00 | 86 | 76-127 | 12 | 11 | A |
| Bromobenzene | 4.11 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 10 | 20 | |
| Bromochloromethane | 4.17 | 0.5 | " | 5.0000 | 0.00 | 83 | 70-130 | 10 | 20 | |
| Bromodichloromethane | 4.10 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 10 | 20 | |
| Bromoform | 3.16 | 0.5 | " | 5.0000 | 0.00 | 63 | 70-130 | 13 | 20 | A |
| Bromomethane | 5.73 | 0.5 | " | 5.0000 | 0.00 | 115 | 70-130 | 10 | 20 | |
| 2-Butanone | 4.97 | 5.0 | " | 5.0000 | 0.00 | 99 | 70-130 | 1 | 20 | J |
| sec-Butylbenzene | 4.08 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 11 | 20 | |
| tert-Butylbenzene | 4.01 | 0.5 | " | 5.0000 | 0.00 | 80 | 70-130 | 11 | 20 | |
| n-Butylbenzene | 4.19 | 0.5 | " | 5.0000 | 0.00 | 84 | 70-130 | 10 | 20 | |
| Carbon disulfide | 5.90 | 0.5 | " | 5.0000 | 0.00 | 118 | 70-130 | 11 | 20 | |
| Carbon Tetrachloride | 3.67 | 0.5 | " | 5.0000 | 0.00 | 73 | 70-130 | 15 | 20 | |
| Chlorobenzene | 4.05 | 0.5 | " | 5.0000 | 0.00 | 81 | 75-130 | 12 | 13 | |
| Chlorodibromomethane | 3.66 | 0.5 | " | 5.0000 | 0.00 | 73 | 70-130 | 13 | 20 | |
| Chloroethane | 5.51 | 0.5 | " | 5.0000 | 0.00 | 110 | 70-130 | 4 | 20 | |
| 2-Chloroethylvinyl ether | U | 1.0 | " | | 0.00 | | 70-130 | | 20 | |
| Chloroform | 4.19 | 0.5 | " | 5.0000 | 0.04 | 83 | 70-130 | 14 | 20 | |
| Chloromethane | 5.62 | 0.5 | " | 5.0000 | 0.00 | 112 | 70-130 | 9 | 20 | |
| 2-Chlorotoluene | 4.23 | 0.5 | " | 5.0000 | 0.00 | 85 | 70-130 | 10 | 20 | |
| 4-Chlorotoluene | 4.12 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 12 | 20 | |
| Cyclohexane | 4.26 | 0.5 | " | 5.0000 | 0.00 | 85 | 70-130 | 12 | 20 | |
| 1,2-Dibromo-3-chloropropane | 3.79 | 1.0 | " | 5.0000 | 0.00 | 76 | 70-130 | 16 | 20 | |
| 1,2-Dibromoethane (EDB) | 4.11 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 10 | 20 | |
| Dibromomethane | 4.40 | 0.5 | " | 5.0000 | 0.00 | 88 | 70-130 | 12 | 20 | |
| 1,2-Dichlorobenzene | 4.12 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 11 | 20 | |
| 1,3-Dichlorobenzene | 4.03 | 0.5 | " | 5.0000 | 0.00 | 81 | 70-130 | 13 | 20 | |
| 1,4-Dichlorobenzene | 4.20 | 0.5 | " | 5.0000 | 0.00 | 84 | 70-130 | 9 | 20 | |
| Dichlorodifluoromethane | 5.48 | 0.5 | " | 5.0000 | 0.00 | 110 | 70-130 | 8 | 20 | |
| 1,1-Dichloroethane | 4.00 | 0.5 | " | 5.0000 | 0.00 | 80 | 70-130 | 11 | 20 | |
| 1,2-Dichloroethane | 4.41 | 0.5 | " | 5.0000 | 0.00 | 88 | 70-130 | 9 | 20 | |
| 1,1-Dichloroethene | 5.31 | 0.5 | " | 5.0000 | 0.00 | 106 | 61-145 | 10 | 14 | |
| cis-1,2-Dichloroethene | 4.10 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 13 | 20 | |
| trans-1,2-Dichloroethene | 4.17 | 0.5 | " | 5.0000 | 0.00 | 83 | 70-130 | 34 | 20 | A |
| 1,2-Dichloropropane | 4.43 | 0.5 | " | 5.0000 | 0.00 | 89 | 70-130 | 10 | 20 | |
| 1,3-Dichloropropane | 4.38 | 0.5 | " | 5.0000 | 0.00 | 88 | 70-130 | 10 | 20 | |
| 2,2-Dichloropropane | 3.77 | 0.5 | " | 5.0000 | 0.00 | 75 | 70-130 | 14 | 20 | |
| 1,1-Dichloropropene | 4.14 | 0.5 | " | 5.0000 | 0.00 | 83 | 70-130 | 14 | 20 | |
| cis-1,3-Dichloropropene | 4.08 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 12 | 20 | |
| trans-1,3-Dichloropropene | 3.74 | 0.5 | " | 5.0000 | 0.00 | 75 | 70-130 | 15 | 20 | |
| Ethylbenzene | 4.00 | 0.5 | " | 5.0000 | 0.00 | 80 | 70-130 | 11 | 20 | |
| Freon 113 | 5.49 | 0.5 | " | 5.0000 | 0.00 | 110 | 70-130 | 11 | 20 | |
| Hexachlorobutadiene | 3.77 | 0.5 | " | 5.0000 | 0.00 | 75 | 70-130 | 12 | 20 | |
| 2-Hexanone | 4.54 | 5.0 | " | 5.0000 | 0.00 | 91 | 70-130 | 0.2 | 20 | J |
| Isopropylbenzene | 3.98 | 0.5 | " | 5.0000 | 0.00 | 80 | 70-130 | 10 | 20 | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

QC Data
Volatile Organic Compounds - Quality Control

| Analyte | Result | Quantitation | | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| | | Limit | Units | | | | | | | |

Batch BD82402 - VOC Purge and Trap

| Matrix Spike Dup (BD82402-MSD1) | Source: 0804013-05 | | | Prepared: 04/24/08 09:00 | | Analyzed: 04/24/08 21:34 | | | | |
|----------------------------------|--------------------|-----|------|--------------------------|------|--------------------------|--------|----|----|---|
| p-Isopropyltoluene | 4.00 | 0.5 | ug/L | 5.0000 | 0.00 | 80 | 70-130 | 12 | 20 | |
| Methyl Acetate | 5.01 | 1.0 | " | 5.0000 | 0.00 | 100 | 70-130 | 23 | 20 | |
| Methylcyclohexane | 4.09 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 12 | 20 | |
| Methyl-tert-butyl ether | 3.91 | 0.5 | " | 5.0000 | 0.00 | 78 | 70-130 | 40 | 20 | A |
| Methylene Chloride | 5.40 | 0.5 | " | 5.0000 | 0.00 | 108 | 70-130 | 7 | 20 | |
| 4-Methyl-2-pentanone | 4.66 | 5.0 | " | 5.0000 | 0.00 | 93 | 70-130 | 2 | 20 | J |
| Naphthalene | 4.29 | 0.5 | " | 5.0000 | 0.00 | 86 | 70-130 | 6 | 20 | |
| n-Propylbenzene | 4.11 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 11 | 20 | |
| 1,1,2,2-Tetrachloroethane | 4.26 | 0.5 | " | 5.0000 | 0.00 | 85 | 70-130 | 12 | 20 | |
| 1,1,1,2-Tetrachloroethane | 3.71 | 0.5 | " | 5.0000 | 0.00 | 74 | 70-130 | 14 | 20 | |
| Tetrachloroethene | 3.76 | 0.5 | " | 5.0000 | 0.00 | 75 | 70-130 | 12 | 20 | |
| Toluene | 4.08 | 0.5 | " | 5.0000 | 0.00 | 82 | 76-125 | 10 | 13 | |
| 1,2,3-Trichlorobenzene | 4.12 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 9 | 20 | |
| 1,2,4-Trichlorobenzene | 4.02 | 0.5 | " | 5.0000 | 0.00 | 80 | 70-130 | 7 | 20 | |
| 1,1,1-Trichloroethane | 3.87 | 0.5 | " | 5.0000 | 0.00 | 77 | 70-130 | 13 | 20 | |
| 1,1,2-Trichloroethane | 4.12 | 0.5 | " | 5.0000 | 0.00 | 82 | 70-130 | 14 | 20 | |
| Trichloroethene | 3.93 | 0.5 | " | 5.0000 | 0.00 | 79 | 71-120 | 13 | 14 | |
| Trichlorofluoromethane | 5.65 | 0.5 | " | 5.0000 | 0.00 | 113 | 70-130 | 39 | 20 | A |
| 1,2,3-Trichloropropane | 4.40 | 0.5 | " | 5.0000 | 0.00 | 88 | 70-130 | 14 | 20 | |
| 1,2,4-Trimethylbenzene | 4.06 | 0.5 | " | 5.0000 | 0.00 | 81 | 70-130 | 12 | 20 | |
| 1,3,5-Trimethylbenzene | 4.04 | 0.5 | " | 5.0000 | 0.00 | 81 | 70-130 | 11 | 20 | |
| Vinyl acetate | 4.49 | 0.5 | " | 5.0000 | 0.00 | 90 | 70-130 | 7 | 20 | |
| Vinyl chloride | 5.73 | 0.5 | " | 5.0000 | 0.00 | 115 | 70-130 | 10 | 20 | |
| m-Xylene/p-Xylene | 7.82 | 1.0 | " | 10.000 | 0.00 | 78 | 70-130 | 12 | 20 | |
| Surrogate: 4-Bromofluorobenzene | 3.970 | | " | 4.0000 | | 99 | 86-115 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 4.070 | | " | 4.0000 | | 102 | 76-114 | | | |
| Surrogate: Toluene-d8 | 4.020 | | " | 4.0000 | | 100 | 88-110 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: JayCee Cleaners

Project #: DAS R32936

Notes and Definitions

| | |
|-----|---|
| T | Tentatively Identified Compound. Identified as a result of a library search using the EPA/NIST Mass Spectral Library. Standards were not used to verify the identity and quantity of the compound. The reported value is an estimate. |
| J | The identification of the analyte is acceptable; the reported value is an estimate. |
| B | Not detected substantially above (10 times) the level reported in the laboratory or field blanks (including field, trip, rinsate, and equipment blanks). |
| A | Quality control value is outside acceptance limits. |
| NR | Not Reported |
| RPD | Relative Percent Difference |
| U | Analyte included in the analysis, but not detected at or above the quantitation limit. |

Quantitation Limit: The lowest concentration of an analyte that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method and that takes into account analytical adjustments made during sample preparation and analysis.

SOLID SAMPLE RESULTS - REPORTING PROTOCOL: Solid samples where % Solids (percent dry wt at 105 degrees C) has been performed, are analyzed wet and converted to a dry weight result for reporting purposes. This is routine for organics and most inorganic analyses. When metals and mercury analyses are requested, solid samples are routinely analyzed and reported on a dry weight basis. Solid samples for metals/mercury are prepared for analysis by an initial drying at 60 degree C and homogenization before digestion. Oil-type samples will be analyzed and reported on a wet weight basis for all analyses because of the nature of the sample. Any exceptions to the protocol will be noted with a qualifier



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
ENVIRONMENTAL SCIENCE CENTER
701 MAPES ROAD
FORT MEADE, MARYLAND 20755-5350

DATE : May 22, 2008

SUBJECT: Region III Data QA Review

FROM : Colleen Walling *Colleen K. Walling*
Region III ESAT PO (3EA20)

TO : Todd Richardson
Regional Program Manager (3HS32)

Attached is the organic validation report for the Jaycee Cleaners site (CASE #: 37373; SDG#: ~~C1~~G43) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

cc: Marian Murphy (TETRA TECH)

TO File##: 0014 TDF# 0549

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

DATE: May 22, 2008

SUBJECT: Organic Data Validation (Level M2)
Site: Jaycee Cleaners
Case: 37373 SDG: C1G43

FROM: Kenneth W. Curry *KWC*
Senior Data Reviewer

JM Mahboobeh Mecanic *SM*
Senior Oversight Chemist

TO: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Case 37373, Sample Delivery Group (SDG) C1G43, consisted of twelve (12) soil and eight (8) aqueous samples from the Jaycee Cleaners site analyzed for volatile compounds by EnviroSystems Incorporated (ENVSYS). The sample set contained two (2) trip blanks. Samples were analyzed according to Contract Laboratory Program (CLP) Statement of Work (SOW) SOM01.2 through the Routine Analysis Services (RAS) program.

SUMMARY

Validation of data was performed according to Innovative Approaches to Data Validation, Level M2. This level of review includes assessment of all Quality Assurance/Quality Control (QA/QC) data and review of chromatograms, but excludes review of spectra and raw data.

MAJOR PROBLEMS

- Deuterated Monitoring Compound (DMC) benzene-d6 had a recovery of less than ten percent (<10%) in sample C1G46. No positive result was reported for benzene, the only compound associated with this DMC, in this sample. The quantitation limit for benzene in this sample was rejected and qualified "R" on the Data Summary Form (DSF).
- Response Factors (RFs) were less than 0.005 for 1,4-dioxane in the initial and continuing calibrations. No positive results were reported for this compound. The quantitation limit for this compound in all samples were rejected and qualified "R" on the DSFs.

MINOR PROBLEMS

- Several compounds failed precision criteria [Percent Relative Standard Deviation (%RSD) and/or Percent Difference (%D)] in the volatile and semivolatile initial and/or continuing calibrations. Positive results for these compounds in affected samples were qualified "J" on the DSFs superseded by "B". No imprecisions were greater than fifty percent (>50%) in affected samples. Therefore, no quantitation limits were qualified based on these outliers.

- Recoveries of DMCs 1,2-dichloroethane-d4 and 1,2-dichlorobenzene-d4 were outside the lower control limits in sample C1G46. The "L" qualifier for positive results reported for compounds associated with these DMCs has been superseded by "J" or "B". Quantitation limits for compounds associated with these DMCs were qualified "UL" on the DSFs.
- Recoveries of DMC trans-1,3-dichloropropene-d4 in sample C1G46 and DMC benzene-d6 in sample C1G53 were outside the upper control limits. Positive results for compounds associated with these DMCs have been qualified "K" on the DSFs.
- Internal Standard (IS) area count for IS 1,4-dichlorobenzene-d4 was outside the upper control limit in sample C1G44. This sample was not re-analyzed at this level. No positive results were reported for compounds associated with this IS. Quantitation limits for compounds associated with this IS were qualified "UJ" on the DSFs.
- Samples listed below were re-analyzed at medium level analyses due to several compounds exceeding the calibration range in the initial analyses. Due to large differences in the positive results for these compounds in these samples, the results were reported from the initial analyses and qualified "J" on the DSFs.

| <u>Sample</u> | <u>Compound(s)</u> |
|---------------|--|
| C1G44 | cis-1,2-dichloroethene, 1,1,1-trichloroethane, trichloroethene, toluene, tetrachloroethene, ethylbenzene, o-xylene, m,p-xylene |
| C1G46 | methylcyclohexane, tetrachloroethene, ethylbenzene, o-xylene, m,p-xylene, isopropylbenzene |
| C1G53 | cis-1,2-dichloroethene, 1,1,1-trichloroethane, trichloroethene, toluene, tetrachloroethene, ethylbenzene, o-xylene, m,p-xylene |

NOTES

- Compounds detected below Contract Required Quantitation Limits (CRQLs) were qualified "J" on the DSFs unless superseded by "B".
- Samples C1G45 was re-analyzed as a medium level analysis due to tetrachloroethene exceeding the calibration range in the initial analysis of this sample. The positive result for this compound in this sample was reported from the medium level analysis and annotated with a "+" symbol on the DSF.
- Samples listed below were re-analyzed at dilutions due to the compound listed exceeding the calibration range in the initial analyses. The positive results for these compounds in these samples were reported from the diluted analysis and annotated with a "+" symbol on the DSFs.

| <u>Sample</u> | <u>Dilution Factor</u> | <u>Compound</u> |
|---------------|------------------------|------------------------|
| C0542 | 5X | cis-1,2-dichloroethene |
| C05454 | 100X | tetrachloroethene |

- Recoveries of several DMCs were outside the upper control limits. No data were reported for compounds associated with these DMCs in these samples. Therefore, no data were qualified based on these outliers.
- Tentatively Identified Compounds (TICs) were reviewed and accepted during data validation. TIC Form Is for samples in which TICs were identified are included in Appendix E.

- Concentrations of compounds found in the analyses of trip, method and storage blanks associated with these samples are listed below. Only compounds used to qualify data are listed. Samples with concentrations of common laboratory contaminants less than or equal to ten times ($\leq 10X$) the blank concentrations or with concentrations of other compounds less than or equal to five times ($\leq 5X$) the blank concentration have been qualified "B" on the DSFs.

| <u>Blank</u> | <u>Compound</u> | <u>Concentration</u> | <u>Affected Samples</u> |
|--------------------|---------------------|------------------------|---|
| Method (VBLKG0) | methylene chloride* | 3.1 J $\mu\text{g/L}$ | All Aqueous Samples |
| | chloroform | 4.1 J $\mu\text{g/L}$ | All Aqueous Samples |
| Method (VBLKHG) | methylene chloride* | 3.2 J $\mu\text{g/Kg}$ | All Soil Samples |
| | chloroform | 2.7 J $\mu\text{g/Kg}$ | All Soil Samples Except C1G44 |
| Trip (C0541) | acetone* | 16 $\mu\text{g/L}$ | C1G44, C1G46, C1G49, C1G53, C0539, C0540, C0542, C0543, C0545, C0546 |

* Common Laboratory Contaminant

- The data package did not contain a laboratory Chain of Custody (COC) record for samples C0539, C0540, C0541 and C1G54.
- The soil samples had the station location listed as the sample number on the COC records. These samples were assigned new sample numbers by SMO.
- The soil samples were collected utilizing Encore samplers. The samples were transferred and placed in a freezer upon sample receipt until sample analysis by the laboratory.
- Sample weights other than five (5) grams were used in the analyses of the soil samples associated with this case. The dilution factors reported on the DSFs reflect actual sample weights analyzed.
- Samples C1G53 and C0553 were designated as field duplicate on the COC records. However, no sample duplicate was provided. This information was requested from the sampler. However, the duplication has not been received as of the date of this report. Therefore, no comparison could be made by the reviewer.

