ANNUAL REPORT

2010 Groundwater Sampling Event

Charlie Burch Site, Spring, Texas
Voluntary Cleanup Program No. 421

Rohm and Haas Texas Inc.

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2010 GROUNDWATER MONITORING REPORT

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1.0 INTRODUCTION

This report summarizes the activities completed during 2010 as part of the response action and associated monitoring related to the Charlie Burch site in Spring, Texas. Rohm and Haas Texas, Inc (Rohm and Haas)[1] is performing these actions in accordance with the Texas Voluntary Cleanup Program (VCP). Since 1998, sampling has been conducted at the Charlie Burch Site to monitor affected groundwater conditions within the two uppermost groundwater-bearing units (GWBUs) designated Zone A and Zone B, and assess the effectiveness of on-going groundwater remedies. The principal Chemical of Concern (COC) identified in affected groundwater beneath, and hydraulically downgradient of the site is 1,2-dichloroethane (1,2-DCA).

Remediation of the site was commenced, and a soil remedy was completed in 1999, under the Texas Risk Reduction Rules (30 TAC Chapter 335). The groundwater investigation and response action was transitioned to the Texas Risk Reduction Program (TRRP; 30 TAC, Chapter 350) in 2003. Point-of-Compliance wells installed in 2005 for the groundwater remedy, which consisted of a source area pump and treat system combined with monitored natural attenuation (MNA) and a plume management zone (PMZ), showed that the dissolved 1,2-DCA plume was not fully delineated. Accordingly, additional investigations were conducted to delineate the Protective Concentration Level Exceedence (PCLE) Zone, and a second pump and treat system was installed in 2006, approximately 2000 feet downgradient of the source area.

In July 2010 Rohm and Haas submitted a Response Action Plan (2010 RAP) proposing remediation technologies (enhanced bioremediation, re-designed source area pump and treat system, and continued annual groundwater monitoring) that will potentially achieve remedial objectives within a shorter timeframe. At present, Rohm and Haas is responding to additional comments from the Texas Commission on Environmental Quality (TCEQ) regarding the 2010 RAP. Groundwater monitoring will continue on an annual basis.

This report presents the results of the 2010 annual groundwater monitoring program, and summarizes the remedial operations conducted at the source area and in the downgradient plume.

1.1 Basis for Submittal

This groundwater monitoring report is being submitted as required by the "Response Action Workplan for Groundwater Remediation" (RAWP) which was submitted to TCEQ on 8 October 1999, and approved in a letter from TCEQ dated 10 November 1999 (GSI 1999b). The RAWP was prepared in accordance with the Texas Risk Reduction Rules, which was the regulatory framework applicable to groundwater remediation in 1999. The work program outlined in the RAWP identified the following objectives for the groundwater recovery operations:

[1] As of 1 April 2009, Rohm and Haas Texas, Inc. is a wholly owned subsidiary of the Dow Chemical Company.

- *Source Area Capture Zone:* Eliminate further off-site migration of affected near-surface groundwater.

- *Off-Site:* Reduce concentrations of 1,2-DCA in off-site groundwater to <0.005 mg/L, corresponding to the Protective Concentration Level (PCL) under the current regulatory framework of the Texas Risk Reduction Program (TRRP).

- *Treatment of Recovered Groundwater:* Treat recovered groundwater to meet discharge requirements.

The work program outlined in the RAWP specified reporting requirements for an annual groundwater monitoring report. As required by the RAWP, this report provides the following information:

- *Groundwater Pumping:* Summaries of total gallons of groundwater recovered and analytical results for source area and downgradient treated groundwater (see Appendices A and C).

- *Monitoring Results:* Summaries of groundwater analytical results, potentiometric surface maps, and isopleth maps of 1,2-DCA concentrations (see Section 4.0).

- *System Effectiveness:* Evaluation of groundwater capture zones from both systems, whether cleanup targets have been achieved, and whether portions of the groundwater recovery systems can be shut down (see Section 4.0).

- *Proposed System Modifications:* Recommended changes to the groundwater monitoring program, including recommendations for discontinuation of sampling of wells where the chemical of concern has not been detected for several consecutive events. System modifications have been proposed in the 2010 RAP, and will be incorporated upon approval of the 2010 RAP.

This report represents the ninth annual report documenting operation of the on-site source area groundwater recovery system and groundwater monitoring results and covers the time period from January to December 2010.

1.2 Document Organization

This report includes the following main sections to document groundwater conditions and remediation efforts during calendar year 2010:

- Section 2 discusses the two active groundwater remediation systems operated to contain and remove contaminated groundwater.

- Section 3 describes the existing groundwater monitoring network and program.

- Section 4 documents the results of groundwater monitoring conducted in 2010.

- Section 5 lists activities planned for 2011.

1.3 Site History

The following section provides a summary of the site history, investigation, and remediation conducted to date.

1.3.1 Site Overview

The Charlie Burch Site is located approximately 25 miles north of Houston, Texas, in south central Montgomery County (see Figure 1). The Charlie Burch site and vicinity in which groundwater monitoring wells have been installed is shown on Figure 2.

1.3.2 Early History

The Charlie Burch site industrial history dates back to the 1950s. In the 1960s, an independent hauler used the site to bury wastes collected from several manufacturers. Rohm and Haas does not currently own, and historically never did own or operate the site. In 1967 a Montgomery County judge ordered the waste site closed. In the early 1980s, the State of Texas approached several parties, including Rohm and Haas, to further investigate the Charlie Burch site and to develop a plan to properly close the site. In 1983 after several years of work, the Texas Department of Water Resources (TDWR, predecessor to the Texas Commission on Environmental Quality, TCEQ) issued a letter stating that the Burch disposal area had been closed in conformance with the approved closure plan.

1.3.3 Soil Response Actions

In the early 1990s, the Texas Water Commission (TWC) asked Rohm and Haas to conduct additional soil and groundwater investigation work, and in 1996, after additional study, Rohm and Haas enrolled the site in the Texas Voluntary Cleanup Program (VCP). In accordance with provisions of the Texas Risk Reduction Rule (30 TAC 335), closure criteria for Risk Reduction Standard No. 2 were selected for closure of impacted soils identified by site investigations. In mid-1999 with the approval of the TCEQ, buried waste and affected soil were delineated, excavated, and disposed off-site by Rohm and Haas, clean backfill was placed in the excavated areas, and the site was graded and seeded in mid-1999 (see Figure 2).

1.3.4 Current Status of Soil Remedy

A Response Action Completion Report documenting the soil remediation was submitted to the TCEQ on 24 March 2000, and was subsequently approved by the TCEQ. Therefore, the response action for soil is complete, although the groundwater response is on-going. The soil remedy qualifies for a split-media closure in accordance with the TCEQ interoffice memorandum dated 18 July 2000, because proof of attainment of a Chapter 335 Risk Reduction Rule standard was submitted prior to 1 May 2000 (TCEQ 2000).

After completion of the soil remedy, the site itself is now mostly open, undeveloped land with some small trees remaining in areas where excavation and backfilling were not performed. An oil production tank battery and saltwater injection well is present on the southern and eastern portions of the property; the oil production facilities are not owned or operated by Rohm and Haas. Environmental issues associated with oil and gas operations at the property have been reported to the TCEQ; however, these noted environmental issues are regulated by the Texas Railroad Commission and are not included in the scope of VCP response actions.

1.3.5 Groundwater Response Actions

Rohm and Haas had no known history of wastes containing 1,2-DCA being sent to the Charlie Burch site and suspects that others may have been the source of the compound. Nevertheless, under the VCP, Rohm and Haas has been working closely with the TCEQ to move toward a final groundwater cleanup objective. Two groundwater pump and treat systems are currently operating, including one in the source area (see Figure 2 and Appendix A) and one within the plume approximately 2,000 ft downgradient of the source area (see Figure 2 and Appendix B). Investigations have confirmed that groundwater moving southeast from the site contains 1,2-DCA in a generally narrow band between approximately 25 ft and 65 ft below ground surface (bgs; see Figures 3 and 6).

The initial response action to affected groundwater was pursued under the Texas Risk Reduction Rules (30 TAC Chapter 335); however, after a meeting with the TCEQ on 25 May 2003, Rohm and Haas elected to implement response actions for affected groundwater under the Texas Risk Reduction Program (TRRP; 30 TAC Chapter 350). In accordance with the reporting requirements of TRRP, a Response Action Plan (RAP) was submitted in February 2005 which described the proposed response action for remediation of groundwater at the site (GSI 2005).

The RAP proposed a TRRP Remedy Standard B response action for the site, including an on-site groundwater recovery system with six groundwater recovery wells operated to remediate the 1,2-DCA plume. The RAP proposed to i) establish a plume management zone (PMZ) for the entire dissolved plume, including the source area; ii) discontinue operation of the pump and treat system after source area 1,2-DCA concentrations declined to less than or equal to the highest off-site concentrations; and iii) initiate a MNA program for the PMZ. The source area remediation system has been in operation since 2001.

At the time the RAP was submitted in 2005, groundwater monitoring had suggested that concentrations of 1,2-DCA were stable and the plume terminated on the 13-Acre Tract owned by Rohm and Haas. However, subsequent investigations indicated that the 1,2-DCA plume extended beyond the southern boundary of the 13-Acre Tract and beneath the adjacent properties to the south. Additional investigations were conducted to delineate the extent of the 1,2-DCA plume, and this plume delineation effort was completed in late 2007. The 1,2-DCA plume terminates approximately 800 feet north of Rayford Road and approximately 1,350 feet southeast of the southern property

boundary of the 13-Acre Tract (see Figure 6). Available data, documented in previous reports, support the conclusion that 1,2-DCA in groundwater does not represent a risk to persons in the area either through ingestion, direct contact, or inhalation (GSI 2006 and GSI 2009).

In May 2006, Rohm and Haas installed a second groundwater pump-and-treat system, located on the 13-Acre Tract (see Figure 2), in order to prevent further downgradient migration of the 1,2-DCA plume and to capture the plume to the extent feasible from the downgradient property. The 13-Acre Tract system has remained in operation since startup, and groundwater elevation data collected from the system indicates that the capture zone is effectively preventing additional downgradient migration of the 1,2-DCA plume (see Figure 4).

Actions taken since 2005 have been performed in accordance with the provisions of the 2005 RAP. Although certain specific objectives, such as alternative monitoring points (AMPs) have not been met owing to the actual plume extent exceeding the known dimensions at the time of the RAP, the interim actions implemented have achieved the overall objective of ensuring that no human exposures have occurred in the downgradient plume areas and on preventing further downgradient migration. These actions have been implemented as expeditiously as possible given the uncertainties regarding extent of the plume and the complications associated with securing access to off-site properties so that investigations can proceed.

Rohm and Haas submitted a RAP in July 2010 establishing a final response action for the site that includes continuation of the current approach (i.e., groundwater extraction at the source and 13-acre tract), and the incorporation of enhanced anaerobic bioremediation (EAB) for portions of the downgradient plume (Parsons 2010). Currently, Rohm and Haas is responding to TCEQ comments regarding the 2010 RAP, but expects to begin implementation of the response action in 2011.

2.0 CORRECTIVE ACTION SYSTEMS

2.1 Source Area

Since March 2001 a pump-and-treat system has operated at the Charlie Burch Site at the downgradient (eastern) boundary of the site within the source area (see Figure 2 and Appendix A, Figure A.1). The system remediates on-site affected groundwater and minimizes further off-site migration of contaminated groundwater. The system includes five recovery wells (i.e., RW-CB-1 through 5) screened in Zone A which is encountered at approximately 20 to 65 ft bgs, and one recovery well (i.e., RW-CB-3D) in Zone B, which is encountered at approximately 70 to 100 ft bgs (see Figure 3). Recovered groundwater is treated by air stripping prior to discharge to a man-made storm water drainage channel.