All data for Case 37373, SDG C1G43, were reviewed in accordance with the Region 3 Innovative Approaches for Validation of Organic Data (Level M2), June 1995.

ATTACHMENTS

- 1) Appendix A - Glossary of Data Qualifiers
- 2) Appendix B - Data Summary Forms
- 3) Appendix C - Chain of Custody (COC) Records
- 4) Appendix D - Laboratory Case Narrative
- 5) Appendix E - Tentatively Identified Compounds (TICs)

DCN: 37373M2

Appendix A

Glossary of Data Qualifiers

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

Appendix B

Data Summary Forms

Page 1 of 10

Number of Soil Samples : 12

Number of Water Samples : 8

ENVSYS

[illegible]

DATA SUMMARY FORM: Volatiles

Page 2 of 10

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | | | | |
|-----------------------------|--|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|------|
| Sample Number : | | C1G43 | | C1G44 | | C1G45 | | C1G46 | | C1G47 | | |
| Sampling Location : | | JCC-01-0405 | | JCC-02-0910 | | JCC-03-0203 | | JCC-04-0809 | | JCC-05-0607 | | |
| Field QC: | | | | | | | | | | | | |
| Matrix : | | Soil | | Soil | | Soil | | Soil | | Soil | | |
| Units : | | ug/Kg | | ug/Kg | | ug/Kg | | ug/Kg | | ug/Kg | | |
| Date Sampled : | | 4/23/2008 | | 4/23/2008 | | 4/23/2008 | | 4/23/2008 | | 4/23/2008 | | |
| Time Sampled : | | 09:54 | | 10:21 | | 10:32 | | 10:57 | | 11:24 | | |
| %Moisture : | | 5.2 | | 17.6 | | 10.4 | | 13.9 | | 18.1 | | |
| Dilution Factor : | | 0.99 | | 0.99 | | 0.99/55.2 | | 0.99 | | 0.99 | | |
| Volatile Compound | | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | | 5.0 | | | | | 2.5 | J | 17 | K | | |
| Tetrachloroethene | | 5.0 | 4.5 | J | 130000 | J | 840+ | | 2000 | J | 34 | J |
| 2-Hexanone | | 10 | | | | | | | | | | |
| Dibromochloromethane | | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | | 5.0 | | | | | | | | UL | | |
| Chlorobenzene | | 5.0 | | | | | | | | UL | | |
| Ethylbenzene | | 5.0 | | | 2300 | J | | | 700 | J | | |
| o-Xylene | | 5.0 | | | 5700 | J | | | 1500 | J | | |
| m,p-Xylene | | 5.0 | | | 6700 | J | | | 2200 | J | | |
| Styrene | | 5.0 | | | | | | | | | | |
| Bromoform | | 5.0 | | | | UJ | | | | | | |
| Isopropylbenzene | | 5.0 | | | | | | | 480 | J | | |
| 1,1,2,2-Tetrachloroethane | | 5.0 | | | | | | | | | | |
| 1,3-Dichlorobenzene | | 5.0 | | | | UJ | | | | UL | | |
| 1,4-Dichlorobenzene | | 5.0 | | | | UJ | | | | UL | | |
| 1,2-Dichlorobenzene | | 5.0 | | | | UJ | | | | UL | | |
| 1,2-Dibromo-3-chloropropane | | 5.0 | | | | UJ | | | | | | |
| 1,2,4-Trichlorobenzene | | 5.0 | | | | UJ | | | | UL | | |
| 1,2,3-Trichlorobenzene | | 5.0 | | | | UJ | | | | UL | | |

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: $(CRQL * Dilution Factor) / [(100 - \%Moisture) / 100]$

Revised 09/99

+ = Result reported from the diluted analysis.

Page 3 of 10

SDG : C1G43

JAYCEE CLEANERS

ENVSYS

[illegible]

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| Sample Number : | | C1G48 | | C1G49 | | C1G50 | | C1G51 | | C1G52 | | |
|-----------------------------|--|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|------|
| Sampling Location : | | JCC-06-0607 | | JCC-07-0708 | | JCC-08-0708 | | JCC-09-0607 | | JCC-10-0809 | | |
| Field QC: | | | | | | | | | | | | |
| Matrix : | | Soil | | Soil | | Soil | | Soil | | Soil | | |
| Units : | | ug/Kg | | ug/Kg | | ug/Kg | | ug/Kg | | ug/Kg | | |
| Date Sampled : | | 4/23/2008 | | 4/23/2008 | | 4/23/2008 | | 4/23/2008 | | 4/23/2008 | | |
| Time Sampled : | | 11:50 | | 12:09 | | 12:32 | | 13:00 | | 13:23 | | |
| %Moisture : | | 6.1 | | 16.7 | | 9.7 | | 11.7 | | 12.7 | | |
| Dilution Factor : | | 1.0 | | 0.99 | | 0.99 | | 1.0 | | 0.99 | | |
| Volatile Compound | | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | | 5.0 | | | | | | | | | | |
| Tetrachloroethene | | 5.0 | 7.9 | J | 50 | J | 3.4 | J | 29 | J | 17 | J |
| 2-Hexanone | | 10 | | | | | | | | | | |
| Dibromochloromethane | | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | | 5.0 | | | | | | | | | | |
| Chlorobenzene | | 5.0 | | | | | | | | | | |
| Ethylbenzene | | 5.0 | | | | | | | | | | |
| o-Xylene | | 5.0 | | | | | | | | | | |
| m,p-Xylene | | 5.0 | | | | | | | | | | |
| Styrene | | 5.0 | | | | | | | | | | |
| Bromoform | | 5.0 | | | | | | | | | | |
| Isopropylbenzene | | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | 5.0 | | | | | | | | | | |
| 1,3-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,4-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: $(CRQL * Dilution Factor) / [(100 - \%Moisture) / 100]$

Revised 09/99

Page 5 of 10

SDG : C1G43

JAYCEE CLEANERS

ENVSYS

[illegible]

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | | | |
|-----------------------------|------|-------------|------|-------------|------|--------|------|--------|------|--------|------|
| Sample Number : | | C1G53 | | C1G54 | | | | | | | |
| Sampling Location : | | JCC-12-0910 | | JCC-11-0607 | | | | | | | |
| Field QC: | | | | | | | | | | | |
| Matrix : | | Soil | | Soil | | | | | | | |
| Units : | | ug/Kg | | ug/Kg | | | | | | | |
| Date Sampled : | | 4/23/2008 | | 4/23/2008 | | | | | | | |
| Time Sampled : | | 10:25 | | 14:15 | | | | | | | |
| %Moisture : | | 17.1 | | 19.6 | | | | | | | |
| Dilution Factor : | | 0.99 | | 0.93 | | | | | | | |
| Volatile Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | 5.0 | | | | | | | | | | |
| Tetrachloroethene | 5.0 | 110000 | J | | | | | | | | |
| 2-Hexanone | 10 | | | | | | | | | | |
| Dibromochloromethane | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | | | | | | | | | | |
| Chlorobenzene | 5.0 | | | | | | | | | | |
| Ethylbenzene | 5.0 | 2100 | J | | | | | | | | |
| o-Xylene | 5.0 | 5100 | J | | | | | | | | |
| m,p-Xylene | 5.0 | 5900 | J | | | | | | | | |
| Styrene | 5.0 | | | | | | | | | | |
| Bromoform | 5.0 | | | | | | | | | | |
| Isopropylbenzene | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 5.0 | | | | | | | | | | |
| 1,3-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,4-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]

Revised 09/99

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| Sample Number : | | C0539 | | C0540 | | C0541 | | C0542 | | C0543 | |
|---------------------------------------|------|-----------|------|-----------|------|-----------------|------|-----------|------|-----------|------|
| Sampling Location : | | JCC-GW-01 | | JCC-GW-10 | | JCC-TB1 | | JCC-GW-07 | | JCC-GW-08 | |
| Field QC: | | | | | | Trip Blank | | | | | |
| Matrix : | | Water | | Water | | Water | | Water | | Water | |
| Units : | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | |
| Date Sampled : | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | |
| Time Sampled : | | 10:40 | | 13:50 | | 08:44 | | 19:22 | | 15:41 | |
| pH : | | <2 | | <2 | | <2 | | <2 | | <2 | |
| Dilution Factor : | | 1.0 | | 1.0 | | 1.0 | | 1.0/5.0 | | 1.0 | |
| Volatile Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Dichlorodifluoromethane | 5.0 | | | | | | | | | | |
| Chloromethane | 5.0 | | | | | | | | | | |
| *Vinyl chloride | 5.0 | | | | | | | | | | |
| Bromomethane | 5.0 | | | | | | | | | | |
| Chloroethane | 5.0 | | | | | | | | | | |
| Trichlorofluoromethane | 5.0 | | | | | | | | | | |
| *1,1-Dichloroethene | 5.0 | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | | | | | | | | | | |
| Acetone | 10 | 15 | B | 4.8 | B | 16 _g | J | 5.2 | B | 3.6 | B |
| Carbon Disulfide | 5.0 | | | | | | | | | | |
| Methyl acetate | 5.0 | | | | | | | | | | |
| *Methylene chloride | 5.0 | 9.8 | B | 7.0 | B | 7.1 | B | 2.8 | B | 2.9 | B |
| trans-1,2-Dichloroethene | 5.0 | | | | | | | | | | |
| Methyl tert-butyl ether | 5.0 | | | | | | | | | | |
| 1,1-Dichloroethane | 5.0 | | | | | | | | | | |
| cis-1,2-Dichloroethene | 5.0 | | | | | | | 200+ | | | |
| *2-Butanone | 10 | | | | | | | | | | |
| Bromochloromethane | 5.0 | | | | | | | | | | |
| Chloroform | 5.0 | 2.6 | B | 2.6 | B | 12 | B | 2.8 | B | 2.9 | B |
| *1,1,1-Trichloroethane | 5.0 | | | | | | | | | | |
| Cyclohexane | 5.0 | | | | | | | | | | |
| *Carbon tetrachloride | 5.0 | | | | | | | | | | |
| *Benzene | 5.0 | | | | | | | | | | |
| *1,2-Dichloroethane | 5.0 | | | | | | | | | | |
| 1,4-Dioxane | 100 | | R | | R | | R | | R | | R |
| Trichloroethene | 5.0 | | | | | | | 18 | | | |
| Methylcyclohexane | 5.0 | | | | | | | | | | |
| *1,2-Dichloropropane | 5.0 | | | | | | | | | | |
| Bromodichloromethane | 5.0 | | | | | | | | | | |
| cis-1,3-Dichloropropene | 5.0 | | | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | | | | | | | | | | |
| *Toluene | 5.0 | | | | | | | | | | |
| trans-1,3-Dichloropropene | 5.0 | | | | | | | | | | |

+ = Result reported from the diluted analysis.

DATA SUMMARY FORM: Volatiles

Page 8 of 10

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | | | |
|-----------------------------|------|-----------|------|-----------|------|------------|------|-----------|------|-----------|------|
| Sample Number : | | C0539 | | C0540 | | C0541 | | C0542 | | C0543 | |
| Sampling Location : | | JCC-GW-01 | | JCC-GW-10 | | JCC-TB1 | | JCC-GW-07 | | JCC-GW-08 | |
| Field QC: | | | | | | Trip Blank | | | | | |
| Matrix : | | Water | | Water | | Water | | Water | | Water | |
| Units : | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | |
| Date Sampled : | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | |
| Time Sampled : | | 10:40 | | 13:50 | | 08:44 | | 19:22 | | 15:41 | |
| pH : | | <2 | | <2 | | <2 | | <2 | | <2 | |
| Dilution Factor : | | 1.0 | | 1.0 | | 1.0 | | 1.0/5.0 | | 1.0 | |
| Volatile Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | 5.0 | | | | | | | 1.1 | J | | |
| *Tetrachloroethene | 5.0 | 3.1 | J | | | | | 140 | | | |
| 2-Hexanone | 10 | | | | | | | | | | |
| Dibromochloromethane | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | | | | | | | | | | |
| *Chlorobenzene | 5.0 | | | | | | | | | | |
| *Ethylbenzene | 5.0 | | | | | | | | | | |
| o-Xylene | 5.0 | | | | | | | | | | |
| m,p-Xylene | 5.0 | | | | | | | | | | |
| *Styrene | 5.0 | | | | | | | | | | |
| Bromoform | 5.0 | | | | | | | | | | |
| Isopropylbenzene | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 5.0 | | | | | | | | | | |
| *1,3-Dichlorobenzene | 5.0 | | | | | | | | | | |
| *1,4-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

DATA SUMMARY FORM: Volatiles

Page _9_ of _10_

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| Sample Number : | | C0544 | | C0545 | | C0546 | | | | | | |
|---------------------------------------|--|------------|--------|-----------|--------|-----------|--------|------|--------|------|--------|------|
| Sampling Location : | | JCC-TB2 | | JCC-GW-09 | | JCC-GW-11 | | | | | | |
| Field QC: | | Trip Blank | | | | | | | | | | |
| Matrix : | | Water | | Water | | Water | | | | | | |
| Units : | | ug/L | | ug/L | | ug/L | | | | | | |
| Date Sampled : | | 4/24/2008 | | 4/25/2008 | | 4/25/2008 | | | | | | |
| Time Sampled : | | 15:26 | | 08:55 | | 11:23 | | | | | | |
| pH : | | <2 | | <2 | | <2 | | | | | | |
| Dilution Factor : | | 1.0 | | 1.0/100 | | 1.0 | | | | | | |
| Volatile Compound | | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Dichlorodifluoromethane | | 5.0 | | | | | | | | | | |
| Chloromethane | | 5.0 | | | | | | | | | | |
| *Vinyl chloride | | 5.0 | | | | | | | | | | |
| Bromomethane | | 5.0 | | | | | | | | | | |
| Chloroethane | | 5.0 | | | | | | | | | | |
| Trichlorofluoromethane | | 5.0 | | | | | | | | | | |
| *1,1-Dichloroethene | | 5.0 | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 5.0 | | | | | | | | | | |
| Acetone | | 10 | 14 | J | 7.0 | B | 3.5 | B | | | | |
| Carbon Disulfide | | 5.0 | | | | | | | | | | |
| Methyl acetate | | 5.0 | | | | | | | | | | |
| *Methylene chloride | | 5.0 | 3.0 | B | 3.1 | B | 2.7 | B | | | | |
| trans-1,2-Dichloroethene | | 5.0 | | | | | | | | | | |
| Methyl tert-butyl ether | | 5.0 | | | | | | | | | | |
| 1,1-Dichloroethane | | 5.0 | | | | | | | | | | |
| cis-1,2-Dichloroethene | | 5.0 | | | 140 | | | | | | | |
| *2-Butanone | | 10 | | | | | | | | | | |
| Bromochloromethane | | 5.0 | | | | | | | | | | |
| Chloroform | | 5.0 | 9.8 | B | 3.2 | B | 2.8 | B | | | | |
| *1,1,1-Trichloroethane | | 5.0 | | | | | | | | | | |
| Cyclohexane | | 5.0 | | | | | | | | | | |
| *Carbon tetrachloride | | 5.0 | | | | | | | | | | |
| *Benzene | | 5.0 | | | | | | | | | | |
| *1,2-Dichloroethane | | 5.0 | | | | | | | | | | |
| 1,4-Dioxane | | 100 | | R | | R | | R | | | | |
| Trichloroethene | | 5.0 | | | 61 | | | | | | | |
| Methylcyclohexane | | 5.0 | | | | | | | | | | |
| *1,2-Dichloropropane | | 5.0 | | | | | | | | | | |
| Bromodichloromethane | | 5.0 | | | | | | | | | | |
| cis-1,3-Dichloropropene | | 5.0 | | | | | | | | | | |
| 4-Methyl-2-pentanone | | 10 | | | | | | | | | | |
| *Toluene | | 5.0 | | | | | | | | | | |
| trans-1,3-Dichloropropene | | 5.0 | | | | | | | | | | |

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | | | | |
|-----------------------------|--|------------|--------|-----------|--------|-----------|--------|------|--------|------|--------|------|
| Sample Number : | | C0544 | | C0545 | | C0546 | | | | | | |
| Sampling Location : | | JCC-TB2 | | JCC-GW-09 | | JCC-GW-11 | | | | | | |
| Field QC: | | Trip Blank | | | | | | | | | | |
| Matrix : | | Water | | Water | | Water | | | | | | |
| Units : | | ug/L | | ug/L | | ug/L | | | | | | |
| Date Sampled : | | 4/24/2008 | | 4/25/2008 | | 4/25/2008 | | | | | | |
| Time Sampled : | | 15:26 | | 08:55 | | 11:23 | | | | | | |
| pH : | | <2 | | <2 | | <2 | | | | | | |
| Dilution Factor : | | 1.0 | | 1.0/100 | | 1.0 | | | | | | |
| Volatile Compound | | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | | 5.0 | | | | | | | | | | |
| *Tetrachloroethene | | 5.0 | | | 7000+ | | 13 | | | | | |
| 2-Hexanone | | 10 | | | | | | | | | | |
| Dibromochloromethane | | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | | 5.0 | | | | | | | | | | |
| *Chlorobenzene | | 5.0 | | | | | | | | | | |
| *Ethylbenzene | | 5.0 | | | | | | | | | | |
| o-Xylene | | 5.0 | | | | | | | | | | |
| m,p-Xylene | | 5.0 | | | | | | | | | | |
| *Styrene | | 5.0 | | | | | | | | | | |
| Bromoform | | 5.0 | | | | | | | | | | |
| Isopropylbenzene | | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | 5.0 | | | | | | | | | | |
| *1,3-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| *1,4-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

+ = Result reported from the diluted analysis.