Additional details regarding operation of the source area system are provided in the Source Area Groundwater Remediation System Operations Report (see Appendix A). Findings of the Groundwater Remediation System Operations Report for 2010 indicate

that the two objectives relevant to source area groundwater are being achieved by the source area groundwater pump-and-treat system, as follows:

- *Source Area Capture Zone:* The pumping wells continue to recover impacted groundwater, thereby creating a capture zone and preventing the further off-site migration of impacted groundwater.

- *Treatment of Recovered Groundwater:* The treatment system continues to treat recovered groundwater to meet discharge standards listed in Table A.1 in accordance with the discharge permit. Results of the bi-weekly system effluent sampling are provided in Table A.4.

Results of previous groundwater modeling indicate that the current pumping operations have stabilized the plume, and simulations showed that migration past its current extent is not expected. Sentinel wells installed downgradient of the known extent of the plume continue to show that 1,2-DCA remains below the PCL of 0.005 mg/L.

2.2 Downgradient Plume

To minimize further plume growth, a groundwater pump-and-treat system was installed in early 2006 in the downgradient portion of the plume on a 13-acre tract owned by Rohm and Haas. The system is located south of Richard Road and a Tennessee Gas Pipeline easement (see Figure 2). The system includes four wells (i.e., TRW-CB-1 through TRW-CB-4) screened in Zone A, because the downgradient plume is found only in Zone A. Recovered groundwater is treated by carbon adsorption prior to re-injection on site. Installation, maintenance, sampling, and reporting of this system have been provided under the authority of the Texas Underground Injection Control (UIC) program, because the remedy involves injecting treated clean water back into Zone A. Semi-annual status reports documenting the performance of the 13-Acre system are provided in Appendix B.

In 2010 the system removed and cleaned over 17.8 million gallons of affected groundwater from within the downgradient plume. No 1,2-DCA was detected in the water re-injected to the aquifer after treatment.

3.0 GROUNDWATER MONITORING PROGRAM

3.1 Overview of Monitoring Program

A site-wide groundwater monitoring event was conducted at the Charlie Burch site in October 2010. The event included the following activities:

- A site-wide water level survey.

- Collection of groundwater samples from monitoring wells, recovery wells, and water supply wells in Zone A, Zone B, and deeper strata.

- Analysis of groundwater samples for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and water quality parameters.

The monitoring program included measurement of static water levels from 83 wells and collection and analysis of samples from 78 wells (see Table 1).

3.2 Monitoring Procedures

3.2.1 Static Water Level Survey

On 18 October 2010 static water levels were measured to the nearest 0.01 foot using an electric water level indicator at all accessible wells except the Wert and Rummell water wells and the 13-acre system recovery wells. A summary of depth-to-water measurements and calculated groundwater elevations is provided on Table 2.

3.2.2 Well Purging and Sample Collection

Prior to sampling, monitoring wells were purged of a minimum of three casing volumes by pumping or bailing. Recovery wells in active service and the Wert and Rummell water wells were not purged prior to sampling. As indicated on Table 1, wells were sampled by one of the following methods:

- On-site and off-site shallow Zone A monitoring wells were purged and sampled using foot-valve pumps.

- Deep Zone A and Zone B wells were purged using a submersible centrifugal pump and sampled using a disposable bailer.

- Recovery wells were sampled by tapping into the recovered water stream at each well prior to treatment during normal pumping operations.

Field measurements of temperature, specific conductance, pH, dissolved oxygen (D.O.), oxidation reduction potential (ORP), and nephelometric turbidity were collected for each sample at the time of groundwater sample collection using properly calibrated instruments (see Table 3).

3.2.3 Laboratory Analysis

Samples were collected in method-specified containers with appropriate preservatives, retained on ice, and transported to Test America Laboratory, Inc., Houston, Texas, under chain-of-custody control within 24 hours of collection. As summarized on Table 1, groundwater samples were analyzed for specific parameters based on the location of each well (see Figures 2 through 7 of this report for well locations):

- *Source Area Monitoring Wells:* Samples from the 11 monitoring wells within the source area, including those on the Charlie Burch Site, were analyzed for 1,2-DCA by EPA Method 8260B.

- *Source Area Recovery Wells:* Samples from the six recovery wells within the source area on the Charlie Burch Site were analyzed for five indicator parameter COCs previously detected in groundwater beneath the source area, as follows: VOCs by EPA Method 8260B (i.e., benzene and 1,2-DCA) and SVOCs by EPA Method 8270C (i.e., aniline; o-cresol; and 2,4-dimethylphenol).

- *Off-Site Monitoring and Recovery Wells:* Samples from a total of 50 off-site monitoring wells located east and southeast of the Charlie Burch Site and four recovery wells located on the 13-acre property were analyzed for 1,2-DCA by EPA Method 8260B, the only COC previously detected in groundwater samples in off-site wells. Four wells (MW-CB-46D, MW-CB-46S, TRW-CB-1, and TRW-CB-2) were analyzed for the full-list of VOCs by EPA Method 8260B.

- *EAB and MaxOx Pilot Study Wells:* Samples from a total of nine pilot study injection and monitoring wells located within the EAB and MaxOx pilot study areas were analyzed for the full-list of VOCs by EPA Method 8260B.

- *Water Wells:* Two water wells located east of the Charlie Burch site (one located on the Rummell property and one located on the Wert property, both screened in Zone C, more than 200 ft below ground surface, see Figure 3) were analyzed for 1,2-DCA by EPA Method 8260B.

3.2.4 Quality Control

In order to evaluate data quality, quality control (QC) samples were collected and analyzed for 1,2-DCA by EPA Method 8260B, as follows:

- *Equipment Blanks:* Equipment blanks were collected for wells sampled using foot-valve pumps or submersible pumps. To provide an equipment blank for wells sampled with foot-valve pumps, a sample was collected by pouring de-ionized water through a new length of pump tubing. For samples collected using a submersible pump, an equipment blank was collected by running de-ionized water through the submersible pump following routine decontamination.

- *Duplicates:* Eight field duplicate pairs were collected to assess field precision.

- *Trip blanks:* One trip blank was analyzed for each day that samples were collected.

- *Control Sample:* A control sample containing a known concentration of 1,2-DCA was obtained from Environmental Resource Associates and submitted to the laboratory for analysis to assess possible analytical bias.

4.0 GROUNDWATER MONITORING RESULTS

Results of the 2010 site-wide groundwater monitoring event are discussed below. Analytical results for source area wells are provided on Table 4, and off-site wells are

provided on Tables 5 and 8. Historical summaries of analytical results for indicator parameters and for 1,2-DCA in source area and off-site wells are provided on Tables 6 and 7, respectively. Original laboratory reports are provided in Appendix C.

4.1 Local Groundwater Conditions

4.1.1 Site Stratigraphy

The shallow stratigraphy in the vicinity of the site is shown on the conceptual cross-section provided on Figure 3. A layer of silty clay, ranging in thickness from approximately 10 to 20 feet, is present at the surface throughout the area. Three underlying permeable zones have been identified: 1) a shallow zone, designated as Zone A, which occurs from approximately 20 to 65 ft below ground surface (bgs); 2) a lower shallow zone, designated as Zone B, which occurs from approximately 70 to 105 ft bgs; and 3) a deeper drinking water aquifer, designated as Zone C, which occurs from approximately 195 to 312 ft bgs. Less-permeable silt/clay and clay layers separate the three more permeable zones.

Near the site and for approximately 325 ft southeast of the site, the 1,2-DCA plume is present in Zone A and the upper portion of Zone B. Downgradient beyond approximately 325 feet southeast from the site, the 1,2-DCA plume is limited to Zone A only, in a band approximately 25 to 65 feet below ground surface. Contamination has not been found in the lower portion of Zone B, nor does it exist in Zone C. Approximately 90 to 100 feet of less permeable, fine-grained material separates the deeper drinking water aquifer from Zones A and B.

4.1.2 Zone A Groundwater

A potentiometric surface map for 18 October 2010 depicts lateral groundwater flow patterns within Zone A, a fine sand generally encountered between 20 and 65 ft bgs (see Figure 4). Under non-pumping conditions, groundwater within Zone A flows in a general south-southeast direction under a lateral hydraulic gradient that varies from the source area to the downgradient area of the plume. During the most recent static water level survey on 18 October 2010, all of the source area recovery wells and the four 13-Acre recovery wells (i.e., TRW-CB-1, -2, -3, and -4) were operational. In the vicinity of the source area and 13-Acre groundwater recovery systems, the potentiometric surface is noticeably influenced by the pumping wells (see Figure 4).

In the downgradient portion of the plume, the hydraulic gradient is approximately 0.0015 ft/ft, as measured between wells MW-CB-9AS (Forestry Drive south of Richard Road) and MW-CB-50S (central portion of the Rayford Business Campus tract, see Figure 4). Based on aquifer testing in wells south of Richard Road, the hydraulic conductivity of the shallow portion of Zone A is estimated to be 21 ft/day (GSI, 1999a). Based on a hydraulic gradient of 0.0015 ft/ft, an average hydraulic conductivity of 21 ft/day, and an assumed effective porosity of 0.30, the calculated lateral seepage velocity beneath the southern portion of the study area is approximately 38 ft/yr.

The value of 38 ft/yr is the current estimated seepage velocity, under the influence of the source area and 13-Acre tract groundwater remediation systems. The average overall seepage velocity during the period the plume has been migrating using its length (i.e., 4,000 ft to the southern property line of the Southwestern University Tract) and the approximate time since the release (i.e., 50 years), would be on the order of 80 ft/yr suggesting that pumping from the 13-acre tract recovery wells has an impact on the velocity of the plume.

4.1.3 Zone B Groundwater

The lateral groundwater flow pattern on 18 October 2010 for Zone B, a groundwater-bearing unit encountered from 70 to 100 ft bgs, is shown on Figure 5. Under non-pumping conditions groundwater within Zone B flows in a general southeast direction under an approximate lateral hydraulic gradient of 0.0021 ft/ft as measured between wells MW-CB-5B and MW-CB-6BS. Based on aquifer testing in Zone B wells within and adjacent to the source area, the hydraulic conductivity of Zone B is estimated to be 6 ft/day (GSI 1999a). Based on a hydraulic gradient of 0.0021 ft/ft, an average hydraulic conductivity of 6 ft/day, and an assumed effective porosity of 0.30, the calculated lateral seepage velocity beneath the southern portion of the source area is approximately 15 ft/yr. As shown on Figure 5, groundwater is contained under pumping conditions, as evidenced by the static water level elevations in upgradient (MW-CB-5B = 97.40 ft msl) and downgradient (MW-CB-6B = 96.86 ft msl) wells versus RW-CB-3D (96.43 ft msl).

4.2 Groundwater Quality

Consistent with the findings from previous years, results from the 2010 site-wide groundwater monitoring event confirm the presence of a 1,2-DCA plume in Zones A and B beneath the Charlie Burch site. The 1,2-DCA plume in Zone A extends approximately 4,000 feet in a southeasterly direction from the source area to the northwest property line of the Rayford Business Campus Tract (see Figure 6). In Zone B, the 1,2-DCA plume extends approximately 150 ft southeast of the source area (see Figure 7). A summary is provided below of the significant points regarding the analytical results obtained from the 2010 groundwater monitoring event. For purpose of the following discussion, wells located upgradient of or on the Charlie Burch Site proper (Figure 2) are designated “Source Area Wells,” and wells downgradient of the site boundary are designated “Off-site Wells.”

4.2.1 Source Area Wells

- *Zone A:* Samples were collected from 12 source area monitoring and recovery wells. 1,2-DCA was detected in seven wells, with exceedences of the PCL (0.005 mg/L) in five wells. Detected concentrations of 1,2-DCA ranged from 0.0018 mg/L at monitoring well MW-CB-4 to 0.087 mg/L at recovery well RW-CB-4 (see Table 4 and Figure 6). The levels identified generally were lower than or consistent with those found in previous years. The five recovery well samples were tested for the other source area indicator parameters (i.e., aniline, benzene, o-cresol, and 2,4-dimethylphenol). Of these, only aniline and benzene were detected, neither above its PCL. Aniline was detected in one of the five recovery

wells, and benzene was detected in three of the five wells. The PCLs for aniline (0.16 mg/L) and benzene (0.005 mg/L) were not exceeded in any well. Aniline was detected at a concentration of 0.00064 J mg/L (J flag defined as a concentration detected between the reporting limit and the method detection limit) from RW-CB-4. Detected concentrations of benzene ranged from 0.00022 J mg/L at RW-CB-4 to 0.00036 J mg/L at RW-CB-5 (see Table 4). No other COC was detected above its respective detection limit. Historical results of groundwater testing in on-site wells are provided on Table 6.

- *Zone B:* Samples were collected from five Zone B source area wells. 1,2-DCA was detected in three wells, and concentrations ranged from 0.020 mg/L at MW-CB-1BS to 0.050 mg/L at MW-CB-1B (see Table 4 and Figure 7). The groundwater sample for RW-CB-3D was tested for the other source area indicator parameters (i.e., aniline, benzene, o-cresol, and 2,4-dimethylphenol). No COC other than 1,2-DCA was detected above its respective detection limit in the RW-CB-3D sample (see Table 4).

4.2.2 Off-site Wells

- *Zone A:* 47 off-site Zone A wells were sampled for 1,2-DCA. Samples from 21 wells did not identify 1,2-DCA above detection levels. Detectable concentrations of 1,2-DCA were recorded in samples from the remaining 26 off-site wells, of which 11 wells had concentrations below the PCL. Detected concentrations ranged from less than the PCL of 0.005 mg/L at recovery well TRW-CB-3 (0.00088 J mg/L) to a maximum of 0.071 mg/L at well MW-CB-45 (see Table 5 and Figure 6). Historical results of groundwater testing in off-site wells are provided on Table 7. MW-CB-46D, MW-CB-46S, TRW-CB-1, and TRW-CB-2 were analyzed for the full list of VOCs by EPA Method 8260 (see Table 8). Other than 1,2-DCA, the only other constituent detected above sample quantitation limits was carbon disulfide at TRW-CB-1 (0.00023 J) and TRW-CB-2 (0.00016 J). Both carbon disulfide concentrations were well below the PCL of 2.4 mg/L.

  Note that two monitoring wells, MW-CB-40 and MW-CB-45, were re-sampled on 1 December 2010 due to inconsistent 1,2-DCA concentrations compared to historical concentrations in those monitoring wells. Historically, 1,2-DCA concentrations at MW-CB-40 were below the PCL of 0.005 mg/L; however, the October 2010 concentration was 0.006 mg/L. Re-sampling on 1 December 2010 confirmed a 1,2-DCA concentration of 0.00608 mg/L. For MW-CB-45, the 1,2-DCA concentration in October 2010 was 0.071 mg/L, compared to the previous high concentration of 0.011 mg/L measured during the October 2008 sampling event. Re-sampling on 1 December 2010 measured a 1,2-DCA concentration of 0.0495 mg/L.

  While results at these two wells differ from historical concentrations, the overall groundwater plume remains delineated. MW-CB-45 is located within the inner portion of the 1,2-DCA plume, and MW-CB-40 is located along the western boundary of the plume. Wells located hydraulically downgradient of both MW-CB-40 and MW-CB-45 did not have detectable concentrations (<0.00013 mg/L)

of 1,2-DCA (see Figure 4). Rohm and Haas will continue to monitor the groundwater quality at these wells on an annual basis.

- *Zone B:* Three off-site Zone B wells were sampled for 1,2-DCA. 1,2-DCA was detected in one well, MW-CB-6BS, at a concentration (0.00011 mg/L) below the PCL (see Table 5 and Figure 7).

- *Deeper Wells:* The presence of 1,2-DCA was not detected in samples collected from the Rummell and Wert water wells, both of which are located downgradient of the source area. The Rummell well is screened from 227 to 242 ft bgs, and the Wert well is screened from 240 to 250 ft bgs (see Table 5).

4.2.3 EAB and MaxOx Pilot Study Wells

- *EAB Pilot Study Wells:* Six EAB pilot study wells were sampled for the full list of VOCs by EPA Method 8260B. 1,2-DCA was detected in all six wells with concentrations ranging from 0.00069 J mg/L at well EAB-INJ-01 to 0.15 mg/L at well EAB-MW-03 (see Table 8). In addition, various ketones and alcohols were detected above sample quantitation limits. The ketones and alcohols are a result of the natural microbial fermentation of organic substrate that was injected during the EAB pilot study.

- *MaxOx Pilot Study Wells:* Three MaxOx pilot study wells were sampled for the full list of VOCs by EPA Method 8260B. 1,2-DCA was detected in all three wells with concentrations ranging from 0.012 mg/L at well OBS-1 to 0.030 mg/L at well OBS-2 (see Table 8). As shown on Table 8, several other chlorinated VOCs were also detected above sample quantitation limits.

4.3 Results of QC Samples

Results from the analysis of QC samples demonstrated that data acquired during the 2010 site-wide groundwater monitoring event was suitable for the intended purpose of evaluating plume concentrations:

- *Blanks:* Results for all equipment blanks, field blanks, and trip blanks were less than sample quantitation limits (SQLs; see Table 4) indicating that collection and handling procedures introduced no sources of contamination to the samples.

  Note: The SQL is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero (adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method).

- *Field Duplicates:* Targets for precision of duplicate samples are based on the value of the reported concentration with respect to the method quantitation limit (MQL, i.e., the concentration of the lowest calibration standard). Precision targets are expressed in terms of relative percent difference (RPD) which is equal to the absolute value of the difference of two duplicate results divided by

their average. For analytical results at least five times the MQL, the precision target is a RPD of 20%. For analytical results less than five times the MQL, the precision target is an absolute difference between duplicates less than or equal to the MQL. The MQL for 1,2-DCA, which was the only COC detected in any duplicate samples, is 0.005 mg/L. Note that, in accordance with general practice for reporting data under the TRRP, the SQL of 0.00013 mg/L is represented on the data tables, rather than the MQL. Estimated concentrations (J-flag values) for COCs detected below the SQL are also reported, if present. Results for duplicate samples are summarized below:

Sample Identification	1,2-DCA Conc. (mg/L)		Results Compared to MQL (0.005 mg/L)	Precision Target	RPD or Absolute Difference	Precision Target Met?
	Sample	Duplicate				
MW-CB-1A	0.034	0.034	>5X MQL	≤20%	RPD = 0%	Yes
RW-CB-2	0.019	0.019	<5X MQL	≤0.005 mg/L	Diff. = 0 mg/L	Yes
MW-CB-12AS	0.026	0.027	>5X MQL	≤20%	RPD = 4%	Yes
MW-CB-15AS	<0.00013	<0.00013	<5X MQL	≤0.005 mg/L	Diff. = 0 mg/L	Yes
MW-CB-25A	0.017	0.017	<5X MQL	≤0.005 mg/L	Diff. = 0 mg/L	Yes
MW-CB-33A	<0.00013	<0.00013	<5X MQL	≤0.005 mg/L	Diff. = 0 mg/L	Yes
MW-CB-38	<0.00013	<0.00013	<5X MQL	≤0.005 mg/L	Diff. = 0 mg/L	Yes
MW-CB-47S	0.002	0.0021	<5X MQL	≤0.005 mg/L	Diff. = 0.0001 mg/L	Yes

Acceptance criteria were achieved for all duplicate samples.

- *Control Sample:* The control sample result of 0.0980 mg/L represents a recovery of 101% of the Control Standard Certified Value of 0.097 mg/L provided by Environmental Resource Associates, the control sample supplier. A recovery of 101% is within the generally accepted range of recoveries of 80% to 120% for volatile organics analyses.

5.0 PLANNED ACTIVITIES FOR 2011

Upcoming activities planned for calendar year 2011 for the Charlie Burch groundwater response action are as follows:

- *System Operation and Maintenance:* The groundwater remediation systems in the source area and on the 13-acre tract will continue to be operated and maintained.

- *Annual Groundwater Monitoring:* Groundwater samples will be collected and analyzed from source area and off-site monitoring wells during October 2011.

- *Implementation of the 2010 RAP:* Upon approval of the 2010 RAP by the TCEQ, Rohm and Haas will commence implementation of response actions as outlined in the 2010 RAP.

6.0 REFERENCES

GSI 1999a, “Results of Slug Tests and Constant-Rate Pumping Test, Charlie Burch Site, Spring, Texas, TCEQ VCP Site No. 421”, Groundwater Services, Inc., Houston, Texas, 26 May 1999.

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2010 GROUNDWATER MONITORING REPORT

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

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TABLE 1
2010 SITE-WIDE GROUNDWATER SAMPLING PROGRAM
Rohm and Haas Texas Inc., Charlie Burch Site, Spring, Texas, Voluntary Cleanup Program No. 421

Well Type	Wells	Sampling Method	Analytes
Source Area Wells			
Zone A Monitoring Wells and Piezometers	MW-CB-1A, MW-CB-3, MW-CB-4, MW-CB-5A, OW-1, OW-2, TP-15	• Purge and sample using foot-valve pump and dedicated tubing.	• 1,2-DCA
Zone B Monitoring Wells	MW-CB-1B, MW-CB-1BS, MW-CB-5B, MW-CB-7B	• Purge using submersible pump. • Sample with disposable bailer.	
Recovery Wells	RW-CB-1, RW-CB-2, RW-CB-3, RW-CB-3D, RW-CB-4, RW-CB-5	• If pump operational, sample at well head valve. Otherwise purge and sample using foot-valve and pump.	• VOCs: benzene; 1,2-DCA • SVOCs: aniline; o-Cresol; 2,4-dimethylphenol
Off-Site Wells			
Zone A, AS, and AD Monitoring Wells and Piezometers	MW-CB-2A, MW-CB-8AD, MW-CB-9AS, MW-CB-10AD, MW-CB-11AS, MW-CB-12AS, MW-CB-13AS, MW-CB-14AS, MW-CB-15AS, MW-CB-16AS, MW-CB-19AS, MW-CB-24AS, MW-CB-25A, MW-CB-26A, MW-CB-27A, MW-CB-28A, MW-CB-29A, MW-CB-30A, MW-CB-31A, MW-CB-33A, MW-CB-34A, MW-CB-35A, MW-CB-36, MW-CB-37D, MW-CB-37S, MW-CB-38, MW-CB-39, MW-CB-40, MW-CB-41D, MW-CB-41S, MW-CB-42, MW-CB-43, MW-CB-44, MW-CB-45, MW-CB-46D*, MW-CB-46S*, MW-CB-47D, MW-CB-47S, MW-CB-48, MW-CB-49, MW-CB-50D, MW-CB-50S, TP-21, TRW-CB-1*, TRW-CB-2*, TRW-CB-3, TRW-CB-4	• Purge and sample using foot-valve or submersible pump and dedicated tubing	• 1,2-DCA
Zone B Monitoring Wells	MW-CB-2B, MW-CB-6B, MW-CB-6BS	• Purge using submersible pump. • Sample with disposable bailer.	• 1,2-DCA
EAB Pilot Study Wells	EAB-INJ-01, EAB-INJ-02, EAB-INJ-03, EAB-MW-01, EAB-MW-02, EAB-MW-03	• Purge and sample using foot-valve pump and dedicated tubing.	• VOCs: Full list of 8260B
MaxOx Pilot Study Wells	INJ-3, OBS-1, OBS-2	• Purge and sample using foot-valve pump and dedicated tubing.	• VOCs: Full list of 8260B

GSI ENVIRONMENTAL

TABLE 1
2010 SITE-WIDE GROUNDWATER SAMPLING PROGRAM
Rohm and Haas Texas Inc., Charlie Burch Site, Spring, Texas, Voluntary Cleanup Program No. 421

Well Type	Wells	Sampling Method	Analytes
Water Wells			
Water Well	Water Well of Mr. Phillip Rummell Water Well of Mr. Warren Wert	• Sample from well head.	• 1,2-DCA
Static Water Level Only			
Zone A, AS, or AD Monitoring Wells	MW-CB-9AD MW-CB-11AD MW-CB-12AD MW-CB-17AS MW-CB-18AS MW-CB-20AS MW-CB-21AS MW-CB-22AS MW-CB-23AS MW-CB-32A PZ-1 PZ-2 PZ-3	• Static water level measurement only.	• None

Notes:

1. 1,2-DCA = 1,2-Dichloroethane
2. VOCs = Volatile Organic Compounds
3. SVOCs = Semi-Volatile Organic Compounds
4. * = Groundwater samples will be analyzed for the full list of VOCs using USEPA Method 8260B.