Appendix C

Chain of Custody (COC) Records



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 37373

Client No:

R

| | | | | | |
|--------------------------------------|--|---------------------------------|--|-------------------------------|--|
| Region: 3 | | Date Shipped: 4/23/2008 | | Chain of Custody Record | |
| Project Code: CT4206 | | Carrier Name: FedEx | | Sampler Signature: | |
| Account Code: NONE | | Airbill: 8574998519380215 | | Relinquished By (Date / Time) | |
| CERCLIS ID: | | Shipped to: EnviroSystems, Inc. | | Received By (Date / Time) | |
| Spill ID: | | 9200 Rumsey Rd. | | 1 | |
| Site Name/State: Jay-Cee GW 04-08/NA | | Suite B102 | | 2 | |
| Project Leader: Jordan Vaughn | | Columbia MD 21045 | | 3 | |
| Action: | | (410) 964-0330 | | 4 | |
| Sampling Co: Tetra Tech | | | | | |

| SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURN ROUND | TAG No/ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | QC Type |
|----------------------|-------------------------------|---------------|-------------------------|--|---------------------|-----------------------------|------------|
| JCC-01-0405 C1G43 | Soil (>12")/ Jordan Vaughn | L/G | SOM01.2 (14) | JCC710 (Not preserved), JCC711 (Not preserved), JCC712 (Not preserved), JCC713 (Not preserved) (4) | JCC-01-0405 | S: 4/23/2008 9:54 | -- |
| JCC-02-0910 C1G44 | Soil (>12")/ Jordan Vaughn | H/G | SOM01.2 (14) | JCC714 (Not preserved), JCC715 (Not preserved), JCC716 (Not preserved), JCC717 (Not preserved) (4) | JCC-02-0910 | S: 4/23/2008 10:21 | -- |
| JCC-03-0203 C1G45 | Soil (>12")/ Jordan Vaughn | M/G | SOM01.2 (14) | JCC718 (Not preserved), JCC719 (Not preserved), JCC720 (Not preserved), JCC721 (Not preserved) (4) | JCC-03-0203 | S: 4/23/2008 10:32 | -- |
| JCC-04-0809 C1G46 | Soil (>12")/ Jordan Vaughn | M/G | SOM01.2 (14) | JCC722 (Not preserved), JCC723 (Not preserved), JCC724 (Not preserved), JCC725 (Not preserved), JCC726 (Not preserved), JCC727 (Not preserved), JCC728 (Not preserved), JCC729 (Not preserved), JCC730 (Not preserved), JCC731 (Not preserved), JCC732 (Not preserved), JCC733 (Not preserved) (12) | JCC-04-0809 | S: 4/23/2008 10:57 | Spike |
| JCC-05-0607 C1G47 | Soil (>12")/ Jordan Vaughn | L/G | SOM01.2 (14) | JCC734 (Not preserved), JCC735 (Not preserved), JCC736 (Not preserved), JCC737 (Not preserved) (4) | JCC-05-0607 | S: 4/23/2008 11:24 | -- |

| | | | |
|---|--|---|-------------------------------|
| Shipment for Case Complete? N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analysis Key: SOM01.2 = SOM01.2 SOIL VOA | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment Iced? _____ |

IR Number: 3-023200937-042308-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax

703/818-4602

REGION COPY



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 37373

Client No:

R

| | | |
|--------------------------------|---------------------------------|-------------------------------|
| Region: 3 | Date Shipped: 4/23/2008 | Sampler Signature: |
| Project Code: CT4206 | Carrier Name: FedEx | Relinquished By (Date / Time) |
| Account Code: | Airbill: 857498519380215 | Received By (Date / Time) |
| CERCLIS ID: NONE | Shipped to: EnviroSystems, Inc. | 1 |
| Spill ID: Jay-Cee GW 04-08/VA | 9200 Rumsey Rd. | 2 |
| Site Name/State: Jordan Vaughn | Suite B102 | 3 |
| Project Leader: Jordan Vaughn | Columbia MD 21045 | 4 |
| Action: | (410) 964-0330 | |
| Sampling Co: Tetra Tech | | |

| SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | QC Type |
|-----------------------|-------------------------------|---------------|-------------------------|--|---------------------|-------------------------------------|-----------------|
| JCC-05-0607 C16-45 | Soil (>12")/ Jordan Vaughn | /G | SOM01.2 (14) | JCC738 (Not preserved), JCC739 (Not preserved), JCC740 (Not preserved), JCC741 (Not preserved) (4) | JCC-06-0607 | 4/23/08 11:11 S: 4/23/2008 12:09 | - |
| JCC-07-0708 C16-49 | Soil (>12")/ Jordan Vaughn | L/G | SOM01.2 (14) | JCC742 (Not preserved), JCC743 (Not preserved), JCC744 (Not preserved), JCC745 (Not preserved) (4) | JCC-07-0708 | S: 4/23/2008 12:09 | - |
| JCC-08-0708 C16-50 | Soil (>12")/ Jordan Vaughn | L/G | SOM01.2 (14) | JCC746 (Not preserved), JCC747 (Not preserved), JCC748 (Not preserved) (4) | JCC-08-0708 | S: 4/23/2008 12:32 | - |
| JCC-09-0607 C16-51 | Soil (>12")/ Jordan Vaughn | L/G | SOM01.2 (14) | JCC749 (Not preserved), JCC750 (Not preserved), JCC751 (Not preserved), JCC752 (Not preserved) (4) | JCC-09-0607 | S: 4/23/2008 13:00 | - |
| JCC-10-0809 C16-52 | Soil (>12")/ Jordan Vaughn | L/G | SOM01.2 (14) | JCC753 (Not preserved) (4), JCC754 (Not preserved), JCC755 (Not preserved), JCC756 (Not preserved) (4) | JCC-10-0809 | S: 4/23/2008 13:23 | - |
| JCC-12-0910 C16-53 | Soil (>12")/ Jordan Vaughn | H/G | SOM01.2 (14) | JCC757 (Not preserved) (4), JCC758 (Not preserved), JCC759 (Not preserved), JCC760 (Not preserved), JCC761 (Not preserved) (4) | JCC-12-0910 | S: 4/23/2008 10:25 | Field Duplicate |

| | | | |
|--|--|---|-------------------------------|
| Shipment for Case Complete? N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analysis Key: SOM01.2 = SOM01.2 SOIL VOA | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment Iced? _____ |

TR Number: 3-023200937-042308-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

REGION COPY



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 37373

Client No:

R

| | | | |
|--------------------------------|---------------------------------|-------------------------|--------------------|
| Region: 3 | Date Shipped: 4/24/2008 | Chain of Custody Record | |
| Project Code: | Carrier Name: FedEx | Relinquished By | Sampler Signature: |
| Account Code: | Airbill: 857499851857 | (Date / Time) | Received By |
| CERCLIS ID: NONE | Shipped to: EnviroSystems, Inc. | 1 | (Date / Time) |
| Spill ID: Jay-Cee/NA | 9200 Rumsey Rd. | 2 | |
| Site Name/State: Jordan Vaughn | Suite B102 | 3 | |
| Project Leader: Jordan Vaughn | Columbia MD 21045 | 4 | |
| Action: Tetra Tech | (410) 964-0330 | | |
| Sampling Co: | | | |

| SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | PRESERVATIVE/ Bottles | TAG No./ | STATION LOCATION | SAMPLE COLLECT DATE/TIME | QC Type |
|----------------------|-------------------------------|------------|----------------------|---|----------|------------------|--------------------------|---------|
| JCC-11-0607 21654 | Soil (>12")/ Jordan Vaughn | L/G | SOM01.2 (14) | JCC773 (Not preserved), JCC774 (Not preserved), JCC775 (Not preserved), JCC776 (Not preserved) (4) | | JCC-11-0607 | S: 4/23/2008 14:15 | |

| | | | |
|---|--|---|-------------------------------|
| Shipment for Case Complete? N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analyst Key: SOM01.2 = SOM01.2 SOIL VOA | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment Iced? _____ |

TR Number: 3-023200937-042408-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax

703/818-4602

F2V5.1.047 Page 1 of 1

REGION COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37373

DAS No:

R

| | | | | | |
|--------------------------------|--|---------------------------------|--|---------------------------|--|
| Region: 3 | | Date Shipped: 4/24/2008 | | Chain of Custody Record | |
| Project Code: | | Carrier Name: FedEx | | Sampler Signature: | |
| Account Code: | | Airbill: 857498851857 | | Received By (Date / Time) | |
| CERCLIS ID: NONE | | Shipped to: EnviroSystems, Inc. | | 1 | |
| Spill ID: Jay-Cee/VA | | 9200 Rumsey Rd. | | 2 | |
| Site Name/State: Jordan Vaughn | | Suite B102 | | 3 | |
| Project Leader: Jordan Vaughn | | Columbia MD 21045 | | 4 | |
| Action: | | (410) 964-0330 | | | |
| Sampling Co: Tetra Tech | | | | | |

| ORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | INORGANIC SAMPLE No. | QC Type |
|--------------------|-----------------------------|------------|----------------------|--|------------------|--------------------------|----------------------|------------|
| C0539 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC777 (HCL), JCC778 (HCL), JCC779 (HCL) (3) | JCC-GW-01 | S: 4/24/2008 10:40 | | |
| C0540 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC780 (HCL), JCC781 (HCL), JCC782 (HCL) (3) | JCC-GW-10 | S: 4/24/2008 13:50 | | |
| C0541 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC783 (HCL) (1) | JCC-TB1 | S: 4/24/2008 8:44 | | Trip Blank |

| | | | |
|---|--|---|-------------------------------|
| Shipment for Case Complete? N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analysis Key: TCL VOC = SOM01.2 TCL VOC's | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment Iced? _____ |

TR Number: 3-023200937-042408-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax

703/818-4602

REGION COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37373

R

| | | | |
|--------------------------------|-------------------------------|-----------------------|---|
| Region: 3 | Date Shipped: 4/28/2008 | Carrier Name: FedEx | Shipped to: EnviroSystems, Inc. 9200 Rumsey Rd. Suite B102 Columbia MD 21045 (410) 964-0330 |
| Project Code: | Account Code: | Airbill: 857499684912 | |
| CERCLIS ID: NONE | Spill ID: Jay-Cee 4-25-08/A | | |
| Site Name/State: Jordan Vaughn | Project Leader: Jordan Vaughn | | |
| Action: | Sampling Co: Tetra Tech | | |

| Chain of Custody Record | | Sampler Signature: |
|-------------------------|---------------|---------------------------|
| Relinquished By | (Date / Time) | Received By (Date / Time) |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |

| ORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | INORGANIC SAMPLE No. | QC Type |
|--------------------|-----------------------------|------------|----------------------|--|------------------|--------------------------|----------------------|-----------------|
| C0542 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC784 (HCL), JCC785 (HCL), JCC786 (HCL) (3) | JCC-GW-07 | S: 4/24/2008 19:22 | | - |
| C0543 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC787 (HCL), JCC788 (HCL), JCC789 (HCL) (3) | JCC-GW-08 | S: 4/24/2008 15:41 | | - |
| C0544 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC790 (HCL) (1) | JCC-TB2 | S: 4/24/2008 15:26 | | Trip Blank |
| C0545 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC791 (HCL), JCC792 (HCL), JCC793 (HCL) (3) | JCC-GW-09 | S: 4/25/2008 8:55 | | - |
| C0546 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC791 (HCL) (3) | JCC-GW-11 | S: 4/25/2008 11:23 | | - |
| C0547 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC791 (HCL) (3) | JCC-GW-06 | S: 4/25/2008 14:41 | | - |
| C0548 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC794 (HCL), JCC795 (HCL), JCC796 (HCL) (3) | JCC-GW-03 | S: 4/25/2008 16:53 | | - |
| C0550 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC800 (HCL), JCC801 (HCL), JCC802 (HCL) (3) | JCC-GW-05 | S: 4/25/2008 17:05 | | - |
| C0551 | Ground Water/ Jordan Vaughn | H/G | TCL VOC (14) | JCC803 (HCL), JCC804 (HCL), JCC805 (HCL) (3) | JCC-GW-02 | S: 4/25/2008 20:02 | | - |
| C0553 | Ground Water/ Jordan Vaughn | H/G | TCL VOC (14) | JCC809 (HCL), JCC810 (HCL), JCC811 (HCL) (3) | JCC-GW-12 | S: 4/25/2008 20:08 | | Field Duplicate |
| C0554 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC812 (HCL), JCC813 (HCL), JCC814 (HCL) (3) | JCC-RB | S: 4/25/2008 19:55 | | Rinsale |

| | | | |
|---|--|---|-------------------------------|
| Shipment for Case Complete 7 N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analysis Key: TCL VOC = SOM01.2 TCL VOC's | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment Iced? _____ |

TR Number: 3-023200937-042708-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37373

DAS No:

R

| | | | |
|-------------------------------------|---------------------------------|-------------------------|---------------------------|
| Region: 3 | Date Shipped: 4/28/2008 | Chain of Custody Record | |
| Project Code: | Carrier Name: FedEx | Relinquished By | Sampler Signature: |
| Account Code: | Airbill: 857499684912 | (Date / Time) | Received By (Date / Time) |
| CERCLIS ID: NONE | Shipped to: EnviroSystems, Inc. | 1 | |
| Spill ID: | 9200 Rumsey Rd. | 2 | |
| Site Name/State: Jay-Cee 4-25-08/VA | Suite B102 | 3 | |
| Project Leader: Jordan Vaughn | Columbia MD 21045 | 4 | |
| Action: | (410) 964-0330 | | |
| Sampling Co: Tetra Tech | | | |

| ORGANIC SAMPLE No. | MATRIX SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | INORGANIC SAMPLE No. | QC Type |
|--------------------|-----------------------------|------------|----------------------|--|------------------|--------------------------|----------------------|---------|
| C0555 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC815 (HCL), JCC816 (HCL), JCC817 (HCL) (3) | JCC-PW | S: 4/25/2008 20:14 | | |
| C0556 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC818 (HCL), JCC819 (HCL), JCC820 (HCL), JCC821 (HCL), JCC822 (HCL), JCC823 (HCL), JCC824 (HCL), JCC825 (HCL), JCC826 (HCL) (9) | JCC-GW-04 | S: 4/25/2008 19:35 | | Spike |

| | | | |
|---|--|---|-------------------------------|
| Shipment for Case Complete? N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analysis Key: TCL VOC = SOM01.2 TCL VOC's | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment Iced? _____ |

TR Number: 3-023200937-042708-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax

703/818-4602

REGION COPY

U.S. EPA Region III Analytical Request Form

Revision 10.06

775 4-11-08

| | |
|----------------|----------------|
| ASQAB USE ONLY | |
| RAS# | CT4206 |
| DAS# | Analytical TAT |
| NSF# | 14 |

37373

| | | | |
|--|---------------------------------------|---|---|
| Date: 4/2/2008 | | Site Activity: RS Removal Site Evaluation | |
| Site Name: Jay-Cee Cleaners | | Street Address: 16163 LANKFORD HIGHWAY | |
| City: Accomack/NELSONIA | State: VA | Latitude: | Longitude: |
| Program: Superfund | Acct. #: 2008 T03 N302 DC6C A3JR RS00 | CERCLIS #: | |
| Site ID: | Spill ID: A3JR | Operable Unit: | |
| Site Specific QA Plan Submitted: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | | Title: Abbreviated SAP | Date Approved: 9/24/2007 |
| EPA Project Leader: Todd Richardson | Phone#: 215-814-5264 | Cell Phone #: 215-779-4592 | E-mail: Richardson.Todd@epamail.epa.gov |
| Request Preparer: Marian Murphy | Phone#: 610-364-2129 | Cell Phone #: 267-446-2839 | E-mail: marian.murphy@ttemi.com |
| Site Leader: Jordan Vaughn | Phone#: 610-364-2141 | Cell Phone #: 215-651-4022 | E-mail: jordan.vaughn@ttemi.com |
| Contractor: Tetra Tech EM Inc. | | EPA CO/PO: Lorrie Murray/Karen Wodarczyk | |
| #Samples 11 | Matrix: soil | Parameter: TCL VOC | Method: CLP SOW SOM01.2 27522 |
| #Samples 11 | Matrix: water-non potable | Parameter: TCL VOC | Method: CLP SOW SOM01.2 27522 |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| Ship Date From: 4/17/2008 | | Ship Date To: 4/27/2008 | Inorg. Validation Level |
| Unvalidated Data Requested: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | | Org. Validation Level M2 | |
| Validated Data Package Due: <input type="checkbox"/> 42 days <input checked="" type="checkbox"/> 30 days <input type="checkbox"/> 21 days <input type="checkbox"/> 14 days <input type="checkbox"/> 7 days <input type="checkbox"/> 48hrs <input type="checkbox"/> 24hrs | | Other (Specify) 72hrs - 14/16 | |
| Electronic Data Deliverables Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (EDDs will be provided in Region 3 EDD Format) | | | |
| Special Instructions: See attached for DLS needed. | | | |

| CLP SOW SOM01.2 TARGET COMPOUND LIST TRACE VOLATILE ORGANICS FOR WATER SAMPLES (ug/L) | | | | | |
|--|---------------|-----|-----------------------------|---------------|-----|
| Volatle Compound | CAS Number | DL | Volatle Compound | CAS Number | DL |
| Dichlorodifluoromethane | 75718 | 0.5 | Toluene | 108883 | 0.5 |
| Chloromethane | 74873 | 0.5 | trans 1,3-Dichloropropene | 10061026 | 0.5 |
| Vinyl Chloride | 75014 | 0.5 | 1,1,2-Trichloroethane | 79005 | 0.5 |
| Bromomethane | 74839 | 0.5 | Tetrachloroethene | 127184 | 0.5 |
| Chloroethane | 75003 | 0.5 | 2-Hexanone | 591786 | 0.5 |
| Trichlorofluoromethane | 75694 | 0.5 | Dibromochloromethane | 124481 | 0.5 |
| 1,1-Dichloroethene | 75354 | 0.5 | 1,2-Dibromoethane | 106934 | 0.5 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76131 | 0.5 | Chlorobenzene | 108907 | 0.5 |
| Acetone | 67641 | 5.0 | Ethylbenzene | 100414 | 0.5 |
| Carbon Disulfide | 75150 | 0.5 | Xylenes (total) | 1330207 | 0.5 |
| Methyl Acetate | 79209 | 0.5 | Styrene | 100425 | 0.5 |
| Methylene Chloride | 75092 | 0.5 | Bromoform | 75252 | 0.5 |
| trans-1,2-Dichloroethene | 156605 | 0.5 | Isopropylbenzene | 98828 | 0.5 |
| tert-Butyl Methyl Ether | 1634044 | 0.5 | 1,1,2,2-Tetrachloroethane | 79345 | 0.5 |
| 1,1-Dichloroethane | 75343 | 0.5 | 1,3-Dichlorobenzene | 541731 | 0.5 |
| cis-1,2-Dichloroethene | 156592 | 0.5 | 1,4-Dichlorobenzene | 106467 | 0.5 |
| 2-Butanone | 78933 | 5.0 | 1,2-Dichlorobenzene | 95501 | 0.5 |
| Chloroform | 67663 | 0.5 | 1,2-Dibromo-3-chloropropane | 96128 | 0.5 |
| 1,1,1-Trichloroethane | 71556 | 0.5 | 1,2,4-Trichlorobenzene | 120821 | 0.5 |
| Cyclohexane | 110827 | 0.5 | | | |
| Carbon Tetrachloride | 56235 | 0.5 | | | |
| Benzene | 71432 | 0.5 | | | |
| 1,2-Dichloroethane | 107062 | 0.5 | | | |
| 1,4-Dioxane | 123911 | 20 | | | |
| Trichloroethene | 79016 | 0.5 | | | |
| Methylcyclohexane | 108872 | 0.5 | | | |
| 1,2-Dichloropropane | 78875 | 0.5 | | | |
| Bromodichloromethane | 75274 | 0.5 | | | |
| cis-1,3-Dichloropropene | 10061015 | 0.5 | | | |
| 4-Methyl-2-pentanone | 108101 | 5.0 | | | |

| CLP SOW SOM01.2 TARGET COMPOUND LIST VOLATILE ORGANICS FOR WATER SAMPLES (ug/L) | | | | | |
|---|------------|------|-----------------------------|------------|------|
| Volatile Compound | CAS Number | CRQL | Volatile Compound | CAS Number | CRQL |
| Dichlorodifluoromethane | 75718 | 5 | Toluene | 108883 | 5 |
| Chloromethane | 74873 | 5 | trans-1,3-Dichloropropene | 10061026 | 5 |
| Vinyl Chloride | 75014 | 5 | 1,1,2-Trichloroethane | 79005 | 5 |
| Bromomethane | 74839 | 5 | Tetrachloroethene | 127184 | 5 |
| Chloroethane | 75003 | 5 | 2-Hexanone | 591786 | 5 |
| Trichlorofluoromethane | 75694 | 5 | Dibromochloromethane | 124481 | 5 |
| 1,1-Dichloroethene | 75354 | 5 | 1,2-Dibromoethane | 106934 | 5 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76131 | 5 | Chlorobenzene | 108907 | 5 |
| Acetone | 67641 | 10 | Ethylbenzene | 100414 | 5 |
| Carbon Disulfide | 75150 | 5 | Xylenes (total) | 1330207 | 5 |
| Methyl Acetate | 79209 | 5 | Styrene | 100425 | 5 |
| Methylene Chloride | 75092 | 5 | Bromoform | 75252 | 5 |
| trans-1,2-Dichloroethene | 156605 | 5 | Isopropylbenzene | 98828 | 5 |
| tert-Butyl Methyl Ether | 1634044 | 5 | 1,1,2,2-Tetrachloroethane | 79345 | 5 |
| 1,1-Dichloroethane | 75343 | 5 | 1,3-Dichlorobenzene | 541731 | 5 |
| cis-1,2-Dichloroethene | 107062 | 5 | 1,4-Dichlorobenzene | 106467 | 5 |
| 2-Butanone | 78933 | 10 | 1,2-Dichlorobenzene | 95501 | 5 |
| Chloroform | 67663 | 5 | 1,2-Dibromo-3-chloropropane | 96128 | 5 |
| 1,1,1-Trichloroethane | 71556 | 5 | 1,2,4-Trichlorobenzene | 120821 | 5 |
| Cyclohexane | 110827 | 5 | | | |
| Carbon Tetrachloride | 56235 | 5 | | | |
| Benzene | 71432 | 5 | | | |
| 1,2-Dichloroethane | 75343 | 5 | | | |
| 1,4-Dioxane | 123911 | 100 | | | |
| Trichloroethene | 79016 | 5 | | | |
| Methylcyclohexane | 108872 | 5 | | | |
| 1,2-Dichloropropane | 78875 | 5 | | | |
| Bromodichloromethane | 74975 | 5 | | | |
| cis-1,3-Dichloropropene | 10061015 | 5 | | | |
| 4-Methyl-2-pentanone | 108101 | 10 | | | |

| CLP SOW SOM01.2 TARGET COMPOUND LIST VOLATILE ORGANIC COMPOUNDS FOR SOIL SAMPLE ug/Kg | | | | | |
|---|------------|------|-----------------------------|------------|------|
| Volatile Compound | CAS Number | CRQL | Volatile Compound | CAS Number | CRQL |
| Dichlorodifluoromethane | 75718 | 5.0 | 2-Hexanone | 591786 | 10 |
| Chloromethane | 74873 | 5.0 | Dibromochloromethane | 124481 | 5.0 |
| Vinyl Chloride | 75014 | 5.0 | 1,2-Dibromoethane | 106934 | 5.0 |
| Bromomethane | 74839 | 5.0 | Chlorobenzene | 108907 | 5.0 |
| Chloroethane | 75003 | 5.0 | Ethylbenzene | 100414 | 5.0 |
| Trichlorofluoromethane | 75694 | 5.0 | Xylenes (total) | 1330207 | 5.0 |
| 1,1-Dichloroethene | 75354 | 5.0 | Styrene | 100425 | 5.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76131 | 5.0 | Bromoform | 75252 | 5.0 |
| Acetone | 67641 | 10 | Isopropylbenzene | 98828 | 5.0 |
| Carbon Disulfide | 75150 | 5.0 | 1,1,2,2-Tetrachloroethane | 79345 | 5.0 |
| Methyl Acetate | 79209 | 5.0 | 1,3-Dichlorobenzene | 541731 | 5.0 |
| Methylene Chloride | 75092 | 5.0 | 1,4-Dichlorobenzene | 106467 | 5.0 |
| trans-1,2-Dichloroethene | 156605 | 5.0 | 1,2-Dichlorobenzene | 95501 | 5.0 |
| tert-Butyl Methyl Ether | 1634044 | 5.0 | 1,2-Dibromo-3-chloropropane | 96128 | 5.0 |
| 1,1-Dichloroethane | 75343 | 5.0 | 1,2,4-Trichlorobenzene | 120821 | 5.0 |
| cis-1,2-Dichloroethene | 156592 | 5.0 | 1,2,3-Trichlorobenzene | 87616 | 5.0 |
| 2-Butanone | 78933 | 10.0 | | | |
| Chloroform | 67663 | 5.0 | | | |
| 1,1,1-Trichloroethane | 71556 | 5.0 | | | |
| Cyclohexane | 110827 | 5.0 | | | |
| Carbon Tetrachloride | 56235 | 5.0 | | | |
| Benzene | 71432 | 5.0 | | | |
| 1,2-Dichloroethane | 107062 | 5.0 | | | |
| 1,4-Doixane | 123911 | 20 | | | |
| Trichloroethene | 79016 | 5.0 | | | |
| Methylcyclohexane | 108872 | 5.0 | | | |
| 1,2-Dichloropropane | 78875 | 5.0 | | | |
| Bromodichloromethane | 74975 | 5.0 | | | |
| cis-1,3-Dichloropropene | 10061015 | 5.0 | | | |
| 4-Methyl-2-pentanone | 108101 | 10 | | | |
| Toluene | 108883 | 5.0 | | | |
| trans-1,3-Dichloropropene | 10061026 | 5.0 | | | |
| 1,1,2-Trichloroethane | 79005 | 5.0 | | | |
| Tetrachloroethene | 127184 | 250 | | | |

Judy
Snyder/ESC/R3/USEPA/US
05/15/2008 05:24 PM

To Colleen Walling/DC/USEPA/US, Todd
Richardson/R3/USEPA/US, Lorrie Murray/R3/USEPA/US,
cc Dan Slizys/ESC/R3/USEPA/US, John
Kwedar/ESC/R3/USEPA/US, Carroll
Harris/ESC/R3/USEPA/US, Victor
bcc
Subject Jay-Cee Cleaners, 37373, memo to file

**INFORMATION CONTAINED BELOW DOES NOT CONSTITUTE TECHNICAL
DIRECTION: THE SAMPLING FIELD CONTRACTOR SHALL CONTACT HIS EPA CONTRACTING
OFFICER FOR TECHNICAL DIRECTION.**

Jay-Cee Cleaners, 37373
Lab: Envsys
EPA Project Lead: Todd Richardson
Site Lead: Jordan Vaughn, TTEMI
POC: Marian Murphy, TTEMI

1. Regional copies of the chains of custody were requested from the sampler 5/14/08 and received 5/15/08. Regional copies are due to the Region within a week of sample shipment
2. Air bill numbers listed on chains of custody 3-023200937-042308-0001, pages 1 and 2 were not correct numbers. There was no airbill with the data package and the Fed Ex Tracking site stated that they had no record of that air bill number (857 49985 19380215.) Sampler will please add a correct air bill number to the COC's via memo to file.
3. Sampler used station locations instead of CLP sample number for samples collected 4/23/08. SMO issued replacement sample numbers and documented the new sample numbers and their corresponding station locations. The site leader will please use the correct CLP sample numbers.
4. There was no sample collection date or time on the tags or chain of custody for sample C1G48.
5. Three samples, C0545, C0546, C0547 have identical tag numbers: JCC791, JCC792, JCC793. All other information was unique to the sample number. Sampler should proof the tags and chains of custody prior to shipment.

Judy Snyder
ESAT Auditor, Region 3
Lockheed Martin Enterprise Solutions & Services
701 Mapes Road
Ft. Meade, MD 20755-5350
Phone 410-305-3015
Fax 410-305-3095

Thanks,

Colin

Colin G. Walsh

Computer Sciences Corporation (CSC)

(703) 818-4544

cwalsh20@fedcsc.com <mailto:cwalsh20@fedcsc.com>

From: EnviroSystems [mailto:envirosystems@gmail.com] On Behalf Of EnviroSystems, Inc.
Sent: Thursday, April 24, 2008 11:50 AM
To: Walsh, Colin
Subject: Case: 37373 Chain of Custody

<<...>>

4/24, 11:45 AM, Phone conversation between Barbara Crook (ENVSYS) and Colin Walsh (SMO).
Barbara indicated that the samples they received today for Case 37373 have the incorrect
CLP sample ID format. Colin asked if she could email the TR/COC.

Internal Virus Database is out-of-date.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.23.0/1382 - Release Date: 4/16/2008 5:34 PM

00713

Envirosystems, Inc.

From: Walsh, Colin [cwalsh20@fedcsc.com]
Sent: Thursday, April 24, 2008 12:54 PM
To: info@envsystems.com
Cc: slizys.dan@epa.gov; Harris.Carroll@epamail.epa.gov; thaung.khin-cho@epa.gov; kwedar.john@epa.gov
Subject: Region 03 | Case 37373 | Lab ENVSYS | Issue Incorrect/duplicated sample numbers | FINAL
Attachments: SCAN0734_000.pdf



SCAN0734_000.pdf (88 KB)

Barbara,

Summary Start

Issue: The laboratory received 11 soil VOA samples on 4/24 for Case 37373. The samples have the station location listed as the sample ID on the TR/COC.

Resolution: In accordance with previous direction from Region 3, the SMO coordinator will assign new CLP sample IDs for the samples, and notify the Region and the laboratory of the new sample IDs. The laboratory will note the issue in the Case/SDG Narrative and proceed with the analysis of the samples.

| Sample ID on TR/COC | New sample ID |
|---------------------|---------------|
| JCC-01-0405 | C1G43 |
| JCC-02-0910 | C1G44 |
| JCC-03-0203 | C1G45 |
| JCC-04-0809 | C1G46 |
| JCC-05-0607 | C1G47 |
| JCC-06-0607 | C1G48 |
| JCC-07-0708 | C1G49 |
| JCC-08-0708 | C1G50 |
| JCC-09-0607 | C1G51 |
| JCC-10-0809 | C1G52 |
| JCC-12-0910 | C1G53 |

Summary End

Please let me know if you have any further questions or problems.

00714

EnviroSystems, Inc.

From: Walsh, Colin [cwalsh20@fedcsc.com]
Sent: Friday, April 25, 2008 11:54 AM
To: info@envsystems.com
Cc: slizys.dan@epa.gov; Harris.Carroll@epamail.epa.gov; thaung.khin-cho@epa.gov; kwedar.john@epa.gov
Subject: Region 03 | Case 37373 | Lab ENVSYS | Issue Incorrect/duplicated sample numbers | FINAL
Attachments: SCAN0736_000.pdf



SCAN0736_00
0.pdf (31 KB)

Domonique,

Summary Start

Issue: The laboratory received 1 soil VOA sample on 4/25 for Case 37373. The sample has the station location listed as the sample ID on the TR/COC.

Resolution: In accordance with previous direction from Region 3, the SMO coordinator will assign new CLP sample IDs for the samples, and notify the Region and the laboratory of the new sample IDs. The laboratory will note the issue in the Case/SDG Narrative and proceed with the analysis of the samples.

| Sample ID on TR/COC | New sample ID |
|---------------------|---------------|
| JCC-11-0607 | CLG54 |

Summary End

Please let me know if you have any further questions or problems.

Thanks,

Colin

Colin G. Walsh
Computer Sciences Corporation (CSC)
(703) 818-4544
cwalsh20@fedcsc.com

-----Original Message-----

From: EnviroSystems [mailto:envirosystems@gmail.com] On Behalf Of EnviroSystems, Inc.
Sent: Friday, April 25, 2008 11:04 AM
To: Walsh, Colin
Subject: RE: Case 37373

Attached is the TR/COC for case 37373

-----Original Message-----

From: Walsh, Colin [mailto:cwalsh20@fedcsc.com]
Sent: Friday, April 25, 2008 10:55 AM
To: info@envsystems.com
Subject: RE: Case 37373

Domonique,

Could you please send me the TR/COC?

Thanks,

Colin

Colin G. Walsh

Computer Sciences Corporation (CSC)

(703) 818-4544

cwalsh20@fedcsc.com <mailto:cwalsh20@fedcsc.com>

From: Envirosystems [mailto:envirosystems@gmail.com] On Behalf Of Envirosystems, Inc.

Sent: Friday, April 25, 2008 10:25 AM

To: Walsh, Colin

Subject:

Colin,

The laboratory received 1 soil VOA sample on 4/25 for Case 37373. The sample has the station location listed as the sample ID on the TR/COC. Could provide us with the correct sample I.D.

Thank You,

Domonique Burney

Internal Virus Database is out-of-date.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.23.0/1382 - Release Date: 4/16/2008

5:34 PM

Internal Virus Database is out-of-date.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.23.0/1382 - Release Date: 4/16/2008

5:34 PM

Internal Virus Database is out-of-date.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.23.0/1382 - Release Date: 4/16/2008

5:34 PM

Internal Virus Database is out-of-date.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.23.0/1382 - Release Date: 4/16/2008 5:34 PM

00721

Appendix D

Laboratory Case Narrative

ENVIROSYSTEMS, INC.

9200 Rumsey Road • Suite B102 • Columbia, Maryland 21045-1934
Phone (410) 964-0330 • Fax (410) 740-9306
Email: info@envsystems.com • Webpage: www.envsystems.com/envsys

May 9, 2008

Computer Sciences Corporation for USEPA/CLP
15000 Conference Center Drive
Chantilly, VA 20151-3819

Re: RAS Contract No. EPW05033
CLP Case No 37373, SDG: C1G43
ENVSYS Report # 080174

VIA FEDERAL EXPRESS

Dear Analytical Services Group:

Enclosed is a copy of the Analytical Data Package and the Summary Data Package for the samples received under the above referenced CLP Case.

Please do not hesitate to call if you have any questions, comments or require additional information.

Sincerely,

AG for Mohan Khare

Mohan Khare, Ph.D.
President/CEO

MK/pl
Enclosures

Cc: Dan Slizys
USEPA Region III
Environmental Services Division
Environmental Science Center
701 Mapes Road (MS 3EA20)
Fort Meade, MD 20755-5350

SDG NARRATIVE

Envirosystems, Inc.

Contract: EPW05033

Client: EPA Region 3

Case: 37373

SDG: C1G43

1. SAMPLE RECEIPT

Date received: 24-APRIL-08 & 29-APRIL 2008

Cooler Temperature: 2C

Sample Summary

| Client ID | Laboratory ID | Fraction | matrix |
|-----------|---------------|----------|--------|
| C1G43 | 0080413-01 | VOA | SOIL |
| C1G44 | 0080413-2 | VOA_L/M | SOIL |
| C1G45 | 0080413-3 | VOA_L/M | SOIL |
| C1G46 | 0080413-4 | VOA_L/M | SOIL |
| C1G47 | 0080413-5 | VOA | SOIL |
| C1G48 | 0080413-6 | VOA | SOIL |
| C1G49 | 0080413-7 | VOA | SOIL |
| C1G50 | 0080413-8 | VOA | SOIL |
| C1G51 | 0080413-9 | VOA | SOIL |
| C1G52 | 0080413-10 | VOA | SOIL |
| C1G53 | 0080413-11 | VOA_L/M | SOIL |
| C1G54 | 0080413-12 | VOA | SOIL |
| C0539 | 0080413-13 | VOA | WATER |
| C0540 | 0080413-14 | VOA | WATER |
| C0541 | 0080413-15 | VOA | WATER |
| C0542 | 0080413-16 | VOA | WATER |
| C0543 | 0080413-17 | VOA | WATER |
| C0544 | 0080413-18 | VOA | WATER |
| C0545 | 0080413-19 | VOA | WATER |
| C0546 | 0080413-20 | VOA | WATER |

Note: VOA = VOA LOW

VOA_L/M = VOA LOW & VOA MEDIUM

1. VOLATILE

2. HOLDING TIMES

All holding times were met.

3. METHODS

CLP Method SOM01.2

4. INSTRUMENT AND CHROMATOGRAPHIC CONDITIONS

A Hewlett Packard 6890 gas chromatograph equipped with a Hewlett Packard 5973 MSD was used for sample analysis. The capillary column used was a Restek 20m by 0.18 mm ID by 1.0 µm film thickness (Restek Cat. # RTX-624). The trap used with the sample concentrator is an EST K Trap, 30cm packed with Carboxen B / Carboxen 1000 & 1001 (VOCARB 3000)

5. PREPARATION

00001A

SDG NARRATIVE

All samples were prepared by CLP Method SOM01.2.