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TABLE 2
WELL AND PIEZOMETER CONSTRUCTION
SPECIFICATIONS AND GROUNDWATER ELEVATIONS

Date Measured: 18 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

WELL NUMBER	DATE INSTALLED	TOTAL BORING DEPTH (ft bgs)	SCREENED DEPTH INTERVAL (ft bgs)	GROUND SURFACE ELEVATION (ft msl)	TOP OF CASING ELEVATION (ft msl)	DEPTH TO WATER (ft toc)	STATIC WATER LEVEL ELEVATION (ft msl)
Zone A Wells							
MW-CB-1A	9/3-4/97	62.0	51.5-61.0	115.7	117.64	27.67	89.97
MW-CB-2A	8/28/1997	63.5	52.5-62.0	116.2	118.62	20.72	97.90
MW-CB-3	8/20-22/97	69.0	58.5-68.0	116.9	118.46	20.35	98.11
MW-CB-4	8/25-27/97	68.6	58.5-68.0	117.5	119.48	27.74	91.74
MW-CB-5A	5/4-5/98	69.0	58.2-67.7	120.6	122.56	26.30	96.26
TP-15	5/14/1998	40.6	35.2-40.2	117.06	116.55	16.97	99.58
TP-21	8/19/1998	50.0	39.7-49.2	NM	118.00	22.45	95.55
MW-CB-8AD	11/18/1998	50.0	40-50	118.6	118.28	21.89	96.39
MW-CB-9AD	11/12/1998	60.0	40-60	117.4	117.05	20.46	96.59
MW-CB-9AS	12/16/1998	40.0	20-40	117.5	117.21	20.55	96.66
MW-CB-10AD	11/17/1998	60.0	40-60	117.1	116.75	20.75	96.00
MW-CB-11AD	11/11/1998	70.0	45-65	117.5	117.18	21.29	95.89
MW-CB-11AS	11/10/1998	45.0	25-45	117.5	117.15	20.78	96.37
MW-CB-12AD	11/17/1998	60.0	38-58	116.9	116.64	20.55	96.09
MW-CB-12AS	12/16/1998	40.0	19.5-39.5	116.9	116.55	20.44	96.11
MW-CB-13AS	12/23/1998	40.0	17.7-37.8	118.9	118.63	22.51	96.12
MW-CB-14AS	12/28/1998	40.0	19.0-38.9	119.2	118.93	23.90	95.03
MW-CB-15AS	12/28/1998	40.0	19.8-39.7	117.3	117.04	21.70	95.34
MW-CB-16AS	12/17/1998	40.0	19.3-39.3	118.3	117.95	21.50	96.45
MW-CB-17AS	2/9/1999	40.0	15-35	116.6	116.30	20.21	96.09
MW-CB-18AS	2/19/1999	40.0	19.5-39.5	118.2	117.88	21.95	95.93
MW-CB-19AS	2/22/1999	39.0	18.5-38.5	120.3	120.04	23.98	96.06
MW-CB-20AS	2/17/1999	40.0	19.5-39.5	121.2	120.88	21.51	99.37
MW-CB-21AS	2/18/1999	40.0	19-39	118.7	118.37	22.95	95.42
MW-CB-22AS	2/19/1999	40.0	19.5-39.5	119.3	119.01	24.38	94.63
MW-CB-23AS	2/18/1999	40.0	18.5-38.5	118.7	118.39	23.58	94.81
MW-CB-24AS	3/5/1999	32.0	19.5-29.5	116.5	116.16	20.07	96.09
MW-CB-25A	10/28/2003	42.0	20-40	116.17	115.74	19.73	96.01
MW-CB-26A	10/30/2003	42.0	20-40	115.06	114.65	17.17	97.48
MW-CB-27A	10/29/2003	42.0	20-40	116.61	116.36	18.95	97.41
MW-CB-28A	10/31/2003	42.0	20-40	118.69	118.36	21.71	96.65
MW-CB-29A	10/22/2003	40.0	18-38	119.79	122.39	27.16	95.23
MW-CB-30A	10/21/2003	40.0	18-38	119.36	122.13	26.70	95.43
MW-CB-31A	10/21/2003	40.0	18.5-38.5	118.18	120.91	27.20	93.71
MW-CB-32A	10/22/2003	40.0	17-37	118.79	121.65	25.86	95.79
MW-CB-33A	4/7/2005	40.0	18-38	120.4	122.80	28.58	94.22
MW-CB-34A	4/7/2005	40.0	19-39	119.5	122.09	27.86	94.23
MW-CB-35A	4/8/2005	40.0	19-39	118.9	118.39	23.31	95.08
MW-CB-36	10/2/2006	51.0	40-50	118.83	121.67	28.58	93.09
MW-CB-37D	10/12/2006	70.0	58-68	118.47	121.55	27.97	93.58
MW-CB-37S	9/28/2006	51.0	40-50	118.53	121.44	27.45	93.99
MW-CB-38	9/29/2006	51.0	40-50	118.51	121.29	26.37	94.92
MW-CB-39	10/5/2006	51.0	40-50	116.20	119.01	24.95	94.06
MW-CB-40	10/3/2006	51.0	40-50	119.99	122.54	28.29	94.25
MW-CB-41D	10/9/2006	71.0	59-69	119.34	122.43	28.86	93.57
MW-CB-41S	10/4/2006	51.0	40-50	118.98	121.70	27.49	94.21
MW-CB-42	10/3/2006	51.0	40-50	117.32	120.15	26.41	93.74

1. Monitoring well and temporary piezometer locations shown on Figure 2.
2. A and AS = Zone A <40 ft depth. AD = Zone A > 40 ft depth. BS = Zone B shallow < 85 ft depth, B = > 85 ft depth.
3. bgs = Below ground surface
   msl = Mean sea level.
   NM = Not measured
   P&A = Plugged and abandoned.
   toc = Top of casing.

GSI ENVIRONMENTAL

TABLE 2
WELL AND PIEZOMETER CONSTRUCTION
SPECIFICATIONS AND GROUNDWATER ELEVATIONS

Date Measured: 18 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

WELL NUMBER	DATE INSTALLED	TOTAL BORING DEPTH (ft bgs)	SCREENED DEPTH INTERVAL (ft bgs)	GROUND SURFACE ELEVATION (ft msl)	TOP OF CASING ELEVATION (ft msl)	DEPTH TO WATER (ft toc)	STATIC WATER LEVEL ELEVATION (ft msl)
Zone A Wells (continued)							
MW-CB-43	5/11/2007	50.0	40-50	118.3	120.86	27.21	93.65
MW-CB-44	5/12/2007	50.0	40-50	118.6	120.96	27.18	93.78
MW-CB-45	5/12/2007	50.0	40-50	118.2	120.89	27.11	93.78
MW-CB-46D	5/10/2007	80.0	68-78	118.1	120.24	27.11	93.13
MW-CB-46S	5/11/2007	50.0	40-50	118.0	120.50	27.05	93.45
MW-CB-47D	2/20/2008	90.0	80-90	118.71	118.57	25.69	92.88
MW-CB-47S	2/21/2008	50.0	40-50	118.80	119.06	25.57	93.49
MW-CB-48	2/19/2008	50.0	40-50	118.27	118.31	24.65	93.66
MW-CB-49	2/19/2008	50.0	40-50	119.09	119.24	28.11	91.13
MW-CB-50D	2/21/2008	78.0	68-78	118.69	118.90	26.19	92.71
MW-CB-50S	2/22/2008	50.0	45-55	118.61	118.79	26.02	92.77
OW-1	2/22/2000	32.0	17-31.6	114.98	117.45	17.68	99.77
OW-2	2/22/2000	37.0	21.9-36.5	119.16	121.54	22.18	99.36
PZ-1	5/21/2008	40.0	30-40	122.19	125.49	28.45	97.04
PZ-2	2/18/2009	45.0	35-45	115.84	118.52	21.22	97.30
PZ-3	2/18/2009	44.0	34-44	115.86	118.97	29.81	89.16
MaxOx Pilot Study Wells							
INJ-3	6/19/2008	50.0	40-42	120.99	124.16	27.29	96.87
OBS-1	6/20/2008	50.0	25-50	120.91	123.36	26.54	96.82
OBS-2	6/19/2008	50.0	40-50	120.51	122.81	26.18	96.63
EAB Pilot Study Wells							
EAB-INJ-01	4/7/2008	40.68	30.68-40.68	120.76	123.86	25.50	98.36
EAB-INJ-02	4/9/2008	40.81	30.81-40.81	121.12	124.27	25.98	98.29
EAB-INJ-03	4/8/2008	40.47	30.47-40.47	120.84	124.84	NM	NM
EAB-MW-01	4/7/2008	40.98	30.98-40.98	121.11	125.09	NM	NM
EAB-MW-02	4/9/2008	40.70	30.70-40.70	121.12	124.66	26.45	98.21
EAB-MW-03	4/8/2008	40.00	30-40	120.96	124.66	26.35	98.31
Zone B Wells							
MW-CB-1B	9/2-3/97	104.0	90.5-100	115.8	117.64	21.38	96.26
MW-CB-1BS	11/24/2003	85.0	70.0-85.0	115.49	118.85	22.33	96.52
MW-CB-2B	8/29/1997	102.0	89.5-99.0	115.3	118.13	21.70	96.43
MW-CB-5B	5/5-6/98	104.0	92.5-102.0	120.6	122.59	25.19	97.40
MW-CB-6BS	11/11/2003	85.0	70.0-85.0	116.38	116.22	19.46	96.76
MW-CB-6B	5/11-12/98	102.0	89.5-99.0	114.8	117.22	20.36	96.86
MW-CB-7B	11/18/2003	101.5	85.0-100.0	117.07	120.07	23.25	96.82
Source Zone Recovery Wells							
RW-CB-1	2/28/2000	63.5	33-62.6	116.96	118.89	23.05	95.84
RW-CB-2	2/29/2000	68.0	36.65-66.6	116.88	118.66	50.35	68.31
RW-CB-3	3/2/2000	69.0	38.3-67.9	115.96	118.14	41.55	76.59
RW-CB-3D	3/3/2000	102.0	71.4-101.0	116.31	118.28	21.85	96.43
RW-CB-4	3/4/2000	68.0	37.5-67.1	116.74	118.30	54.10	64.20
RW-CB-5	3/1/2000	67.0	36.3-65.9	116.70	118.58	23.40	95.18

1. Monitoring well and temporary piezometer locations shown on Figure 2.
2. A and AS = Zone A <40 ft depth. AD = Zone A > 40 ft depth. BS = Zone B shallow < 85 ft depth, B = > 85 ft depth.
3. bgs = Below ground surface
   msl = Mean sea level.
   NM = Not measured
   P&A = Plugged and abandoned.
   toc = Top of casing.