6. ANALYSIS

A. Calibration:

I. Initial and continuing calibration standards

The Initial calibrations met all acceptance criteria.

The CCV standard VSTD050GO has I, 4-dioxane -d8 outside the QC limits.

The CCV standard VSTD050HI has Tetrachloroethene outside the QC limits.

The CCV standard VSTD050HK has I, 4-dioxane -d8 and I, 4-dioxane outside the QC limits.

. All other CCVs were within the contract requirement.

B. Blanks:

Mehtylene Chloride for VBLKEP was detected above the CRQL at 8.2ug/l.

For VBLKFA Mehtylene Chloride was detected above the CRQL at 1800ug/kg and chloroform at 1900ug/kg for the medium level analysis.

C. Surrogates/Deuterated Monitoring Compounds (DMCs):

All technical acceptance criteria were met.

Spikes:

I. Laboratory Control Spikes (LCS)

Laboratory Control Spikes were not used for this method.

II. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD was not requested to analyze for this SDG.

Internal Standard:

All internal standard criteria were met except for sample C1G44. DCB was outside the limits in the first run, this sample was analyzed at medium level .All IS were within limits.

D. Samples

Sample analysis proceeded as normal. Four samples were re-analyzed at medium level due to the presence of high concentration of the target compounds.

There was an issue with the sample IDs, it was communicated to the region .The e-mails were included in the data package.

Manual Integration Summary

00001B

SDG NARRATIVE


The following manual integrations were performed on Samples, Blanks, and/or standards C0540, C0546, C0546RE, C1G44, C1G46, C1G53, C1G53ME, VSTD005EL, VSTD010EL, VSTD005EK, VSTD010EK, VSTD50EK, VSTD100EK, VSTD200EK, VSTD050GP, VSTD050HR, VSTD050HI, VBLKHG, VBLKHR, VHBLKHH.

Reason Codes:

- A. Baseline integration, re-inforced due to interference on target peak.
- B. Baseline integration, peak not properly integrated by software integrator.
- C. Target peak was not properly identified, more than one peak in retention time window.
- D. Split peak, more than one peak in retention time window.
- E. Target peak was not properly identified/missed by the integration software.

These manual integrations have been reviewed and meet all criteria in accordance with CLP SOM01.2 protocol.

I certify that this Sample 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 the hard copy Sample Data Package and in the Electronic Data Deliverables has been authorized by the laboratory manager or the manager's designee, as verified by the following signatures.


Laboratory Manager

05/09/08
Date

00001c



May 16, 2008

**MEMO TO FILE
CASE 37373
Jay-Cee Cleaners**

Attn: Carroll Harris
U.S. EPA Region III RSCC
Environmental Science Center
701 Mapes Road
Ft. Meade, MD 20755

Dear Ms. Harris:

This memo to file is written to address the following items associated with case 37373:

The airbill number on the Traffic Report Chain of Custody Record number 3-023200937-042308-0001 was listed incorrectly. The correct airbill number is 8574 9985 1938.

Station locations, rather than CLP sample numbers, were used for samples collected on 4/23/2008 (Traffic Report Chain of Custody Record numbers 3-023200937-042308-0001 and 3-023200937-042408-0003). The assigned CLP sample numbers and corresponding station locations and sampling information are shown in the table here:

| CLP Sample Number | Station Location | Sample Date | Sample Time |
|--------------------------|-------------------------|--------------------|--------------------|
| C1G43 | JCC-01-0405 | 4/23/2008 | 09:54 |
| C1G44 | JCC-02-0910 | 4/23/2008 | 10:21 |
| C1G45 | JCC-03-0203 | 4/23/2008 | 10:32 |
| C1G46 | JCC-04-0809 | 4/23/2008 | 10:57 |
| C1G47 | JCC-05-0607 | 4/23/2008 | 11:24 |
| C1G48 | JCC-06-0607 | 4/23/2008 | 11:50 |
| C1G49 | JCC-07-0708 | 4/23/2008 | 12:09 |
| C1G50 | JCC-08-0708 | 4/23/2008 | 12:32 |
| C1G51 | JCC-09-0607 | 4/23/2008 | 13:00 |
| C1G52 | JCC-10-0809 | 4/23/2008 | 13:23 |
| C1G53 | JCC-12-0910 | 4/23/2008 | 10:25 |



TETRA TECH EM INC.

Marian Murphy

Memo to File Jay-Cee
Cleaners

Case 37373

There was no sample collection date or time on the tags or Chain of Custody for sample C1G48.
The sample collection date and time are also provided here:

| CLP Sample Number | Station Location | Sample Date | Sample Time |
|-------------------|------------------|-------------|-------------|
| C1G48 | JCC-06-0607 | 4/23/2008 | 11:50 |

Three samples, C0545, C0546, and C0547, have identical tag numbers. The error has been noted and future chains of custody will be more thoroughly proofed.

Please note these items.

Sincerely,

For sampler Jordan Vaughn

cc: EPA WAM Todd Richardson (3HS21)
START 3 TDD Files

Appendix E

TIC Form Is

1J - FORM 1 VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C1G44

Lab Name: EnviroSystems, Inc. Contract: EPW05033
Lab Code: ENVSYS Case No.: 37373 Mod. Ref No.: SDG No.: C1G43
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0080413-02
Sample wt/vol: 5.06 (g/mL) g Lab File ID: H001243.D
Level: (TRACE or LOW/MED) LOW Date Received: 04/24/2008
% Moisture: not dec. 17.6 Date Analyzed: 05/02/2008
GC Column: RTX-624 ID: .18 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|------------|-------------------------------------|-------|------------|----|
| 01 | | UNKNOWN | 1.92 | 0.0046 | J |
| 02 | | UNKNOWN | 2.62 | 0.0052 | J |
| 03 | 96-14-0 | Pentane, 3-methyl- | 4.33 | 0.011 | JN |
| 04 | 110-54-3 | Hexane | 4.68 | 0.017 | JN |
| 05 | 157-33-5 | Bicyclo[1.1.0]butane | 4.91 | 0.0014 | JN |
| 06 | | UNKNOWN | 5.47 | 0.019 | J |
| 07 | | UNKNOWN | 12.55 | 17 | J |
| 08 | | UNKNOWN | 12.69 | 30 | J |
| 09 | | UNKNOWN | 12.84 | 26 | J |
| 10 | 1676-81-5 | Cyclohexane, 1,2,3-trimethyl-, (1.2 | 13.04 | 8.1 | JN |
| 11 | | UNKNOWN | 14.80 | 60 | J |
| 12 | | UNKNOWN | 16.18 | 17 | J |
| 13 | | UNKNOWN | 16.79 | 4.3 | J |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 | Total Alkanes | N/A | | |

EPA-designated Registry Number.

DU
5/19/08

00169

SOM1.2 (8/2007)

1J - FORM 1 VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C1G44ME

Lab Name: EnviroSystems, Inc. Contract: EPW05033
Lab Code: ENVSYS Case No.: 37373 Mod. Ref No.: SDG No.: C1G43
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0080413-02
Sample wt/vol: 5.04 (g/mL) g Lab File ID: H001313.D
Level: (TRACE or LOW/MED) MED Date Received: 04/24/2008
% Moisture: not dec. 17.6 Date Analyzed: 05/07/2008
GC Column: RTX-624 ID: .18 (mm) Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100 (uL)
CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|---------------------------|-------|------------|----|
| 01 | | UNKNOWN | 14.72 | 7700 | J |
| 02 | | UNKNOWN | 15.00 | 2300 | J |
| 03 | 108-67-8 | Benzene, 1,3,5-trimethyl- | 15.07 | 2000 | JN |
| 04 | | UNKNOWN | 15.46 | 1800 | J |
| 05 | 1120-21-4 | Undecane | 15.82 | 6400 | JN |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

DJ
3/19/08

00213
SOM01.2 (8/2007)

1J - FORM 1 VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C1G46

Lab Name: EnviroSystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373

Mod. Ref No.:

SDG No.: C1G43

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: 0080413-04

Sample wt/vol: 5.03 (g/mL) g

Lab File ID: H001245.D

Level: (TRACE or LOW/MED) LOW

Date Received: 04/24/2008

% Moisture: not dec. 13.9

Date Analyzed: 05/02/2008

GC Column: RTX-624 ID: .18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|-----------------------------------|-------|------------|----|
| 01 | 111-65-9 | Octane | 10.65 | 160 | JN |
| 02 | | UNKNOWN | 12.55 | 260 | J |
| 03 | | UNKNOWN | 13.09 | 180 | J |
| 04 | 111-81-2 | Nonane | 13.28 | 840 | JN |
| 05 | 3728-56-1 | 1-Ethyl-4-methylcyclohexane | 13.53 | 210 | JN |
| 06 | 2051-30-1 | Octane, 2,6-dimethyl- | 13.84 | 540 | JN |
| 07 | | UNKNOWN | 13.91 | 370 | J |
| 08 | | UNKNOWN | 13.98 | 380 | J |
| 09 | | UNKNOWN | 14.25 | 600 | J |
| 10 | | UNKNOWN | 14.67 | 950 | J |
| 11 | 124-18-5 | Decane | 14.77 | 1200 | JN |
| 12 | | UNKNOWN | 14.92 | 740 | J |
| 13 | | UNKNOWN | 15.02 | 1000 | J |
| 14 | 1678-93-9 | Cyclohexane, butyl- | 15.27 | 610 | JN |
| 15 | | UNKNOWN | 15.40 | 590 | J |
| 16 | | UNKNOWN | 15.48 | 1000 | J |
| 17 | | UNKNOWN | 15.86 | 1300 | J |
| 18 | | UNKNOWN | 16.07 | 650 | J |
| 19 | | UNKNOWN | 16.19 | 610 | J |
| 20 | | UNKNOWN | 16.33 | 600 | J |
| 21 | 488-23-3 | Benzene, 1,2,3,4-tetramethyl- | 16.40 | 510 | JN |
| 22 | | UNKNOWN | 16.43 | 640 | J |
| 23 | | UNKNOWN | 16.50 | 520 | J |
| 24 | 112-40-3 | Dodecane | 16.75 | 1200 | JN |
| 25 | 3333-13-9 | Benzene, 1-methyl-4-(2-propenyl)- | 16.80 | 700 | JN |
| 26 | 629-50-5 | Tridecane | 17.54 | 540 | JN |
| 27 | | UNKNOWN | 18.03 | 200 | J |
| 28 | 90-12-0 | Naphthalene, 1-methyl- | 18.21 | 310 | JN |
| 29 | 629-59-4 | Tetradecane | 18.27 | 190 | JN |
| 30 | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

DJ
5/19/08

00257
SOM1.2 (8/2007)

1J - FORM 1 VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C1G46ME

Lab Name: EnviroSystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373

Mod. Ref No.:

SDS No.: C1G43

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: 0080413-04

Sample wt/vol: 5.03 (g/mL) g

Lab File ID: H001314.D

Level: (TRACE or LOW/MED) MED

Date Received: 04/24/2008

% Moisture: not dec. 13.9

Date Analyzed: 05/07/2008

GC Column: RTX-624 ID: .18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL)

Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|--------------------------------------|-------|------------|----|
| 01 | | UNKNOWN | 13.24 | 4900 | J |
| 02 | | UNKNOWN | 14.36 | 2200 | J |
| 03 | | UNKNOWN | 14.64 | 3200 | J |
| 04 | 124-18-5 | Decane | 14.73 | 9300 | JN |
| 05 | 611-14-3 | Benzene, 1-ethyl-2-methyl- | 14.91 | 1900 | JN |
| 06 | | UNKNOWN | 15.00 | 2000 | J |
| 07 | 108-67-8 | Benzene, 1,3,5-trimethyl- | 15.08 | 4700 | JN |
| 08 | 95-63-6 | Benzene, 1,2,4-trimethyl- | 15.46 | 3000 | JN |
| 09 | | UNKNOWN | 15.67 | 4100 | J |
| 10 | 1120-21-4 | Undecane | 15.82 | 6900 | JN |
| 11 | 527-84-4 | Benzene, 1-methyl-2-(1-methylethyl)- | 15.99 | 3100 | JN |
| 12 | 874-41-9 | Benzene, 1-ethyl-2,4-dimethyl- | 16.06 | 3200 | JN |
| 13 | | UNKNOWN | 16.32 | 3000 | J |
| 14 | | UNKNOWN | 16.65 | 3300 | J |
| 15 | | UNKNOWN | 16.74 | 4900 | J |
| 16 | 7525-62-4 | Benzene, 1-ethenyl-3-ethyl- | 16.79 | 7600 | JN |
| 17 | 4175-53-5 | 1H-Indene, 2,3-dihydro-1,3-dimethy. | 17.05 | 2800 | JN |
| 18 | 97664-19-2 | Benzene, 1-methyl-2-(1-methyl-2-pro | 17.18 | 4000 | JN |
| 19 | | UNKNOWN | 17.37 | 4600 | J |
| 20 | | UNKNOWN | 17.45 | 5200 | J |
| 21 | | UNKNOWN | 17.61 | 3900 | J |
| 22 | 2809-64-5 | Naphthalene, 1,2,3,4-tetrahydro-5-n | 17.76 | 8600 | JN |
| 23 | | UNKNOWN | 17.86 | 3200 | J |
| 24 | | UNKNOWN | 17.91 | 5300 | J |
| 25 | | UNKNOWN | 18.03 | 5900 | J |
| 26 | | UNKNOWN | 18.16 | 7400 | J |
| 27 | 90-12-0 | Naphthalene, 1-methyl- | 18.21 | 10000 | JN |
| 28 | 581-42-0 | Naphthalene, 2,6-dimethyl- | 19.04 | 5200 | JN |
| 29 | 582-16-1 | Naphthalene, 2,7-dimethyl- | 19.18 | 6100 | JN |
| 30 | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

D1
5/19/08

00313
SOM1.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C1G53

Lab Name: EnviroSystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373

Mod. Ref No.:

SDG No.: C1G43

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: 0080413-11

Sample wt/vol: 5.06 (g/mL) g

Lab File ID: H001247.D

Level: (TRACE or LOW/MED) LOW

Date Received: 04/24/2008

% Moisture: not dec. 17.1

Date Analyzed: 05/02/2008

GC Column: RTX-624 ID: .18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|-------------------------------------|-------|------------|----|
| 01 | | UNKNOWN | 1.91 | 0.0060 | J |
| 02 | | UNKNOWN | 4.67 | 0.016 | J |
| 03 | | UNKNOWN | 5.46 | 0.022 | J |
| 04 | | UNKNOWN | 11.53 | 41 | J |
| 05 | 1678-91-7 | Cyclohexane, ethyl- | 12.28 | 18 | JN |
| 06 | | UNKNOWN | 12.53 | 16 | J |
| 07 | | UNKNOWN | 12.67 | 28 | J |
| 08 | 2216-33-3 | Octane, 3-methyl- | 12.82 | 24 | JN |
| 09 | 1678-81-5 | Cyclohexane, 1,2,3-trimethyl-, (1.6 | 13.03 | 7.3 | JN |
| 10 | | UNKNOWN | 14.79 | 60 | J |
| 11 | | UNKNOWN | 16.79 | 5.1 | J |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

DJ
5/19/08

00433

SOM01.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C1G53ME

Lab Name: EnviroSystems, Inc. Contract: EPW05033
Lab Code: ENVSYS Case No.: 37373 Mod. Ref No.: SDG No.: C1G43
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0080413-11
Sample wt/vol: 5.04 (g/mL) g Lab File ID: H001315.D
Level: (TRACE or LOW/MED) MED Date Received: 04/24/2008
% Moisture: not dec. 17.1 Date Analyzed: 05/07/2008
GC Column: RTX-624 ID: .18 (mm) Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100 (uL)
CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|---------------------------|-------|------------|----|
| 01 | 124-18-5 | Decane | 14.73 | 7600 | JN |
| 02 | | UNKNOWN | 15.00 | 2300 | J |
| 03 | 108-67-8 | Benzene, 1,3,5-trimethyl- | 15.08 | 2200 | JN |
| 04 | | UNKNOWN | 15.46 | 2100 | J |
| 05 | 1120-21-4 | Undecane | 15.82 | 6100 | JN |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

DV
5/16/08

00475
SOM01.2 (8/2007)

1J - FORM 1 VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0541

Lab Name: EnviroSystems, Inc.

Contract: EPW0503E

Lab Code: ENVSYS Case No.: 37373 Mod. Ref No.: SDG No.: C1G13

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0080413-15

Sample wt/vol: 5.00 (g/mL) ml Lab File ID: H001139.D

Level: (TRACE or LOW/MED) LOW Date Received: 04/25/2008

% Moisture: not dec. Date Analyzed: 04/29/2008

GC Column: RTX-624 ID: .18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/l Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|------------|-------------------|------|------------|----|
| 01 | 67-63-0 | Isopropyl alcohol | 3.72 | 17 | JN |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 | Total Alkanes | N/A | | |

EPA-designated Registry Number.

DJ
5/8/08

00057
SOM01.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0544

Lab Name: Envirosystems, Inc. Contract: EPW05033
Lab Code: ENVSYS Case No.: 37373 Mod. Ref No.: SDG No.: 0043
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0080413-18
Sample wt/vol: 5.00 (g/mL) ml Lab File ID: H001142.D
Level: (TRACE or LOW/MED) LOW Date Received: 04/29/2008
% Moisture: not dec. Date Analyzed: 04/29/2008
GC Column: RTX-624 ID: .18 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/kg) ug/l Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|------------|-------------------|------|------------|----|
| 01 | 67-63-0 | Isopropyl alcohol | 3.72 | 16 | JN |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 | Total Alkanes | N/A | | |

EPA-designated Registry Number.

DJ
5/1/08

00103


SOM01.2 (8/2007)



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350**

DATE : May 28, 2008

SUBJECT: Region III Data QA Review

FROM: Colleen K. Walling 
Region III ESAT RPO (3EA20)

TO: Todd Richardson
Regional Project Manager (3HS32)

Attached is the organic data validation report for the JAY-CEE Cleaners site (Case #: 37373; SDG#: CO547) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

cc: Jordan Vaughn (TTEMI)

TO: #0014 TDF: #0552

**ANALYTICAL SERVICE AND QUALITY ASSURANCE BRANCH
OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE**

Lockheed Martin Enterprise Solutions & Services
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-530
Telephone 410-305-3037 Facsimile 410-305-3597

DATE: May 27, 2008

SUBJECT: Organic Data Validation (M2 Level)
Case: 37373
SDG: C0547
Site: Jay-CEE Cleaners

FROM: Habteab Ghebreyesus *HG*
Organic Data Reviewer

MB Mahboobeh Mecanic *MB*
Senior Oversight Chemist

TO: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Case 37373, Sample Delivery Group (SDG) C0547, consisted of eight (8) aqueous samples analyzed for volatiles. The sample set included one (1) rinsate blank. All samples were submitted to EnviroSystems, Inc. (ENVSYS) for analyses. Samples were analyzed according to Contract Laboratory Program (CLP) Statement of Work (SOW) SOM01.2 through Routine Analytical Services (RAS) program.