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TABLE 3
RESULTS OF GROUNDWATER TESTING: FIELD PARAMETERS
Sampling Period: 19 to 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

Well No.	Date	Temperature (°F)	Specific Conductance (mS/cm)	pH	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
Zone A - Source Area Wells							
MW-CB-1A	10/21/2010	71.5	0.783	5.83	4.69	162.5	370
MW-CB-3	10/21/2010	71.5	0.500	6.18	3.86	118.1	866
MW-CB-4	10/22/2010	71.9	0.986	5.29	4.11	126.0	684
MW-CB-5A	10/22/2010	70.3	0.546	6.04	5.92	187.0	152
OW-1	10/21/2010	76.3	1.812	6.05	4.24	205.5	547
OW-2	10/21/2010	74.8	2.296	5.95	3.40	31.9	175
RW-CB-1	10/22/2010	69.3	1.516	6.03	9.90*	43.5	38.5
RW-CB-2	10/22/2010	70.0	1.303	5.84	6.06	71.8	42.6
RW-CB-3	10/22/2010	70.5	1.349	5.87	5.65	47.2	286
RW-CB-4	10/22/2010	73.3	1.698	5.77	4.54	73.6	266
RW-CB-5	10/22/2010	71.0	1.611	5.95	8.89*	56.1	51.6
TP-15	10/21/2010	73.9	0.729	6.02	2.90	162.9	411
Zone B - Source Area Wells							
MW-CB-1B	10/21/2010	73.1	0.941	5.67	4.03	176.6	91
MW-CB-1BS	10/21/2010	72.0	0.713	5.99	4.70	336.0	50.2
MW-CB-5B	10/22/2010	69.7	0.562	5.72	5.95	245.5	2.36
MW-CB-7B	10/22/2010	69.7	0.625	5.88	5.43	244.9	2.62
RW-CB-3D	10/22/2010	71.8	0.617	6.53	5.73	71.0	25.1
Zone A Off-Site Wells							
MW-CB-2A	10/21/2010	70.7	0.885	5.45	4.51	146.7	>1000
MW-CB-8AD	10/20/2010	74.1	0.491	5.45	8.00	424.2	>1000
MW-CB-9AS	10/20/2010	73.9	2.665	5.20	5.18	111.9	364
MW-CB-10AD	10/20/2010	73.2	0.601	5.50	3.86	390.1	670
MW-CB-11AS	10/20/2010	76.9	2.142	6.70	3.74	92.7	925
MW-CB-12AS	10/20/2010	76.4	2.800	5.67	2.91	330.5	411
MW-CB-13AS	10/20/2010	72.1	6.369	7.18	2.45	-191.1	>1000
MW-CB-14AS	10/20/2010	71.4	1.426	6.53	4.91	260.2	216
MW-CB-15AS	10/20/2010	73.4	1.453	6.15	3.85	289.6	556
MW-CB-16AS	10/20/2010	72.5	1.320	5.07	3.81	294.8	296
MW-CB-19AS	10/20/2010	71.1	0.596	5.90	4.94	204.7	315
MW-CB-24AS	10/20/2010	77.0	1.082	6.64	4.25	154.6	>1000
MW-CB-25A	10/21/2010	71.4	4.707	5.58	4.17	63.3	164
MW-CB-26A	10/21/2010	69.7	0.731	6.01	4.47	126.8	>1000
MW-CB-27A	10/21/2010	71.1	4.172	5.39	3.67	74.9	175
MW-CB-28A	10/21/2010	74.7	3.203	6.00	4.54	150.1	>1000
MW-CB-29A	10/20/2010	68.6	1.067	5.80	3.78	301.9	202
MW-CB-30A	10/20/2010	71.6	0.913	5.87	5.99	208.2	>1000
MW-CB-31A	10/20/2010	69.0	1.180	5.76	5.44	250.5	593
MW-CB-33A	10/20/2010	71.3	0.600	5.94	3.17	236.7	491
MW-CB-34A	10/20/2010	67.6	2.416	5.60	4.75	396.1	732
MW-CB-35A	10/20/2010	71.6	1.988	5.76	2.29	437.2	>1000
MW-CB-36	10/19/2010	67.9	0.812	5.57	4.63	327.9	803

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Well number subscripts generally refer to screen depths as follows:
   A and AS: Zone A wells with screen < 40 ft depth
   AD: Zone A wells with screen > 40 ft depth
   BS: Zone B wells with screen < 85 ft depth.
3. > = Reading exceeded maximum range of instrument indicated.
   NM = Parameter not measured. — = Information not available.
4. Dissolved oxygen exceeds the saturation concentration in water at the recorded temperature. Field parameter meter was recalibrated; however, the reading still exceede the saturation concentration.

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TABLE 3
RESULTS OF GROUNDWATER TESTING: FIELD PARAMETERS
Sampling Period: 19 to 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

Well No.	Date	Temperature (°F)	Specific Conductance (mS/cm)	pH	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
Zone A Off-Site Wells (continued)							
MW-CB-37S	10/20/2010	67.7	1.445	6.50	3.54	85.8	123
MW-CB-37D	10/20/2010	68.2	0.537	5.59	5.87	180.5	332
MW-CB-38	10/19/2010	71.7	1.194	5.99	5.39	246.4	339
MW-CB-39	10/19/2010	70.7	1.316	5.54	4.44	248.4	>1000
MW-CB-40	10/19/2010	71.8	2.034	5.43	3.49	241.6	>1000
MW-CB-41S	10/19/2010	68.4	1.403	5.44	3.15	224.6	0.5
MW-CB-41D	10/19/2010	71.7	0.579	5.85	3.76	117.4	45.8
MW-CB-42	10/19/2010	70.6	1.229	5.08	4.02	400.3	643
MW-CB-43	10/19/2010	68.9	1.244	4.97	3.75	426.6	132
MW-CB-44	10/19/2010	70.5	1.645	5.48	3.86	245.1	139
MW-CB-45	10/19/2010	70.4	1.895	5.39	3.89	228.2	263
MW-CB-46S	10/19/2010	68.7	1.387	5.22	3.56	441.6	477
MW-CB-46D	10/19/2010	67.8	0.923	5.03	3.17	372.8	7.47
MW-CB-47D	10/19/2010	70.1	0.229	5.89	3.01	86.0	4.77
MW-CB-47S	10/19/2010	71.0	1.779	5.41	5.01	208.4	41
MW-CB-48	10/19/2010	68.3	1.236	5.41	4.44	264.2	40.0
MW-CB-49	10/19/2010	70.5	0.569	5.59	5.15	147.2	39.4
MW-CB-50D	10/19/2010	68.7	1.176	5.28	4.18	265.2	9.89
MW-CB-50S	10/19/2010	68.6	0.852	5.46	4.51	192.2	241
TP-21	10/20/2010	73.2	0.693	5.47	2.93	149.2	420
TRW-CB-1	10/20/2010	69.7	0.996	5.85	4.67	117.0	6.7
TRW-CB-2	10/20/2010	68.7	1.239	5.57	4.23	174.2	6.7
TRW-CB-3	10/20/2010	68.3	1.138	5.64	4.63	214.5	1.0
TRW-CB-4	10/20/2010	67.6	1.077	5.64	6.59	251.2	0.4
MaxOx Pilot Study Wells							
INJ-3	10/19/2010	69.1	2.766	2.78	27.80	563.8	2.87
OBS-1	10/19/2010	67.5	1.419	5.52	7.22	438.3	43.7
OBS-2	10/19/2010	67.9	1.884	4.89	19.58	424.9	9.22
EAB Pilot Study Wells							
EAB-INJ-01	10/21/2010	71.8	5.460	6.43	3.46	-106.0	> 1000
EAB-INJ-02	10/21/2010	75.2	12.670	7.03	2.09	-171.5	> 1000
EAB-INJ-03	10/21/2010	76.8	35.230	7.00	1.10	-35.5	> 1000
EAB-MW-01	10/21/2010	72.4	3.262	6.27	3.41	-69.0	> 1000
EAB-MW-02	10/21/2010	69.9	1.649	6.49	2.75	-64.0	> 1000
EAB-MW-03	10/21/2010	69.2	1.888	5.89	4.10	20.3	233.0
Zone B Off-Site Wells							
MW-CB-2B	10/21/2010	71.3	0.417	5.66	4.03	185.9	37.3
MW-CB-6B	10/21/2010	69.4	0.397	6.66	3.76	215.1	10.8
MW-CB-6BS	10/21/2010	71.0	0.498	6.13	3.20	143.5	37.0
Water Supply Wells							
Wert Water Well	10/21/2010	76.9	0.608	6.81	7.61	-1.1	7.0
Rummel Water Well	10/21/2010	72.9	0.594	8.50	7.98	87.5	33.5

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Well number subscripts refer to screen depths as follows:
   A and AS: Zone A wells with screen < 40 ft depth
   AD: Zone A wells with screen > 40 ft depth
   BS: Zone B wells with screen < 85 ft depth.
3. > = Reading exceeded maximum range of instrument indicated.
   NM = Parameter not measured. — = Information not available.
4. * = Dissolved oxygen exceeded the saturation concentration in water at the recorded temperature. Field parameter meter was recalibrated; however, the reading still exceede the saturation concentration.

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TABLE 4
RESULTS OF GROUNDWATER TESTING:
INDICATOR PARAMETERS FOR SOURCE AREA WELLS

Sampling Period: 19 October to 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	Zone A Source Wells							
SAMPLE LOCATION	MW-CB-1A	MW-CB-1A DUP	MW-CB-3	MW-CB-4	MW-CB-5A	OW-1	OW-2	TP-15
DATE SAMPLED	10/21/2010	10/21/2010	10/21/2010	10/22/2010	10/22/2010	10/21/2010	10/21/2010	10/21/2010
DATE ANALYZED	10/27/2010	10/27/2010	10/26/2010	10/22/2010	10/26/2010	10/27/2010	10/27/2010	10/27/2010
SCREENED INTERVAL (ft bgs)	51.5-61.0	51.5-61.0	58.5-68.0	58.5-68.0	58.2-67.7	17-31.6	21.9-36.5	35.2-40.2
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds								
Benzene	—	—	—	—	—	—	—	—
Dichloroethane, 1,2-	**0.034**	**0.034**	< 0.00013	**0.0018**	< 0.00013	< 0.00013	**0.0025**	< 0.00013
Semivolatile Organic Compounds								
Aniline	—	—	—	—	—	—	—	—
Cresol, o-	—	—	—	—	—	—	—	—
Dimethylphenol, 2,4-	—	—	—	—	—	—	—	—

	Zone A Source Wells					
SAMPLE LOCATION	RW-CB-1	RW-CB-2	RW-CB-2 DUP	RW-CB-3	RW-CB-4	RW-CB-5
DATE SAMPLED	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010
DATE ANALYZED	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010
SCREENED INTERVAL (ft bgs)	33-62.6	36.65-66.6	36.65-66.6	38.3-67.9	37.5-67.1	36.3-65.9
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds						
Benzene	< 0.00013	**0.00023 J**	**0.00024 J**	< 0.00013	**0.00022 J**	**0.00036 J**
Dichloroethane, 1,2-	< 0.00013	**0.019**	**0.019**	**0.080**	**0.087**	**0.041**
Semivolatile Organic Compounds						
Aniline	< 0.000079	< 0.000079	< 0.000079	< 0.000079	**0.00064 J**	< 0.000079
Cresol, o-	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
Dimethylphenol, 2,4-	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds). Samples analyzed by Test America, Inc., Houston Texas.
3. Bold type indicates a detection greater than the sample quantitation limit.
4. NA = Not applicable.
   — = Compound not analyzed.
5. Control Std certified value = 0.0970 mg/L
6. TRRP Tier 1 Protective Concentration Limit (PCL) for benzene and 1,2-DCA = 0.005 mg/L
   TRRP Tier 1 Protective Concentration Limit (PCL) for Aniline = 0.16 mg/L, o-cresol = 1.2 mg/L, and 2,4-dimethylphenol = 0.49 mg/L