SUMMARY

Data were validated according to Innovative Approaches for Validation of Organic Data, Level M2. This level of review includes assessment of all Quality Assurance/Quality Control (QA/QC) data and review of chromatograms, but excludes review of raw data and sample spectra. Areas that may impact data usability are listed below.

MAJOR PROBLEM

- Relative Response Factors (RRFs) were less than 0.005 for 1,4-dioxane in the initial and continuing calibrations. Quantitation limits for this compound in all samples were rejected and qualified "R" on Data Summary Forms (DSFs).

MINOR PROBLEMS

- Several compounds failed precision criteria [percent difference (%D)] in the continuing calibrations. The associated positive results for acetone was qualified 'J' on the DSF unless superseded by "B". Imprecision did not exceed fifty percent (50%) criteria; therefore, quantitation limits were not qualified.
- Recovery of DMC 1,4-dioxane-d8 was outside the lower quality control (QC) limit in volatile sample C0556. There was no positive result reported for the compound associated with this DMC in this sample. The "UL" qualifier for the quantitation limit for 1,4-dioxane only compound associated with this DMC, was superseded by "R" on the DSFs.

NOTES

- Compounds detected below the Contract Required Quantitation Limits (CRQLs) were qualified "J" on the DSFs unless superseded by "B".
- Storage blank (VHBLKHL) had DMC 1,4-dioxane outside the lower QC limit. No data were qualified based on this QC sample outlier.
- Tentatively identified compounds (TICs) were reviewed during data validation. Compounds identified from another fraction were crossed off TIC Form 1s by the reviewer. TIC Form 1s for samples with reported TICs are included in Appendix E.
- Volatile samples listed below were re-analyzed at the dilutions because the detected concentration of one (1) or more compounds exceeded the linear calibration range in the initial analyses. The positive results for these compounds in these samples were reported from the dilution by the reviewer and annotated with a "+" on the DSFs

| <u>Sample</u> | <u>Dilution Factor</u> | <u>Compounds</u> |
|---------------|------------------------|--|
| C0547 | 50X | cis-1,2-Dichloroethene, Trichloroethene, Tetrachloroethene |
| C0548, C0555 | 200X | Tetrachloroethene |
| C0550 | 25X | cis-1,2-Dichloroethene, Tetrachloroethene |
| C0551, C0553 | 500X | cis-1,2-Dichloroethene, Trichloroethene, Tetrachloroethene |
| C0556 | 10X | Tetrachloroethene |

- Based on sample screening, the initial analyses of volatile samples C0548 and C0555 at ten (10X) and samples C0551 and C0553 at twenty (20X) dilutions were performed. The CRQLs are elevated in these samples due to these dilutions.
- Trip blanks associated with this case was analyzed in SDG C1G43. Results for these blanks were utilized to evaluate samples for contaminations. Results for these blanks are included in appendix E.

- Sample C0553 was designated as field duplicate on Chain of Custody (COC) records. However, field duplicate for this sample was not identified on COC records; therefore no comparison could be made by reviewer.
- Concentrations of target compounds found in the analyses of the method and rinsate blanks are listed below. Samples with concentrations of common laboratory contaminants (*) less than ten times (<10X) the blank concentration or with concentrations of other contaminants less than five times (<5X) the blank concentration have been qualified "B" on the DSFs.

| <u>Blanks</u> | <u>Compound</u> | <u>Concentration</u> | <u>Affected Samples</u> |
|--------------------------|------------------------|----------------------|----------------------------|
| Method blank (VBLKHK) | Methylene Chloride* | 1.9J ug/L | C0554 |
| | Chloroform | 1.6J ug/L | C0554, C0550, C0553, C0554 |
| Trip Blank (C0541) | Methylene Chloride* | 7.1 ug.L | All samples except C0554 |
| | Acetone* | 16 ug/L | C0547, C0551, C0556 |

Data for Case 37373, SDG C0547, were reviewed in accordance with EPA Region 3 Innovative Approaches (Level M2) for Validation of Organic Data, June 1995.

ATTACHMENTS

- 1) Appendix A Glossary of Data Qualifier Terms
- 2) Appendix B Data Summary Forms
- 3) Appendix C Chain-of-Custody Records
- 4) Appendix D Laboratory Case Narrative
- 5) Appendix E Tentatively Identified Compounds

DCN: 37373_C0547

Appendix A

Glossary of Data Qualifier Codes

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of analytes):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte Present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

Appendix B

Data Summary Forms

DATA SUMMARY FORM: Volatiles

Page 1 of 4

Case #: 37373

SDG : C0547

Number of Soil Samples : 0

Site :

JAYCEE CLEANERS

Number of Water Samples : 8

Lab. :

ENVSYS

Number of Sediment Samples : 0

| Sample Number : | | C0547 | | C0548 | | C0550 | | C0551 | | C0553 | |
|---------------------------------------|------|-----------|------|------------|------|-----------|------|------------|------|------------|------|
| Sampling Location : | | JCC-GW-06 | | JCC-GW-03 | | JCC-GW-05 | | JCC-GW-02 | | JCC-GW-12 | |
| Matrix : | | Water | | Water | | Water | | Water | | Water | |
| Units : | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | |
| Date Sampled : | | 4/25/2008 | | 4/25/2008 | | 4/25/2008 | | 4/25/2008 | | 4/25/2008 | |
| Time Sampled : | | 14:41 | | 16:53 | | 17:05 | | 20:02 | | 20:08 | |
| pH : | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | |
| Dilution Factor : | | 1.0/50.0 | | 10.0/200.0 | | 1.0/25.0 | | 20.0/500.0 | | 20.0/500.0 | |
| Volatiles Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Dichlorodifluoromethane | 5.0 | | | | | | | | | | |
| Chloromethane | 5.0 | | | | | | | | | | |
| *Vinyl chloride | 5.0 | | | | | | | | | | |
| Bromomethane | 5.0 | | | | | | | | | | |
| Chloroethane | 5.0 | | | | | | | | | | |
| Trichlorofluoromethane | 5.0 | | | | | | | | | | |
| *1,1-Dichloroethene | 5.0 | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | | | | | | | | | | |
| Acetone | 10 | 8.7 | B | | | | | 85 | B | | |
| Carbon Disulfide | 5.0 | | | | | | | | | | |
| Methyl acetate | 5.0 | | | | | | | | | | |
| *Methylene chloride | 5.0 | 1.7 | B | 21 | B | 1.9 | B | 41 | B | 39 | B |
| trans-1,2-Dichloroethene | 5.0 | 3.6 | J | | | 4.4 | J | | | | |
| Methyl tert-butyl ether | 5.0 | | | | | 1.8 | J | | | | |
| 1,1-Dichloroethane | 5.0 | | | | | | | | | | |
| cis-1,2-Dichloroethene | 5.0 | 950 + | | 740 | | 2300 + | | 5000 + | | 4800 + | |
| *2-Butanone | 10 | | | | | | | | | | |
| Bromochloromethane | 5.0 | | | | | | | | | | |
| Chloroform | 5.0 | | | | | 1.1 | B | | | 24 | B |
| *1,1,1-Trichloroethane | 5.0 | | | | | | | | | | |
| Cyclohexane | 5.0 | | | | | | | | | | |
| *Carbon tetrachloride | 5.0 | | | | | | | | | | |
| *Benzene | 5.0 | | | | | | | | | | |
| *1,2-Dichloroethane | 5.0 | | | | | | | | | | |
| 1,4-Dioxane | 100 | | R | | R | | R | | R | | R |
| Trichloroethene | 5.0 | 250 + | | 740 | | 150 | | 6400 + | | 6200 + | |
| Methylcyclohexane | 5.0 | | | | | | | | | | |
| *1,2-Dichloropropane | 5.0 | | | | | | | | | | |
| Bromodichloromethane | 5.0 | | | | | | | | | | |
| cis-1,3-Dichloropropene | 5.0 | | | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | | | | | | | | | | |
| *Toluene | 5.0 | | | | | | | | | | |
| trans-1,3-Dichloropropene | 5.0 | | | | | | | | | | |

+ = Results reported from dilution

DATA SUMMARY FORM: Volatiles

Page 2 of 4

Case #: 37373

SDG : C0547

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | | | |
|-----------------------------|------|-----------|------|------------|------|-----------|------|------------|------|------------|------|
| Sample Number : | | C0547 | | C0548 | | C0550 | | C0551 | | C0553 | |
| Sampling Location : | | JCC-GW-06 | | JCC-GW-03 | | JCC-GW-05 | | JCC-GW-02 | | JCC-GW-12 | |
| Field QC: | | | | | | | | | | | |
| Matrix : | | Water | | Water | | Water | | Water | | Water | |
| Units : | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | |
| Date Sampled : | | 4/25/2008 | | 4/25/2008 | | 4/25/2008 | | 4/25/2008 | | 4/25/2008 | |
| Time Sampled : | | 14:41 | | 16:53 | | 17:05 | | 20:02 | | 20:08 | |
| pH : | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | |
| Dilution Factor : | | 1.0/50.0 | | 10.0/200.0 | | 1.0/25.0 | | 20.0/500.0 | | 20.0/500.0 | |
| Volatile Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | 5.0 | 23 | | 280 | | 12 | | 830 | | 810 | |
| *Tetrachloroethene | 5.0 | 3100 + | | 34000 + | | 1400 + | | 94000 + | | 92000 + | |
| 2-Hexanone | 10 | | | | | | | | | | |
| Dibromochloromethane | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | | | | | | | | | | |
| *Chlorobenzene | 5.0 | | | | | | | | | | |
| *Ethylbenzene | 5.0 | | | | | | | 25 | J | 26 | J |
| o-Xylene | 5.0 | | | | | | | 70 | J | 71 | J |
| m,p-Xylene | 5.0 | | | | | | | 89 | J | 85 | J |
| *Styrene | 5.0 | | | | | | | | | | |
| Bromoform | 5.0 | | | | | | | | | | |
| Isopropylbenzene | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 5.0 | | | | | | | | | | |
| *1,3-Dichlorobenzene | 5.0 | | | | | | | | | | |
| *1,4-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | | | | | | | 20 | J | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit *Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

+ = Results reported from dilution

DATA SUMMARY FORM: Volatiles

Page _3_ of _4_

Case #: 37373

SDG : C0547

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | |
|---------------------------------------|---------------|------------|------|-----------|------|--------|------|--------|------|
| Sample Number : | C0554 | C0555 | | C0556 | | | | | |
| Sampling Location : | JCC-RB | JCC-PW | | JCC-GW-04 | | | | | |
| Field QC: | Rinsate Blank | | | | | | | | |
| Matrix : | Water | Water | | Water | | | | | |
| Units : | ug/L | ug/L | | ug/L | | | | | |
| Date Sampled : | 4/25/2008 | 4/25/2008 | | 4/25/2008 | | | | | |
| Time Sampled : | 19:55 | 20:14 | | 19:35 | | | | | |
| pH : | <2.0 | <2.0 | | <2.0 | | | | | |
| Dilution Factor : | 1.0 | 10.0/200.0 | | 1.0/10.0 | | | | | |
| Volatile Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Dichlorodifluoromethane | 5.0 | | | | | | | | |
| Chloromethane | 5.0 | | | | | | | | |
| *Vinyl chloride | 5.0 | | | | | | | | |
| Bromomethane | 5.0 | | | | | | | | |
| Chloroethane | 5.0 | | | | | | | | |
| Trichlorofluoromethane | 5.0 | | | | | | | | |
| *1,1-Dichloroethene | 5.0 | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | | | | | | | | |
| Acetone | 10 | 9.2 | J | | | 7.3 | B | | |
| Carbon Disulfide | 5.0 | | | | | | | | |
| Methyl acetate | 5.0 | | | | | | | | |
| *Methylene chloride | 5.0 | 2.3 | B | 21 | B | 1.8 | B | | |
| trans-1,2-Dichloroethene | 5.0 | | | | | | | | |
| Methyl tert-butyl ether | 5.0 | | | | | | | | |
| 1,1-Dichloroethane | 5.0 | | | | | | | | |
| cis-1,2-Dichloroethene | 5.0 | | | 730 | | 89 | | | |
| *2-Butanone | 10 | | | | | | | | |
| Bromochloromethane | 5.0 | | | | | | | | |
| Chloroform | 5.0 | 5.8 | B | | | | | | |
| *1,1,1-Trichloroethane | 5.0 | | | | | | | | |
| Cyclohexane | 5.0 | | | | | | | | |
| *Carbon tetrachloride | 5.0 | | | | | | | | |
| *Benzene | 5.0 | | | | | | | | |
| *1,2-Dichloroethane | 5.0 | | | | | | | | |
| 1,4-Dioxane | 100 | | R | | R | | R | | |
| Trichloroethene | 5.0 | | | 680 | | 23 | | | |
| Methylcyclohexane | 5.0 | | | | | | | | |
| *1,2-Dichloropropane | 5.0 | | | | | | | | |
| Bromodichloromethane | 5.0 | | | | | | | | |
| cis-1,3-Dichloropropene | 5.0 | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | | | | | | | | |
| *Toluene | 5.0 | | | | | 2.9 | J | | |
| trans-1,3-Dichloropropene | 5.0 | | | | | | | | |

Case #: 37373

SDG : C0547

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| Sample Number : | | C0554 | | C0555 | | C0556 | | | | | |
|-----------------------------|------|---------------|------|------------|------|-----------|------|--------|------|--------|------|
| Sampling Location : | | JCC-RB | | JCC-PW | | JCC-GW-04 | | | | | |
| Field QC: | | Rinsate Blank | | | | | | | | | |
| Matrix : | | Water | | Water | | Water | | | | | |
| Units : | | ug/L | | ug/L | | ug/L | | | | | |
| Date Sampled : | | 4/25/2008 | | 4/25/2008 | | 4/25/2008 | | | | | |
| Time Sampled : | | 19:55 | | 20:14 | | 19:35 | | | | | |
| pH : | | 2.0 | | 2.0 | | 2.0 | | | | | |
| Dilution Factor : | | 1.0 | | 10.0/200.0 | | 1.0/10.0 | | | | | |
| Volatile Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | 5.0 | | | 120 | | 3.3 | J | | | | |
| *Tetrachloroethene | 5.0 | | | 14000 + | | 370 + | | | | | |
| 2-Hexanone | 10 | | | | | | | | | | |
| Dibromochloromethane | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | | | | | | | | | | |
| *Chlorobenzene | 5.0 | | | | | | | | | | |
| *Ethylbenzene | 5.0 | | | | | 1.8 | J | | | | |
| o-Xylene | 5.0 | | | 10 | J | 3.9 | J | | | | |
| m,p-Xylene | 5.0 | | | 16 | J | 5.6 | | | | | |
| *Styrene | 5.0 | | | | | | | | | | |
| Bromoform | 5.0 | | | | | | | | | | |
| Isopropylbenzene | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 5.0 | | | | | | | | | | |
| *1,3-Dichlorobenzene | 5.0 | | | | | | | | | | |
| *1,4-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit *Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