TABLE 4
RESULTS OF GROUNDWATER TESTING:
INDICATOR PARAMETERS FOR SOURCE AREA WELLS

Sampling Period: 19 October to 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	Zone B Source Wells					*QA/QC Samples*		
SAMPLE LOCATION	MW-CB-1B	MW-CB-1BS	MW-CB-5B	MW-CB-7B	RW-CB-3D	ERA Control Std.	EQUIP BLK-1	EQUIP BLK-2
DATE SAMPLED	10/21/2010	10/21/2010	10/22/2010	10/22/2010	10/22/2010	10/19/2010	10/22/2010	10/22/2010
DATE ANALYZED	10/27/2010	10/27/2010	10/26/2010	10/26/2010	10/28/2010	10/23/2010	10/26/2010	10/26/2010
SCREENED INTERVAL (ft bgs)	90.5-100	70.0-85.0	92.5-102.0	85.0-100.0	71.4-101.0	NA	NA	NA
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds								
Benzene	—	—	—	—	< 0.00013	—	—	—
Dichloroethane, 1,2-	**0.050**	**0.020**	< 0.00013	< 0.00013	**0.033**	**0.0980**	< 0.00013	< 0.00013
Semivolatile Organic Compounds								
Aniline	—	—	—	—	< 0.000079	—	—	—
Cresol, o-	—	—	—	—	< 0.00012	—	—	—
Dimethylphenol, 2,4-	—	—	—	—	< 0.00031	—	—	—

	QA/QC Samples				
SAMPLE LOCATION	FIELD BLK-1	TRIP BLK-1	TRIP BLK-2	TRIP BLK-3	TRIP BLK-4
DATE SAMPLED	10/22/2010	10/19/2010	10/20/2010	10/21/2010	10/22/2010
DATE ANALYZED	10/26/2010	10/22/2010	10/25/2010	10/26/2010	10/26/2010
SCREENED INTERVAL (ft bgs)	NA	NA	NA	NA	NA
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds					
Benzene	—	—	—	—	—
Dichloroethane, 1,2-	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
Semivolatile Organic Compounds					
Aniline	—	—	—	—	—
Cresol, o-	—	—	—	—	—
Dimethylphenol, 2,4-	—	—	—	—	—

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds). Samples analyzed by Test America, Inc., Houston Texas.
3. Bold type indicates a detection greater than the sample quantitation limit.
4. NA = Not applicable.
   — = Compound not analyzed.
5. Control Std certified value = 0.0970 mg/L
6. TRRP Tier 1 Protective Concentration Limit (PCL) for benzene and 1,2-DCA = 0.005 mg/L
   TRRP Tier 1 Protective Concentration Limit (PCL) for Aniline = 0.16 mg/L, o-cresol = 1.2 mg/L, and 2,4-dimethylphenol = 0.49 mg/L

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TABLE 5
RESULTS OF GROUNDWATER TESTING:
1,2-DICHLOROETHANE FOR OFF-SITE WELLS

Sampling Period: 19 October to 22 October 2010

Charlie Burch Site, Spring, Texas
The Dow Chemical Company, VCP No. 421

SAMPLE LOCATION	DATE SAMPLED	DATE ANALYZED	SCREEN DEPTH (ft bgs)	1,2-Dichloroethane (mg/L)
Zone A Wells				
MW-CB-2A	10/21/2010	10/27/2010	52.5-62.0	**0.059**
MW-CB-8AD	10/20/2010	10/25/2010	40-50	**0.0067**
MW-CB-9AS	10/20/2010	10/26/2010	20-40	< 0.00013
MW-CB-10AD	10/20/2010	10/26/2010	40-60	< 0.00013
MW-CB-11AS	10/20/2010	10/26/2010	25-45	**0.0059**
MW-CB-12AS	10/20/2010	10/26/2010	19.5-39.5	**0.026**
MW-CB-12AS DUP	10/20/2010	10/26/2010	19.5-39.5	**0.027**
MW-CB-13AS	10/20/2010	10/26/2010	17.7-37.8	<0.0026
MW-CB-14AS	10/20/2010	10/26/2010	19.0-38.9	**0.004**
MW-CB-15AS	10/20/2010	10/25/2010	19.8-39.7	< 0.00013
MW-CB-15AS DUP	10/20/2010	10/25/2010	19.8-39.7	< 0.00013
MW-CB-16AS	10/20/2010	10/27/2010	19.3-39.3	**0.047**
MW-CB-19AS	10/20/2010	10/22/2010	18.5-38.5	< 0.00013
MW-CB-24AS	10/20/2010	10/26/2010	19.5-29.5	< 0.00013
MW-CB-25A	10/21/2010	10/26/2010	20-40	**0.017**
MW-CB-25A DUP	10/21/2010	10/26/2010	20-40	**0.017**
MW-CB-26A	10/21/2010	10/26/2010	20-40	**0.007**
MW-CB-27A	10/21/2010	10/27/2010	20-40	**0.031**
MW-CB-28A	10/21/2010	10/27/2010	20-40	**0.0058**
MW-CB-29A	10/20/2010	10/25/2010	18-38	< 0.00013
MW-CB-30A	10/20/2010	10/25/2010	18-38	< 0.00013
MW-CB-31A	10/20/2010	10/25/2010	18.5-38.5	< 0.00013
MW-CB-33A	10/20/2010	10/25/2010	18-38	< 0.00013
MW-CB-33A DUP	10/20/2010	10/25/2010	18-38	< 0.00013
MW-CB-34A	10/20/2010	10/25/2010	19-39	< 0.00013
MW-CB-35A	10/20/2010	10/25/2010	19-39	< 0.00013
MW-CB-36	10/19/2010	10/21/2010	40-50	**0.0026**
MW-CB-37S	10/20/2010	10/25/2010	40-50	**0.0041**
MW-CB-37D	10/20/2010	10/25/2010	58-68	**0.0022**
MW-CB-38	10/19/2010	10/21/2010	40-50	< 0.00013
MW-CB-38 DUP	10/19/2010	10/21/2010	40-50	< 0.00013
MW-CB-39	10/19/2010	10/21/2010	40-50	**0.015**
MW-CB-40	10/19/2010	10/21/2010	40-50	**0.006**
MW-CB-40*	12/1/2010	12/1/2010	40-50	**0.00608**
MW-CB-41S	10/19/2010	10/21/2010	40-50	**0.032**
MW-CB-41D	10/19/2010	10/21/2010	59-69	**0.0027**
MW-CB-42	10/19/2010	10/21/2010	40-50	< 0.00013
MW-CB-43	10/19/2010	10/22/2010	40-50	< 0.00013
MW-CB-44	10/19/2010	10/21/2010	40-50	< 0.00013

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Method 8260 by Test America, Inc., Houston, Texas.
3. Bold type indicates a measurement exceeding the sample quantitation limit.
4. Well number subscripts generally refer to screen depths as follows:
   A and AS: Zone A wells with screen < 50 ft depth
   AD: Zone A wells with screen > 50 ft depth
   BS: Zone B wells with screen < 85 ft depth.
5. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   < = Not detected at the quantitation limit indicated. NA = Not applicable. — = Information not available.
6. TRRP Tier 1 Protective Concentration Limit (PCL) for 1,2-DCA = 0.005 mg/L
7. * = Well was resampled on 12/1/10 to confirm the 1,2-DCA concentration detected during the October 2010 sampling event.

TABLE 5
RESULTS OF GROUNDWATER TESTING:
1,2-DICHLOROETHANE FOR OFF-SITE WELLS

Sampling Period: 19 October to 22 October 2010

Charlie Burch Site, Spring, Texas
The Dow Chemical Company, VCP No. 421

SAMPLE LOCATION	DATE SAMPLED	DATE ANALYZED	SCREEN DEPTH (ft bgs)	1,2-Dichloroethane (mg/L)
Zone A Wells (continued)				
MW-CB-45	10/19/2010	10/22/2010	40-50	**0.071**
MW-CB-45*	12/1/2010	12/1/2010	40-50	**0.0495**
MW-CB-46S	10/19/2010	10/21/2010	40-50	**0.0046**
MW-CB-46D	10/19/2010	10/22/2010	68-78	< 0.00013
MW-CB-47D	10/19/2010	10/21/2010	80-90	< 0.00013
MW-CB-47S	10/19/2010	10/21/2010	40-50	**0.002**
MW-CB-47S DUP	10/19/2010	10/21/2010	40-50	**0.0021**
MW-CB-48	10/19/2010	10/21/2010	40-50	< 0.00013
MW-CB-49	10/19/2010	10/21/2010	40-50	< 0.00013
MW-CB-50D	10/19/2010	10/21/2010	68-78	**0.0016**
MW-CB-50S	10/19/2010	10/21/2010	40-50	< 0.00013
TP-21	10/20/2010	10/26/2010	39.7-49.2	**0.0086**
TRW-CB-1	10/20/2010	10/22/2010	—	**0.015**
TRW-CB-2	10/20/2010	10/25/2010	—	**0.01**
TRW-CB-3	10/20/2010	10/25/2010	—	**0.00088 J**
TRW-CB-4	10/20/2010	10/25/2010	—	**0.0017**
MaxOx Pilot Study Wells				
INJ-3	10/19/2010	10/22/2010	40-42	**0.025**
OBS-1	10/19/2010	10/22/2010	25-50	**0.012**
OBS-2	10/19/2010	10/22/2010	40-50	**0.03**
EAB Pilot Study Wells				
EAB-INJ-01	10/21/2010	10/27/2010	30.68-40.68	**0.00069 J**
EAB-INJ-02	10/21/2010	10/27/2010	30.81-40.81	**0.0019**
EAB-INJ-03	10/21/2010	10/27/2010	30.47-40.47	**0.0035**
EAB-MW-01	10/21/2010	10/28/2010	30.98-40.98	**0.0092**
EAB-MW-02	10/21/2010	10/26/2010	30.70-40.70	**0.0051**
EAB-MW-03	10/21/2010	10/27/2010	30-40	**0.15**
EAB-MW-03*	12/1/2010	12/2/2010	30-40	**0.108**
Zone B Wells				
MW-CB-2B	10/21/2010	10/27/2010	89.5-99.0	< 0.00013
MW-CB-6B	10/21/2010	10/27/2010	89.5-99.0	< 0.00013
MW-CB-6BS	10/21/2010	10/26/2010	70.0-85.0	**0.0011**
Water Supply Wells				
Rummell Water Well	10/21/2010	10/27/2010	227-242.4	< 0.00013
Wert Water Well	10/21/2010	10/27/2010	240-250	< 0.00013

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Method 8260 by Test America, Inc., Houston, Texas.
3. Bold type indicates a measurement exceeding the sample quantitation limit.
4. Well number subscripts generally refer to screen depths as follows:
   A and AS: Zone A wells with screen < 50 ft depth
   AD: Zone A wells with screen > 50 ft depth
   BS: Zone B wells with screen < 85 ft depth.
5. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   < = Not detected at the quantitation limit indicated. NA = Not applicable. — = Information not available.
6. TRRP Tier 1 Protective Concentration Limit (PCL) for 1,2-DCA = 0.005 mg/L
7. * = Well was resampled on 12/1/10 to confirm the 1,2-DCA concentration detected during the October 2010 sampling event.

TABLE 6
RESULTS OF HISTORICAL GROUNDWATER TESTING:
INDICATOR PARAMETERS

Sampling Period: 2001-2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

SAMPLE LOCATION	***MW-CB-1A***									
DATE SAMPLED	9/4/2001	9/24/2002	11/25/2003	10/20/2004	9/8/2005	10/5/2006	10/10/2007	10/16/2008	11/2/2009	10/21/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	**0.009**	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	**0.200**	**0.115**	**0.151**	**0.100**	**0.133**	**0.0510**	**0.0285**	**0.018**	**0.044**	**0.034**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0097	<0.0095	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0097	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	**0.01**	<0.010	<0.0097	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	***MW-CB-3***									
DATE SAMPLED	8/31/2001	9/24/2002	11/24/2003	10/20/2004	9/8/2005	10/5/2006	10/10/2007	10/16/2008	10/30/2009	10/21/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	<0.00013
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0096	<0.0095	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0096	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0096	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	***MW-CB-4***									
DATE SAMPLED	8/31/2001	9/24/2002	11/24/2003	10/20/2004	9/8/2005	10/5/2006	10/10/2007	10/16/2008	10/30/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	<0.005	<0.005	**0.0038J**	<0.005	**0.00269 J**	<0.00047	**0.0012**	**0.0011**	**0.001**	**0.0018**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0096	<0.0096	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0096	<0.0096	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0096	<0.0096	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	***MW-CB-5A***									
DATE SAMPLED	8/31/2001	9/24/2002	11/24/2003	10/20/2004	9/8/2005	10/5/2006	10/10/2007	10/16/2008	11/2/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	**0.005**	<0.005	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	**0.0002**	<0.00013
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds) by Test America, Inc., Houston, Texas. Samples collected in 2001 and 2002 analyzed by Environmental Chemistry, Inc., Houston, Texas. Samples collected in 2003 though 2009 by Test America Laboratories (formerly, Severn Trent Laboratories), Houston, Texas.
3. Bold type indicates a detection in excess of the sample quantitation limit.
4. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   NA = Analyte not analyzed.
5. Where duplicate samples were collected the value shown is the average of both samples.
6. TRRP Tier 1 Protective Concentration Limit (PCL) for benzene and 1,2-DCA = 0.005 mg/L
   TRRP Tier 1 Protective Concentration Limit (PCL) for Aniline = 0.16 mg/L, o-cresol = 1.2 mg/L, and 2,4-dimethylphenol = 0.49 mg/L

TABLE 6
RESULTS OF HISTORICAL GROUNDWATER TESTING:
INDICATOR PARAMETERS

Sampling Period: 2001-2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

SAMPLE LOCATION	*OW-1*									
DATE SAMPLED	8/31/2001	9/25/2002	11/24/2003	10/20/2004	9/8/2005	10/5/2006	10/10/2007	10/16/2008	10/28/2009	10/21/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	<0.00013
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	*OW-2*									
DATE SAMPLED	8/31/2001	9/24/2002	11/24/2003	10/20/2004	9/8/2005	10/5/2006	10/10/2007	10/16/2008	10/30/2009	10/21/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	**0.007**	**0.009**	0.0042 J	<0.005	**0.00581**	**0.00506**	**0.00233**	**0.0022**	**0.0019**	**0.0025**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	*TP-15*									
DATE SAMPLED	8/31/2001	9/25/2002	11/24/2003	10/20/2004	9/8/2005	10/5/2006	10/10/2007	10/16/2008	10/28/2009	10/21/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	<0.00013
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	*RW-CB-1*									
DATE SAMPLED	9/4/2001	9/25/2002	11/24/2003	10/21/2004	9/8/2005	10/4/2006	10/12/2007	10/16/2008	10/30/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	<0.00018	<0.00013	<0.00013	< 0.00013
Dichloroethane, 1,2-	<0.005	<0.005	**0.0029 J**	<0.005	<0.005	<0.00047	<0.0002	**0.0013**	<0.00013	< 0.00013
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0097	<0.0095	<0.01	<0.00011	<0.00086	<0.00008	<0.000079	< 0.000079
Cresol, o-	<0.010	<0.010	<0.0097	<0.0095	<0.01	<0.00006	<0.00139	<0.00012	<0.00012	< 0.00012
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0097	<0.0095	<0.01	<0.00005	<0.01	<0.00031	<0.00031	< 0.00031

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds) by Test America, Inc., Houston, Texas. Samples collected in 2001 and 2002 analyzed by Environmental Chemistry, Inc., Houston, Texas. Samples collected in 2003 though 2009 by Test America Laboratories (formerly, Severn Trent Laboratories), Houston, Texas.
3. Bold type indicates a detection in excess of the sample quantitation limit.
4. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   NA = Analyte not analyzed.
5. Where duplicate samples were collected the value shown is the average of both samples.
6. TRRP Tier 1 Protective Concentration Limit (PCL) for benzene and 1,2-DCA = 0.005 mg/L
   TRRP Tier 1 Protective Concentration Limit (PCL) for Aniline = 0.16 mg/L, o-cresol = 1.2 mg/L, and 2,4-dimethylphenol = 0.49 mg/L

TABLE 6
RESULTS OF HISTORICAL GROUNDWATER TESTING:
INDICATOR PARAMETERS

Sampling Period: 2001-2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

SAMPLE LOCATION	***RW-CB-2***									
DATE SAMPLED	9/4/2001	9/25/2002	11/24/2003	10/21/2004	9/8/2005	10/4/2006	10/12/2007	10/20/2008	10/30/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	**0.007**	**0.004 J**	**0.0025J**	<0.005	<0.005	**0.000670 J**	<0.00018	<0.00013	<0.00013	**0.00024 J**
Dichloroethane, 1,2-	**0.040**	**0.020**	**0.042**	**0.0244**	**0.0045 J**	**0.0419**	**0.0308**	**0.035**	**0.0250**	**0.019**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	0.0047J	<0.0095	<0.01	**0.00157**	<0.00084	<0.00008	0.00030	< 0.000079
Cresol, o-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00006	<0.00136	<0.00012	<0.00012	< 0.00012
Dimethylphenol, 2,4-	<0.010	<0.010	0.003J	<0.0095	<0.01	**0.00098**	<0.01	<0.00031	<0.00031	< 0.00031

SAMPLE LOCATION	***RW-CB-3***									
DATE SAMPLED	9/4/2001	9/25/2002	11/24/2003	10/21/2004	9/8/2005	10/4/2006	10/12/2007	10/16/2008	10/30/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	**0.018**	**0.012**	**0.0064**	<0.005	<0.005	<0.00038	<0.00018	<0.00013	<0.00013	< 0.00013
Dichloroethane, 1,2-	**0.229**	**0.236**	**0.156**	**0.104**	**0.0655**	**0.0464**	**0.0268**	**0.083**	**0.0390**	**0.080**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	0.0044J	<0.0096	<0.01	<0.00011	<0.00086	**0.00011 J**	<0.000079	< 0.000079
Cresol, o-	<0.010	<0.010	<0.0096	<0.0096	<0.01	<0.00006	<0.00139	<0.00012	<0.00012	< 0.00012
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0096	<0.0096	<0.01	<0.00005	<0.01	<0.00031	<0.00031	< 0.00031

SAMPLE LOCATION	***RW-CB-4***									
DATE SAMPLED	9/4/2001	9/25/2002	11/24/2003	10/21/2004	9/8/2005	10/4/2006	10/12/2007	10/16/2008	10/30/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	**0.002 J**	<0.005	<0.005	**0.00103 J**	<0.00038	<0.00018	**0.00043 J**	<0.00013	**0.00022 J**
Dichloroethane, 1,2-	**0.114**	**0.152**	**0.0138**	**0.0097**	**0.180**	**0.106**	**0.06**	**0.077**	**0.0710**	**0.087**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0099	<0.0095	<0.01	**0.000180 J**	<0.00084	**0.00021 J**	<0.000079	**0.00064 J**
Cresol, o-	<0.010	<0.010	<0.0099	<0.0095	<0.01	<0.00006	<0.00135	<0.00012	<0.00012	< 0.00012
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0099	<0.0095	<0.01	**0.000160 J**	<0.01	<0.00031	<0.00031	< 0.00031

SAMPLE LOCATION	***RW-CB-5***									
DATE SAMPLED	9/4/2001	9/25/2002	11/24/2003	10/21/2004	9/8/2005	10/4/2006	10/12/2007	10/16/2008	10/30/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	<0.00018	<0.00013	<0.00013	**0.00036 J**
Dichloroethane, 1,2-	**0.139**	**0.030**	**0.076**	**0.0425**	**0.068**	**0.0369**	**0.0251**	**0.030**	**0.0240**	**0.041**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.01	<0.0095	<0.01	**0.000450**	<0.00084	**0.00018 J**	0.00110	< 0.000079
Cresol, o-	<0.010	<0.010	<0.01	<0.0095	<0.01	<0.00006	<0.00135	<0.00012	<0.00012	< 0.00012
Dimethylphenol, 2,4-	<0.010	<0.010	<0.01	<0.0095	<0.01	**0.000450**	<0.01	<0.00031	<0.00031	< 0.00031

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds) by Test America, Inc., Houston, Texas. Samples collected in 2001 and 2002 analyzed by Environmental Chemistry, Inc., Houston, Texas. Samples collected in 2003 though 2009 by Test America Laboratories (formerly, Severn Trent Laboratories), Houston, Texas.
3. Bold type indicates a detection in excess of the sample quantitation limit.
4. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   NA = Analyte not analyzed.
5. Where duplicate samples were collected the value shown is the average of both samples.
6. TRRP Tier 1 Protective Concentration Limit (PCL) for benzene and 1,2-DCA = 0.005 mg/L
   TRRP Tier 1 Protective Concentration Limit (PCL) for Aniline = 0.16 mg/L, o-cresol = 1.2 mg/L, and 2,4-dimethylphenol = 0.49 mg/L

TABLE 6
RESULTS OF HISTORICAL GROUNDWATER TESTING:
INDICATOR PARAMETERS

Sampling Period: 2001-2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

SAMPLE LOCATION	***MW-CB-1B***									
DATE SAMPLED	9/4/2001	9/25/2002	11/25/2003	10/20/2004	9/8/2005	10/4/2006	10/12/2007	10/16/2008	11/2/2009	10/21/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	<0.00018	NA	NA	NA
Dichloroethane, 1,2-	**0.106**	**0.029**	**0.0765**	**0.036**	**0.0555**	**0.0370**	**0.0343**	**0.039**	**0.0480**	**0.050**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00010	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	***MW-CB-1BS***							
DATE SAMPLED	11/25/2003	10/20/2004	9/8/2005	10/4/2006	10/12/2007	10/16/2008	11/2/2009	10/21/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds								
Benzene	<0.006	<0.005	<0.005	<0.00038	<0.00018	NA	NA	NA
Dichloroethane, 1,2-	0.00433 J	**0.0397**	**0.00687**	**0.0373**	**0.0369**	**0.042**	**0.032**	**0.020**
Semivolatile Organic Compounds								
Aniline	<0.01	<0.0095	<0.01	<0.00010	NA	NA	NA	NA
Cresol, o-	<0.01	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.01	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	***MW-CB-5B***									
DATE SAMPLED	9/4/2001	9/25/2002	11/25/2003	10/20/2004	9/8/2005	10/4/2006	10/10/2007	10/16/2008	11/2/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	NA	NA	NA	NA
Dichloroethane, 1,2-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	<0.00013
Semivolatile Organic Compounds										
Aniline	<0.010	<0.001	<0.0096	<0.0095	<0.01	<0.00010	NA	NA	NA	NA
Cresol, o-	<0.010	<0.010	<0.0096	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0096	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