+ = Results reported from dilution

Appendix C

Chain-of-Custody Records

275 4-10-08

U.S. EPA Region III Analytical Request Form

Revision 10.06

37373

| ASQAB USE ONLY | | | |
|----------------|--------|----------------|--|
| RAS# | CT4206 | Analytical TAT | |
| DAS# | | | |
| NSF# | | 14 | |

| | | | |
|--|---------------------------------------|--|-------------------------------|
| Date: 4/2/2008 | | Site Activity: RS Removal Site Evaluation | |
| Site Name: Jay-Cee Cleaners | | Street Address: 16163 LANKFORD HIGHWAY | |
| City: Accomack/NELSONIA | State: VA | Latitude: | Longitude: |
| Program: Superfund | Acct. #: 2008 T03 N302 DC6C A3JR RS00 | CERCLIS #: | |
| Site ID: | Spill ID: A3JR | Operable Unit: | |
| Site Specific QA Plan Submitted: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | | Title: Abbreviated SAP | Date Approved: 9/24/2007 |
| EPA Project Leader: Todd Richardson | | Phone#: 215-814-5264 | Cell Phone #: 215-779-4592 |
| Request Preparer: Marian Murphy | | Phone#: 610-364-2129 | Cell Phone #: 267-446-2839 |
| Site Leader: Jordan Vaughn | | Phone#: 610-364-2141 | Cell Phone #: 215-651-4022 |
| Contractor: Tetra Tech EM Inc. | | EPA CO/PO: Lorrie Murray/Karen Wodarczyk | |
| #Samples 11 | Matrix: soil | Parameter: TCL VOC | Method: CLP SWO SOM01.2 27522 |
| #Samples 11 | Matrix: water-non potable | Parameter: TCL VOC | Method: CLP SOW SOM01.2 27523 |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| #Samples | Matrix: | Parameter: | Method: |
| Ship Date From: 4/17/2008 | | Ship Date To: 4/27/2008 | Inorg. Validation Level |
| Unvalidated Data Requested: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | | If Yes, TAT Needed: <input checked="" type="checkbox"/> 14days <input type="checkbox"/> 7days <input type="checkbox"/> 48hrs <input type="checkbox"/> 24hrs <input type="checkbox"/> Other | (Specify) PRS by - |
| Validated Data Package Due: <input type="checkbox"/> 42 days <input checked="" type="checkbox"/> 30 days <input type="checkbox"/> 21days <input type="checkbox"/> 14 days <input type="checkbox"/> Other (Specify) | | 14/14 | |
| Electronic Data Deliverables Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (EDDs will be provided in Region 3 EDD Format) | | | |
| Special Instructions: See attached for DLS needed. | | | |

| CLP SOW SOM01.2 TARGET COMPOUND LIST TRACE VOLATILE ORGANICS FOR WATER SAMPLES (ug/L) | | | | | |
|--|---------------|-----|-----------------------------|---------------|-----|
| Volatile Compound | CAS Number | DL | Volatile Compound | CAS Number | DL |
| Dichlorodifluoromethane | 75718 | 0.5 | Toluene | 108883 | 0.5 |
| Chloromethane | 74873 | 0.5 | trans-1,3-Dichloropropene | 10061026 | 0.5 |
| Vinyl Chloride | 75014 | 0.5 | 1,1,2-Trichloroethane | 79005 | 0.5 |
| Bromomethane | 74839 | 0.5 | Tetrachloroethene | 127184 | 0.5 |
| Chloroethane | 75003 | 0.5 | 2-Hexanone | 591786 | 0.5 |
| Trichlorofluoromethane | 75694 | 0.5 | Dibromochloromethane | 124481 | 0.5 |
| 1,1-Dichloroethene | 75354 | 0.5 | 1,2-Dibromoethane | 106934 | 0.5 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76131 | 0.5 | Chlorobenzene | 108907 | 0.5 |
| Acetone | 67641 | 5.0 | Ethylbenzene | 100414 | 0.5 |
| Carbon Disulfide | 75150 | 0.5 | Xylenes (total) | 1330207 | 0.5 |
| Methyl Acetate | 79209 | 0.5 | Styrene | 100425 | 0.5 |
| Methylene Chloride | 75092 | 0.5 | Bromoform | 75252 | 0.5 |
| trans-1,2-Dichloroethene | 156605 | 0.5 | Isopropylbenzene | 98828 | 0.5 |
| tert-Butyl Methyl Ether | 1634044 | 0.5 | 1,1,2,2-Tetrachloroethane | 79345 | 0.5 |
| 1,1-Dichloroethane | 75343 | 0.5 | 1,3-Dichlorobenzene | 541731 | 0.5 |
| cis-1,2-Dichloroethene | 156592 | 0.5 | 1,4-Dichlorobenzene | 106467 | 0.5 |
| 2-Butanone | 78933 | 5.0 | 1,2-Dichlorobenzene | 95501 | 0.5 |
| Chloroform | 67663 | 0.5 | 1,2-Dibromo-3-chloropropane | 96128 | 0.5 |
| 1,1,1-Trichloroethane | 71556 | 0.5 | 1,2,4-Trichlorobenzene | 120821 | 0.5 |
| Cyclohexane | 110827 | 0.5 | | | |
| Carbon Tetrachloride | 56235 | 0.5 | | | |
| Benzene | 71432 | 0.5 | | | |
| 1,2-Dichloroethane | 107062 | 0.5 | | | |
| 1,4-Dioxane | 123911 | 20 | | | |
| Trichloroethene | 79016 | 0.5 | | | |
| Methylcyclohexane | 108872 | 0.5 | | | |
| 1,2-Dichloropropane | 78875 | 0.5 | | | |
| Bromodichloromethane | 75274 | 0.5 | | | |
| cis-1,3-Dichloropropene | 10061015 | 0.5 | | | |
| 4-Methyl-2-pentanone | 108101 | 5.0 | | | |

| CLP SOW SOM01.2 TARGET COMPOUND LIST VOLATILE ORGANICS FOR WATER SAMPLES (ug/L) | | | | | |
|---|------------|------|-----------------------------|------------|------|
| Volatiles Compound | CAS Number | CRQL | Volatiles Compound | CAS Number | CRQL |
| Dichlorodifluoromethane | 75718 | 5 | Toluene | 108883 | 5 |
| Chloromethane | 74873 | 5 | trans-1,3-Dichloropropene | 10061026 | 5 |
| Vinyl Chloride | 75014 | 5 | 1,1,2-Trichloroethane | 79005 | 5 |
| Bromomethane | 74839 | 5 | Tetrachloroethene | 127184 | 5 |
| Chloroethane | 75003 | 5 | 2-Hexanone | 591786 | 5 |
| Trichlorofluoromethane | 75694 | 5 | Dibromochloromethane | 124481 | 5 |
| 1,1-Dichloroethene | 75354 | 5 | 1,2-Dibromoethane | 106934 | 5 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76131 | 5 | Chlorobenzene | 108907 | 5 |
| Acetone | 67641 | 10 | Ethylbenzene | 100414 | 5 |
| Carbon Disulfide | 75150 | 5 | Xylenes (total) | 1330207 | 5 |
| Methyl Acetate | 79209 | 5 | Styrene | 100425 | 5 |
| Methylene Chloride | 75092 | 5 | Bromoform | 75252 | 5 |
| trans-1,2-Dichloroethene | 156605 | 5 | Isopropylbenzene | 98828 | 5 |
| tert-Butyl Methyl Ether | 1634044 | 5 | 1,1,2,2-Tetrachloroethane | 79345 | 5 |
| 1,1-Dichloroethane | 75343 | 5 | 1,3-Dichlorobenzene | 541731 | 5 |
| cis-1,2-Dichloroethene | 107062 | 5 | 1,4-Dichlorobenzene | 106467 | 5 |
| 2-Butanone | 78933 | 10 | 1,2-Dichlorobenzene | 95501 | 5 |
| Chloroform | 67663 | 5 | 1,2-Dibromo-3-chloropropane | 96128 | 5 |
| 1,1,1-Trichloroethane | 71556 | 5 | 1,2,4-Trichlorobenzene | 120821 | 5 |
| Cyclohexane | 110827 | 5 | | | |
| Carbon Tetrachloride | 56235 | 5 | | | |
| Benzene | 71432 | 5 | | | |
| 1,2-Dichloroethane | 75343 | 5 | | | |
| 1,4-Dioxane | 123911 | 100 | | | |
| Trichloroethene | 79016 | 5 | | | |
| Methyleyclohexane | 108872 | 5 | | | |
| 1,2-Dichloropropane | 78875 | 5 | | | |
| Bromodichloromethane | 74975 | 5 | | | |
| cis-1,3-Dichloropropene | 10061015 | 5 | | | |
| 4-Methyl-2-pentanone | 108101 | 10 | | | |

| CLP SOW SOM01.2 TARGET COMPOUND LIST VOLATILE ORGANIC COMPOUNDS FOR SOIL SAMPLE ug/Kg | | | | | |
|---|------------|------|-----------------------------|------------|------|
| Volatile Compound | CAS Number | CRQL | Volatile Compound | CAS Number | CRQL |
| Dichlorodifluoromethane | 75718 | 5.0 | 2-Hexanone | 591786 | 10 |
| Chloromethane | 74873 | 5.0 | Dibromochloromethane | 124481 | 5.0 |
| Vinyl Chloride | 75014 | 5.0 | 1,2-Dibromoethane | 106934 | 5.0 |
| Bromomethane | 74839 | 5.0 | Chlorobenzene | 108907 | 5.0 |
| Chloroethane | 75003 | 5.0 | Ethylbenzene | 100414 | 5.0 |
| Trichlorofluoromethane | 75694 | 5.0 | Xylenes (total) | 1330207 | 5.0 |
| 1,1-Dichloroethene | 75354 | 5.0 | Styrene | 100425 | 5.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76131 | 5.0 | Bromoform | 75252 | 5.0 |
| Acetone | 67641 | 10 | Isopropylbenzene | 98828 | 5.0 |
| Carbon Disulfide | 75150 | 5.0 | 1,1,2,2-Tetrachloroethane | 79345 | 5.0 |
| Methyl Acetate | 79209 | 5.0 | 1,3-Dichlorobenzene | 541731 | 5.0 |
| Methylene Chloride | 75092 | 5.0 | 1,4-Dichlorobenzene | 106467 | 5.0 |
| trans-1,2-Dichloroethene | 156605 | 5.0 | 1,2-Dichlorobenzene | 95501 | 5.0 |
| tert-Butyl Methyl Ether | 1634044 | 5.0 | 1,2-Dibromo-3-chloropropane | 96128 | 5.0 |
| 1,1-Dichloroethane | 75343 | 5.0 | 1,2,4-Trichlorobenzene | 120821 | 5.0 |
| cis-1,2-Dichloroethene | 156592 | 5.0 | 1,2,3-Trichlorobenzene | 87616 | 5.0 |
| 2-Butanone | 78933 | 10.0 | | | |
| Chloroform | 67663 | 5.0 | | | |
| 1,1,1-Trichloroethane | 71556 | 5.0 | | | |
| Cyclohexane | 110827 | 5.0 | | | |
| Carbon Tetrachloride | 56235 | 5.0 | | | |
| Benzene | 71432 | 5.0 | | | |
| 1,2-Dichloroethane | 107062 | 5.0 | | | |
| 1,4-Doixane | 123911 | 20 | | | |
| Trichloroethene | 79016 | 5.0 | | | |
| Methylcyclohexane | 108872 | 5.0 | | | |
| 1,2-Dichloropropane | 78875 | 5.0 | | | |
| Bromodichloromethane | 74975 | 5.0 | | | |
| cis-1,3-Dichloropropene | 10061015 | 5.0 | | | |
| 4-Methyl-2-pentanone | 108101 | 10 | | | |
| Toluene | 108883 | 5.0 | | | |
| trans-1,3-Dichloropropene | 10061026 | 5.0 | | | |
| 1,1,2-Trichloroethane | 79005 | 5.0 | | | |
| Tetrachloroethene | 127184 | 250 | | | |

EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:
DAS No:

37373

R

| | | | | |
|-------------------------------------|---------------------------------|-------------------------|---------------|--------------------|
| Region: 3 | Date Shipped: 4/28/2008 | Chain of Custody Record | | Sampler Signature: |
| Project Code: | Carrier Name: FedEx | Relinquished By | (Date / Time) | Received By |
| Account Code: | Airbill: 857499684912 | 1 | | |
| CERCLIS ID: NONE | Shipped to: EnviroSystems, Inc. | 2 | | |
| Spill ID: | 9200 Rumsey Rd. | 3 | | |
| Site Name/State: Jay-Cee 4-25-08/VA | Suite B102 | 4 | | |
| Project Leader: Jordan Vaughn | Columbia MD 21045 | | | |
| Action: | (410) 964-0330 | | | |
| Sampling Co: Tetra Tech | | | | |

| ORGANIC SAMPLE No. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | INORGANIC SAMPLE No. | QC Type |
|-----------------------------------|--------------------------------|--|-------------------------|---|---|-----------------------------|-------------------------|-------------------------------|
| C0542 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC784 (HCL), JCC785 (HCL), JCC786 (HCL) (3) | JCC-GW-07 | S: 4/24/2008 19:22 | | - |
| C0543 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC787 (HCL), JCC788 (HCL), JCC789 (HCL) (3) | JCC-GW-08 | S: 4/24/2008 15:41 | | - |
| C0544 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC790 (HCL) (1) | JCC-TB2 | S: 4/24/2008 15:26 | | Trip Blank |
| C0545 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC791 (HCL), JCC792 (HCL), JCC793 (HCL) (3) | JCC-GW-09 | S: 4/25/2008 8:55 | | - |
| C0546 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC791 (HCL) (3) | JCC-GW-11 | S: 4/25/2008 11:23 | | - |
| C0547 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC791 (HCL) (3) | JCC-GW-06 | S: 4/25/2008 14:41 | | - |
| C0548 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC794 (HCL), JCC795 (HCL), JCC796 (HCL) (3) | JCC-GW-03 | S: 4/25/2008 16:53 | | - |
| C0550 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC800 (HCL), JCC801 (HCL), JCC802 (HCL) (3) | JCC-GW-05 | S: 4/25/2008 17:05 | | - |
| C0551 | Ground Water/ Jordan Vaughn | H/G | TCL VOC (14) | JCC803 (HCL), JCC804 (HCL), JCC805 (HCL) (3) | JCC-GW-02 | S: 4/25/2008 20:02 | | - |
| C0553 | Ground Water/ Jordan Vaughn | H/G | TCL VOC (14) | JCC809 (HCL), JCC810 (HCL), JCC811 (HCL) (3) | JCC-GW-12 | S: 4/25/2008 20:08 | | Field Duplicate |
| C0554 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC812 (HCL), JCC813 (HCL), JCC814 (HCL) (3) | JCC-RB | S: 4/25/2008 19:55 | | Rinsate |
| Shipment for Case Complete ? N | | Sample(s) to be used for laboratory QC: | | | Additional Sampler Signature(s): | | | Chain of Custody Seal Number: |
| Analysis Key: | | Concentration: L = Low, M = Low/Medium, H = High | | | Type/Designate: Composite = C, Grab = G | | | Shipment Iced? _____ |
| TCL VOC = SOM01.2 TCL VOC'S | | | | | | | | |

TR Number: 3-023200937-042708-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

REGION COPY

EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37373
DAS No: R

| | | | | |
|-------------------------------------|---------------------------------|-------------------------|---------------|--------------------|
| Region: 3 | Date Shipped: 4/28/2008 | Chain of Custody Record | | Sampler Signature: |
| Project Code: | Carrier Name: FedEx | Relinquished By | (Date / Time) | Received By |
| Account Code: | Airbill: 857499684912 | 1 | | |
| CERCLIS ID: NONE | Shipped to: EnviroSystems, Inc. | 2 | | |
| Spill ID: | 9200 Rumsey Rd. | 3 | | |
| Site Name/State: Jay-Cee 4-25-08/VA | Suite B102 | 4 | | |
| Project Leader: Jordan Vaughn | Columbia MD 21045 | | | |
| Action: | (410) 964-0330 | | | |
| Sampling Co: Tetra Tech | | | | |

| ORGANIC SAMPLE NO. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNAROUND | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | INORGANIC SAMPLE NO. | QC Type |
|--------------------|-----------------------------|------------|----------------------|--|------------------|--------------------------|----------------------|---------|
| C0555 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC815 (HCL), JCC816 (HCL), JCC817 (HCL) (3) | JCC-PW | S: 4/25/2008 20:14 | | -- |
| C0556 | Ground Water/ Jordan Vaughn | M/G | TCL VOC (14) | JCC818 (HCL), JCC819 (HCL), JCC820 (HCL), JCC821 (HCL), JCC822 (HCL), JCC823 (HCL), JCC824 (HCL), JCC825 (HCL), JCC826 (HCL) (9) | JCC-GW-04 | S: 4/25/2008 19:35 | | Spike |

| | | | |
|-------------------------------|--|---|-------------------------------|
| Shipment for Case Complete? N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analysis Key: | Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment lead? _____ |
| TCL VOC = SOM01.2 TCL VOCs | | | |

TR Number: 3-023200937-042708-0001

REGION COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:

37373

DAS No:

R

| | | | | |
|-------------------------------|---------------------------------|-------------------------|---------------|--------------------|
| Region: 3 | Date Shipped: 4/24/2008 | Chain of Custody Record | | Sampler Signature: |
| Project Code: | Carrier Name: FedEx | Relinquished By | (Date / Time) | Received By |
| Account Code: | Airbill: 857499851857 | 1 | | |
| CERCLUS ID: NONE | Shipped to: EnviroSystems, Inc. | 2 | | |
| Spill ID: | 9200 Rumsey Rd. | 3 | | |
| Site Name/State: Jay-Cee/VA | Suite B102 | 4 | | |
| Project Leader: Jordan Vaughn | Columbia MD 21045 | | | |
| Action: | (410) 964-0330 | | | |
| Sampling Co: Tetra Tech | | | | |

| ORGANIC SAMPLE NO. | MATRIX/ SAMPLER | CONC/ TYPE | ANALYSIS/ TURNDOWN | TAG No./ PRESERVATIVE/ Bottles | STATION LOCATION | SAMPLE COLLECT DATE/TIME | INORGANIC SAMPLE No. | QC Type |
|--------------------|-----------------------------|------------|--------------------|--|------------------|--------------------------|----------------------|------------|
| C0539 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC777 (HCL), JCC778 (HCL), JCC779 (HCL) (3) | JCC-GW-01 | S: 4/24/2008 10:40 | | -- |
| C0540 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC780 (HCL), JCC781 (HCL), JCC782 (HCL) (3) | JCC-GW-10 | S: 4/24/2008 13:50 | | -- |
| C0541 | Ground Water/ Jordan Vaughn | L/G | TCL VOC (14) | JCC783 (HCL) (1) | JCC-TB1 | S: 4/24/2008 8:44 | | Trip Blank |

| | | | |
|--|---|----------------------------------|-------------------------------|
| Shipment for Case Complete? N | Sample(s) to be used for laboratory QC: | Additional Sampler Signature(s): | Chain of Custody Seal Number: |
| Analysis Key: Concentration: L = Low, M = Low/Medium, H = High | Type/Designate: Composite = C, Grab = G | Shipment Iced? _____ | |
| TCL VOC = SOM01.2 TCL VOC'S | | | |

TR Number: 3-023200937-042408-0004

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

Judy
Snyder/ESC/R3/USEPA/US
05/15/2008 05:24 PM

To Colleen Walling/DC/USEPA/US, Todd
Richardson/R3/USEPA/US, Lorrie Murray/R3/USEPA/US,
cc Dan Slizys/ESC/R3/USEPA/US, John
Kwedar/ESC/R3/USEPA/US, Carroll
Harris/ESC/R3/USEPA/US, Victor
bcc

Subject Jay-Cee Cleaners, 37373, memo to file

**INFORMATION CONTAINED BELOW DOES NOT CONSTITUTE TECHNICAL
DIRECTION: THE SAMPLING FIELD CONTRACTOR SHALL CONTACT HIS EPA CONTRACTING
OFFICER FOR TECHNICAL DIRECTION.**

Jay-Cee Cleaners, 37373
Lab: Envsys
EPA Project Lead: Todd Richardson
Site Lead: Jordan Vaughn, TTEMI
POC: Marian Murphy, TTEMI

1. Regional copies of the chains of custody were requested from the sampler 5/14/08 and received 5/15/08. Regional copies are due to the Region within a week of sample shipment
2. Air bill numbers listed on chains of custody 3-023200937-042308-0001, pages 1 and 2 were not correct numbers. There was no airbill with the data package and the Fed Ex Tracking site stated that they had no record of that air bill number (857 49985 19380215.) Sampler will please add a correct air bill number to the COC's via memo to file.
3. Sampler used station locations instead of CLP sample number for samples collected 4/23/08. SMO issued replacement sample numbers and documented the new sample numbers and their corresponding station locations. The site leader will please use the correct CLP sample numbers.
4. There was no sample collection date or time on the tags or chain of custody for sample C1G48.
5. Three samples, C0545, C0546, C0547 have identical tag numbers: JCC791, JCC792, JCC793. All other information was unique to the sample number. Sampler should proof the tags and chains of custody prior to shipment.

Judy Snyder
ESAT Auditor, Region 3
Lockheed Martin Enterprise Solutions & Services
701 Mapes Road
Ft. Meade, MD 20755-5350
Phone 410-305-3015
Fax 410-305-3095

Charlie Hampp

From: Walsh, Colin [cwalsh20@fedcsc.com]
Sent: Tuesday, April 29, 2008 1:33 PM
To: Charlie Hampp
Cc: info@envsystems.com; slizys.dan@epa.gov; Harris.Carroll@epamail.epa.gov; thaung.khin-cho@epa.gov; kwedar.john@epa.gov
Subject: Region 03 | Case 37373 | Lab ENVSYS | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL

Charlie,

Summary Start

Issue: The laboratory received samples C0545, -46, and -47 with the same sample tag number JCC791. Only one bc each was received for samples C0546 and -47. One of the three bottles received for sample C0545 had sample tag number JCC791.

Resolution: Per Region 3, the laboratory will note the issue in the Case/SDG Narrative and proceed with the analysis the samples.

Summary End

Please let me know if you have any further questions or problems.

Thanks,

Colin

 Colin G. Walsh
 Computer Sciences Corporation (CSC)
 (703) 818-4544
 cwalsh20@fedcsc.com

-----Original Message-----

From: Slizys.Dan@epamail.epa.gov [mailto:Slizys.Dan@epamail.epa.gov]
Sent: Tuesday, April 29, 2008 1:23 PM
To: Walsh, Colin; marian.murphy@ttemi.com; jordan.vaughn@ttemi.com
Cc: Harris.Carroll@epamail.epa.gov; kwedar.john@epa.gov; thaung.khin-cho@epa.gov
Subject: Re: NEW ISSUE | Case 37373 | Lab ENVSYS | Issue Discrepancies with tags, jars, and/or TR/COC |

Colin,

The lab must document the Tag/TR/COC issue in the case narrative and proceed with the analysis.

Marian and Jordan,

Please refer to the TR/COC and the tags associated for samples C0545, C0546, and C0547. All samples have the same sample tag number JCC791. However, the station locations are not the same. Please write a memo to file clarifying the issue.

(See attached file: CT4206.doc)

"Walsh, Colin"
 <cwalsh20@fedcsc
 .com>

To
 Dan Slizys/ESC/R3/USEPA/US@EPA,

00349

4/29/2008

04/29/2008 12:40 PM Carroll
Harris/ESC/R3/USEPA/US@EPA

cc

Khin-Cho
Thaung/ESC/R3/USEPA/US@EPA, John
Kwedat/ESC/R3/USEPA/US@EPA
Subject
NEW ISSUE | Case 37373 | Lab
ENVSYS | Issue Discrepancies with
tags, jars, and/or TR/COC |

Dan/Carroll,

ENVSYS is reporting the following issue for Case 37373. Please advise.

Issue: The laboratory received samples C0545, -46, and -47 with the same sample tag number JCC791. Only one bottle each was received for samples C0546 and -47. One of the three bottles received for sample C0545 had sample tag number JCC791.

Please see the attached TR/COC and let me know if you need any further information.

Thanks,

Colin

Colin G. Walsh
Computer Sciences Corporation (CSC)
(703) 818-4544
cwalsh20@fedcsc.com

From: Charlie Hampp [mailto:hamppc@comcast.net]
Sent: Tuesday, April 29, 2008 11:38 AM
To: Walsh, Colin
Cc: Mohan Khare Ph. D.
Subject: Case 37373 Sample Tag Issues

We have received several samples with the same tag number for the bottles. EPA sample IDs C0545, C0546, and C0547 all report tag number JCC791 for one or more bottle. Please let me know what we need to do?

Thanks,

Charlie Hampp
Director IT & QAO
EnviroSystems, Inc.
9200 Rumsey Road, Suite B102
Columbia, MD 21045-1934
410-964-0330 Ext. 225 410-740-9306 (fax)
hamppc@comcast.net

(See attached file: SCAN0746_000.pdf)

00350

4/29/2008

Page ____ of ____

SDG : C1G43

JAYCEE CLEANERS

ENVSYS

[illegible]

DATA SUMMARY FORM: Volatiles (Lab Results)

Page ____ of ____

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | | | | |
|-----------------------------|--|-----------|--------|-----------|--------|------------------------|--------|-----------|--------|-----------|--------|------|
| Sample Number : | | C0539 | | C0540 | | C0541 | | C0542 | | C0543 | | |
| Sampling Location : | | JCC-GW-01 | | JCC-GW-10 | | JCC-TB1 Trip Blonik | | JCC-GW-07 | | JCC-GW-08 | | |
| Matrix : | | Water | | Water | | Water | | Water | | Water | | |
| Units : | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | | |
| Date Sampled : | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | | 4/24/2008 | | |
| Time Sampled : | | 10:40 | | 13:50 | | 08:44 | | 19:22 | | 15:41 | | |
| %Moisture : | | N/A | | N/A | | N/A | | N/A | | N/A | | |
| pH : | | 2.0 | | 2.0 | | 2.0 | | 2.0 | | 2.0 | | |
| Dilution Factor : | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | |
| Volatile Compound | | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | | 5.0 | | | | | | | 1.1 | J | | |
| *Tetrachloroethene | | 5.0 | 3.1 | J | | | | | 140 | | | |
| 2-Hexanone | | 10 | | | | | | | | | | |
| Dibromochloromethane | | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | | 5.0 | | | | | | | | | | |
| *Chlorobenzene | | 5.0 | | | | | | | | | | |
| *Ethylbenzene | | 5.0 | | | | | | | | | | |
| o-Xylene | | 5.0 | | | | | | | | | | |
| m,p-Xylene | | 5.0 | | | | | | | | | | |
| *Styrene | | 5.0 | | | | | | | | | | |
| Bromoform | | 5.0 | | | | | | | | | | |
| Isopropylbenzene | | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | 5.0 | | | | | | | | | | |
| *1,3-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| *1,4-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

DATA SUMMARY FORM: Volatiles (Lab Results)

Page ____ of ____

Case #: 37373

SDG : C1G43

Site :

JAYCEE CLEANERS

Lab. :

ENVSYS

| | | | | | | | | | | | |
|-----------------------------|------------|-----------|------|-----------|------|--------|------|--------|------|--------|------|
| Sample Number : | C0544 | C0545 | | C0546 | | | | | | | |
| Sampling Location : | JCC-TB2 | JCC-GW-09 | | JCC-GW-11 | | | | | | | |
| Field No. : | Imp Bionic | | | | | | | | | | |
| Matrix : | Water | Water | | Water | | | | | | | |
| Units : | ug/L | ug/L | | ug/L | | | | | | | |
| Date Sampled : | 4/24/2008 | 4/25/2008 | | 4/25/2008 | | | | | | | |
| Time Sampled : | 15:26 | 08:55 | | 20:08 | | | | | | | |
| %Moisture : | N/A | N/A | | N/A | | | | | | | |
| pH : | 2.0 | 2.0 | | 2.0 | | | | | | | |
| Dilution Factor : | 1.0 | 1.0 | | 1.0 | | | | | | | |
| Volatile Compound | CRQL | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,2-Trichloroethane | 5.0 | | | | | | | | | | |
| *Tetrachloroethene | 5.0 | | | 7700 | E | 13 | | | | | |
| 2-Hexanone | 10 | | | | | | | | | | |
| Dibromochloromethane | 5.0 | | | | | | | | | | |
| 1,2-Dibromoethane | 5.0 | | | | | | | | | | |
| *Chlorobenzene | 5.0 | | | | | | | | | | |
| *Ethylbenzene | 5.0 | | | | | | | | | | |
| o-Xylene | 5.0 | | | | | | | | | | |
| m,p-Xylene | 5.0 | | | | | | | | | | |
| *Styrene | 5.0 | | | | | | | | | | |
| Bromoform | 5.0 | | | | | | | | | | |
| Isopropylbenzene | 5.0 | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 5.0 | | | | | | | | | | |
| *1,3-Dichlorobenzene | 5.0 | | | | | | | | | | |
| *1,4-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 5.0 | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 5.0 | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 5.0 | | | | | | | | | | |

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Appendix D

Laboratory Case Narrative

SDG NARRATIVE

Envirosystems, Inc.

Contract: EPW05033
Client: EPA Region 3
Case: 37373
SDG: C0547

1. SAMPLE RECIEPT

Date received: 29-APRIL 2008
Cooler Temperature: 2C

Sample Summary

| Client ID | Laboratory ID | Fraction | matrix |
|-----------|---------------|----------|--------|
| C0547 | 0080421-01 | VOA | WATER |
| C0548 | 0080421-02 | VOA | WATER |
| C0550 | 0080421-03 | VOA | WATER |
| C0551 | 0080421-04 | VOA | WATER |
| C0553 | 0080421-05 | VOA | WATER |
| C0554 | 0080421-06 | VOA | WATER |
| C0555 | 0080421-07 | VOA | WATER |
| C0556 | 0080421-08 | VOA | WATER |

Note: VOA = VOA LOW

VOA_L/M = VOA LOW & VOA MEDIUM

1. VOLATILE 2. HOLDING TIMES

All holding times were met.

3. METHODS

CLP Method SOM01.2

4. INSTRUMENT AND CHROMATOGRAPHIC CONDITIONS

A Hewlett Packard 6890 gas chromatograph equipped with a Hewlett Packard 5973 MSD was used for sample analysis. The capillary column used was a Restek 20m by 0.18 mm ID by 1.0 µm film thickness (Restek Cat. # RTX-624). The trap used with the sample concentrator is an EST K Trap, 30cm packed with Carboxen B / Carboxen 1000 & 1001 (VOCARB 3000)

5. PREPARATION

All samples were prepared by CLP Method SOM01.2.

6. ANALYSIS

A. Calibration:

I. Initial and continuing calibration standards

The Initial calibrations met all acceptance criteria.

All the CCVs were within the contract requirement.

B. Blanks:

Blanks met the QC requirements.

00001A

SDG NARRATIVE

C. Surrogates/Deuterated Monitoring Compounds (DMCs):

All technical acceptance criteria were met.

Spikes:

I. Laboratory Control Spikes (LCS)

Laboratory Control Spikes were not used for this method.

II. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD was not requested to analyze for this SDG.

Internal Standard:

All internal standard criteria were met.

D. Samples

Sample analysis proceeded as normal. Seven samples were re-analyzed at dilution due to the presence of high concentration of the target compounds.

There was an issue with the sample, it was communicated to the region. The e-mails were included in the data package.

Manual Integration Summary


The following manual integrations were performed on Samples, Blanks, and/or standards C0555, VSTD005EL, VSTD010EL, VSTD050HR, and VBLKHK.

Reason Codes:

- A. Baseline integration, re-inforced due to interference on target peak.
- B. Baseline integration, peak not properly integrated by software integrator.
- C. Target peak was not properly identified, more than one peak in retention time window.
- D. Split peak, more than one peak in retention time window.
- E. Target peak was not properly identified/missed by the integration software.

These manual integrations have been reviewed and meet all criteria in accordance with CLP SOM01.2 protocol.

I certify that this Sample 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 the hard copy Sample Data Package and in the Electronic Data Deliverables has been authorized by the laboratory manager or the manager's designee, as verified by the following signatures.


Laboratory Manager

05/12/08
Date

000013

Appendix E

Tentatively Identified Compounds (TICs)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0550

Lab Name: Envirosystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373 Mod. Ref No.: SDG No.: C0547

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0080421-03

Sample wt/vol: 5.00 (g/ml) ml Lab File ID: H001335.D

Level: (TRACE or LOW/MED) LOW Date Received: 04/29/2008

% Moisture: not dec. Date Analyzed: 05/08/2008

GC Column: RTX-624 ID: .18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/l Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|---------------|------|------------|---|
| 01 | | UNKNOWN | 1.42 | 5.8 | J |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

00068
SOM01.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0551

Lab Name: EnviroSystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373

Mod. Ref No.: SDG No.: C0547

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: 0080421-04

Sample wt/vol: 5.00 (g/mL) ml

Lab File ID: H001336.D

Level: (TRACE or LOW/MED) LOW

Date Received: 04/29/2008

% Moisture: not dec.

Date Analyzed: 05/08/2008

GC Column: RTX-624 ID: .18 (mm)

Dilution Factor: 20.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/l

Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|----------------------------|-------|------------|----|
| 01 | | UNKNOWN | 9.83 | 440 | J |
| 02 | 620-14-4 | Benzene, 1-ethyl-3-methyl- | 14.63 | 160 | JN |
| 03 | 108-67-8 | Benzene, 1,3,5-trimethyl- | 14.73 | 230 | JN |
| 04 | 611-14-3 | Benzene, 1-ethyl-2-methyl- | 14.91 | 180 | JN |
| 05 | 526-73-8 | Benzene, 1,2,3-trimethyl- | 15.08 | 580 | JN |
| 06 | 95-53-6 | Benzene, 1,2,4-trimethyl- | 15.46 | 390 | JN |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

00096
SOM01.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0553

Lab Name: EnviroSystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373

Mod. Ref No.:

SDG No.: C0547

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: 0080421-05

Sample wt/vol: 5.00 (g/mL) ml

Lab File ID: H001337.D

Level: (TRACE or LOW/MED) LOW

Date Received: 04/29/2008

% Moisture: not dec.

Date Analyzed: 05/08/2008

GC Column: RTX-624 ID: .18 (mm)

Dilution Factor: 20.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/l

Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|--------------------------------|-------|------------|----|
| 01 | | UNKNOWN | 9.82 | 440 | J |
| 02 | 622-96-8 | Benzene, 1-ethyl-4-methyl- | 14.62 | 170 | JN |
| 03 | 108-67-8 | Benzene, 1,3,5-trimethyl- | 14.72 | 220 | JN |
| 04 | 611-14-3 | Benzene, 1-ethyl-2-methyl- | 14.90 | 190 | JN |
| 05 | 526-73-8 | Benzene, 1,2,3-trimethyl- | 15.08 | 580 | JN |
| 06 | 95-63-6 | Benzene, 1,2,4-trimethyl- | 15.46 | 410 | JN |
| 07 | 1758-88-9 | Benzene, 2-ethyl-1,4-dimethyl- | 15.99 | 100 | JN |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

00131
SOM01.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0554

Lab Name: EnviroSystems, Inc.

Contract: EPW05033 *Pinsole*

Lab Code: ENVSYS Case No.: 37373 Mod. Ref No.: SDG No.: C0547

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0080421-06

Sample wt/vol: 5.00 (g/mL) ml Lab File ID: H001330.D

Level: (TRACE or LOW/MED) LOW Date Received: 04/29/2008

% Moisture: not dec. Date Analyzed: 05/07/2008

GC Column: RTX-624 ID: .18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/l Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|---------------|------|------------|---|
| 01 | | UNKNOWN | 3.72 | 13 | J |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

00169
SOM01.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0555

Lab Name: EnviroSystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373

Mod. Ref No.:

SDG No.: C0547

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: 0080421-07

Sample wt/vol: 5.00 (g/mL) ml

Lab File ID: H001338.D

Level: (TRACE or LOW/MED) LOW

Date Received: 04/29/2008

% Moisture: not dec.

Date Analyzed: 05/08/2008

GC Column: RTX-624 ID: .18 (mm)

Dilution Factor: 10.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/l

Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|-------------------------------------|-------|------------|----|
| 01 | | UNKNOWN | 9.83 | 220 | J |
| 02 | | UNKNOWN | 14.36 | 61 | J |
| 03 | | UNKNOWN | 14.64 | 82 | J |
| 04 | 124-18-5 | Decane | 14.73 | 330 | JN |
| 05 | 611-14-3 | Benzene, 1-ethyl-2-methyl- | 14.90 | 73 | JN |
| 06 | | UNKNOWN | 15.00 | 120 | J |
| 07 | 95-63-6 | Benzene, 1,2,4-trimethyl- | 15.08 | 190 | JN |
| 08 | 526-73-8 | Benzene, 1,2,3-trimethyl- | 15.46 | 140 | JN |
| 09 | | UNKNOWN | 15.66 | 98 | J |
| 10 | 1120-21-4 | Undecane | 15.82 | 270 | JN |
| 11 | 99-87-6 | Benzene, 1-methyl-4-(1-methylethyl) | 15.99 | 90 | JN |
| 12 | 933-98-2 | Benzene, 1-ethyl-2,3-dimethyl- | 16.06 | 69 | JN |
| 13 | | UNKNOWN | 16.16 | 51 | J |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

00180
SOM01.2 (8/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0556

Lab Name: Envirosystems, Inc.

Contract: EPW05033

Lab Code: ENVSYS Case No.: 37373

Mod. Ref No.: SDG No.: C0547

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: 0080421-08

Sample wt/vol: 5.00 (g/mL) ml

Lab File ID: H001339.D

Level: (TRACE or LOW/MED) LOW

Date Received: 04/29/2008

% Moisture: not dec.

Date Analyzed: 05/08/2008

GC Column: RTX-624 ID: .18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/l

Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|----|----------------------|----------------------------------|------------------|----------------|---------------|
| 01 | 75-18-3 | Dimethyl Sulfide | 3.41 | 5.9 | JN |
| 02 | | UNKNOWN | 9.83 | 21 | J |
| 03 | 526-73-8 | Benzene, 1,2,3-trimethyl- | 15.08 | 7.5 | JN |
| 04 | 95-63-6 | Benzene, 1,2,4-trimethyl- | 15.46 | 5.1 | JN |
| 05 | 1560-06-1 | Benzene, 2-butenyl- | 16.79 | 8.0 | JN |
| 06 | 622-76-4 | Benzene, 1-butenyl- | 16.85 | 6.5 | JN |
| 07 | | UNKNOWN | 16.92 | 5.6 | J |
| 08 | 91-20-3 | Naphthalene (1) | 17.32 | 6.0 | JN |
| 09 | 91-57-6 | Naphthalene, 2-methyl | 18.21 | 6.1 | JN |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796 ¹ | Total Alkanes | N/A | | |

¹EPA-designated Registry Number.

00219
SOM1.2 (8/2007)