SAMPLE LOCATION	***MW-CB-7B***							
DATE SAMPLED	11/25/2003	10/20/2004	9/8/2005	10/4/2006	10/12/2007	10/16/2008	11/2/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds								
Benzene	<0.005	<0.005	<0.005	<0.00038	<0.00018	NA	NA	NA
Dichloroethane, 1,2-	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	<0.00013
Semivolatile Organic Compounds								
Aniline	<0.0095	<0.0095	<0.01	<0.00011	NA	NA	NA	NA
Cresol, o-	<0.0095	<0.0095	<0.01	<0.00006	NA	NA	NA	NA
Dimethylphenol, 2,4-	<0.0095	<0.0095	<0.01	<0.00005	NA	NA	NA	NA

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds) by Test America, Inc., Houston, Texas. Samples collected in 2001 and 2002 analyzed by Environmental Chemistry, Inc., Houston, Texas. Samples collected in 2003 though 2009 by Test America Laboratories (formerly, Severn Trent Laboratories), Houston, Texas.
3. Bold type indicates a detection in excess of the sample quantitation limit.
4. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   NA = Analyte not analyzed.
5. Where duplicate samples were collected the value shown is the average of both samples.
6. TRRP Tier 1 Protective Concentration Limit (PCL) for benzene and 1,2-DCA = 0.005 mg/L
   TRRP Tier 1 Protective Concentration Limit (PCL) for Aniline = 0.16 mg/L, o-cresol = 1.2 mg/L, and 2,4-dimethylphenol = 0.49 mg/L

TABLE 6
RESULTS OF HISTORICAL GROUNDWATER TESTING:
INDICATOR PARAMETERS

Sampling Period: 2001-2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

SAMPLE LOCATION	**RW-CB-3D**									
DATE SAMPLED	9/4/2001	9/25/2002	11/24/2003	10/21/2004	9/8/2005	10/4/2006	10/12/2007	10/20/2008	10/30/2009	10/22/2010
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds										
Benzene	<0.005	<0.001	<0.005	<0.005	<0.005	<0.00038	<0.00018	<0.00013	<0.00013	< 0.00013
Dichloroethane, 1,2-	**0.101**	**0.076**	**0.057**	**0.0375**	**0.00212**	**0.0368**	**0.0185**	**0.036**	**0.023**	**0.033**
Semivolatile Organic Compounds										
Aniline	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00011	NA	<0.00008	<0.000079	< 0.000079
Cresol, o-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00006	NA	<0.00012	<0.00012	< 0.00012
Dimethylphenol, 2,4-	<0.010	<0.010	<0.0095	<0.0095	<0.01	<0.00005	NA	<0.00031	<0.00031	< 0.00031

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds) by Test America, Inc., Houston, Texas. Samples collected in 2001 and 2002 analyzed by Environmental Chemistry, Inc., Houston, Texas. Samples collected in 2003 though 2009 by Test America Laboratories (formerly, Severn Trent Laboratories), Houston, Texas.
3. Bold type indicates a detection in excess of the sample quantitation limit.
4. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   NA = Analyte not analyzed.
5. Where duplicate samples were collected the value shown is the average of both samples.
6. TRRP Tier 1 Protective Concentration Limit (PCL) for benzene and 1,2-DCA = 0.005 mg/L
   TRRP Tier 1 Protective Concentration Limit (PCL) for Aniline = 0.16 mg/L, o-cresol = 1.2 mg/L, and 2,4-dimethylphenol = 0.49 mg/L

GSI ENVIRONMENTAL

TABLE 7
RESULTS OF HISTORICAL GROUNDWATER TESTING:
1,2-DICHLOROETHANE FOR OFF-SITE WELLS

Sampling Period: 1999-2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	1,2-Dichloroethane												
SAMPLING DATE	9/98-3/99	10/00	8/01	8-9/02	11/03	7/04	10/04	9/05	10/06	10/07	10/08	10/09	10/10
SAMPLE LOCATION	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone A Wells													
MW-CB-2A	NS	**0.313**	NS	NS	NS	NS	NS	NS	NS	NS	**0.054**	**0.044**	**0.059**
MW-CB-8AD	**0.011**	<0.005	<0.005	**0.005**	**0.0043**	NS	**0.00264 J**	<0.005	**0.0081**	**0.00342**	**0.0059**	**0.0083**	**0.0067**
MW-CB-9AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-9AD	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	NS	NS	NS	NS
MW-CB-10AD	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-11AS	**0.044**	**0.042**	**0.033**	**0.033**	**0.0264**	NS	**0.0209**	**0.0158**	**0.0172**	**0.00845**	**0.0057**	**0.0085**	**0.0059**
MW-CB-11AD	<0.005	<0.005	<0.005	<0.005	**0.0029 J**	NS	**0.0022 J**	**0.00387 J**	**0.00303**	NS	NS	NS	NS
MW-CB-12AS	**0.078**	**0.085**	**0.077**	**0.076**	**0.0672**	NS	**0.0508**	**0.0551**	**0.04955**	**0.0392**	**0.0255**	**0.04**	**0.0265**
MW-CB-12AD	<0.005	**0.016**	**0.013**	**0.017**	**0.0189**	NS	**0.0164**	**0.0218**	**0.0250**	NS	NS	NS	NS
MW-CB-13AS	**0.017**	**0.026**	**0.025**	**0.015**	**0.018**	NS	**0.0168**	**0.0151**	**0.0130**	**0.00606**	**0.0057**	**0.0038**	<0.0026
MW-CB-14AS	<0.005	**0.007**	**0.008**	**0.011**	**0.0163**	**0.0238**	**0.0161**	**0.0169**	**0.0158**	**0.0137**	**0.013**	**0.0046**	**0.004**
MW-CB-15AS	**0.049**	**0.111**	**0.025**	**0.017**	**0.0121**	**0.0126**	**0.00787**	**0.0281**	**0.0260**	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-16AS	**0.048**	**0.036**	**0.02**	**0.016**	**0.0133**	NS	**0.033**	**0.0749**	**0.0813**	**0.0604**	**0.074**	**0.051**	**0.047**
MW-CB-17AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	NS	NS	NS	NS
MW-CB-18AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	NS	NS	NS	NS
MW-CB-19AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	<0.0002	**0.0012**	<0.00013	< 0.00013
MW-CB-20AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	NS	NS	NS	NS
MW-CB-21AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	NS	NS	NS	NS
MW-CB-22AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	NS	NS	NS	NS
MW-CB-23AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	NS	<0.00047	NS	NS	NS	NS
MW-CB-24AS	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-25A	NS	NS	NS	NS	**0.0498**	NS	**0.0492**	**0.0822**	**0.0375**	**0.015**	**0.01**	**0.0125**	**0.017**
MW-CB-26A	NS	NS	NS	NS	**0.0133**	NS	**0.00575**	**0.00711**	**0.00716**	**0.00485**	**0.01**	**0.0086**	**0.007**
MW-CB-27A	NS	NS	NS	NS	**0.0562**	NS	**0.0497**	**0.0992**	**0.0633**	**0.041**	**0.043**	**0.026**	**0.031**
MW-CB-28A	NS	NS	NS	NS	**0.015**	NS	**0.0125**	**0.0186**	**0.0128**	**0.00753**	**0.0066**	**0.0065**	**0.0058**
MW-CB-29A	NS	NS	NS	NS	<0.005	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-30A	NS	NS	NS	NS	<0.005	<0.005	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-31A	NS	NS	NS	NS	**0.0057**	<0.005	<0.005	**0.00121 J**	<0.00047	<0.0002	<0.00013	**0.00043 J**	< 0.00013
MW-CB-32A	NS	NS	NS	NS	<0.005	<0.005	<0.005	<0.005	<0.00047	NS	NS	NS	NS
MW-CB-33A	NS	NS	NS	NS	NS	NS	NS	**0.0403**	**0.0188**	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-34A	NS	NS	NS	NS	NS	NS	NS	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-35A	NS	NS	NS	NS	NS	NS	NS	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-36	NS	NS	NS	NS	NS	NS	NS	NS	**0.00774**	**0.0479**	**0.011**	**0.0043**	**0.0026**
MW-CB-37S	NS	NS	NS	NS	NS	NS	NS	NS	**0.0871**	**0.0581**	**0.019**	**0.01**	**0.0041**
MW-CB-37D	NS	NS	NS	NS	NS	NS	NS	NS	**0.0270**	**0.00835**	**0.0048**	**0.0036**	**0.0022**
MW-CB-38	NS	NS	NS	NS	NS	NS	NS	NS	**0.00808**	**0.00449**	**0.0019**	**0.00082 J**	< 0.00013
MW-CB-39	NS	NS	NS	NS	NS	NS	NS	NS	**0.133**	**0.0398**	**0.02**	**0.016**	**0.015**
MW-CB-40	NS	NS	NS	NS	NS	NS	NS	NS	<0.00047	<0.0002	**0.0025**	**0.0042**	**0.006**
MW-CB-41S	NS	NS	NS	NS	NS	NS	NS	NS	**0.145**	**0.136**	**0.085**	**0.0245**	**0.032**
MW-CB-41D	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.00471**	**0.0043**	**0.00131**	**0.0027**

Notes presented on page 2

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TABLE 7
RESULTS OF HISTORICAL GROUNDWATER TESTING:
1,2-DICHLOROETHANE FOR OFF-SITE WELLS

Sampling Period: 1999-2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	1,2-Dichloroethane												
SAMPLING DATE	9/98-3/99	10/00	8/01	8-9/02	11/03	7/04	10/04	9/05	10/06	10/07	10/08	10/09	10/10
SAMPLE LOCATION	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone A Wells													
MW-CB-42	NS	NS	NS	NS	NS	NS	NS	NS	**0.00236**	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-43	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.00065 J**	<0.00013	<0.00013	< 0.00013
MW-CB-44	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.0002	<0.00013	<0.00013	< 0.00013
MW-CB-45	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.00372**	**0.011**	<0.00013	**0.071**
MW-CB-46S	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.0157**	**0.0063**	**0.00673**	**0.0046**
MW-CB-46D	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.0002	NS	NS	< 0.00013
MW-CB-47D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.00013	<0.00013	< 0.00013
MW-CB-47S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.00095 J**	**0.00124**	**0.00205**
MW-CB-48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.00013	<0.00013	< 0.00013
MW-CB-49	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.00013	<0.00013	< 0.00013
MW-CB-50D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.0024**	**0.00392**	**0.0016**
MW-CB-50S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.00013	<0.00013	< 0.00013
TP-21	**0.021**	**0.037**	**0.025**	**0.03**	**0.021**	NS	**0.021**	**0.0228**	**0.0207**	**0.0143**	**0.012**	**0.0032**	**0.0086**
TRW-CB-1	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.0272**	**0.015**	**0.02**	**0.015**
TRW-CB-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.027**	**0.016**	**0.021**	**0.01**
TRW-CB-3	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.00652**	**0.0028**	**0.0019**	**0.00088 J**
TRW-CB-4	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00755	0.0038	0.0029	**0.0017**
MaxOx Pilot Study Wells													
INJ-3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.025**
OBS-1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.012**
OBS-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.03**
EAB Pilot Study Wells													
EAB-INJ-01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.00069 J**
EAB-INJ-02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.0019**
EAB-INJ-03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.0035**
EAB-MW-01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.0092**
EAB-MW-02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.0051**
EAB-MW-03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.15**
Zone B Wells													
MW-CB-2B	NS	<0.005	NS	NS	NS	NS	NS	NS	NS	NS	<0.00013	<0.00013	< 0.00013
MW-CB-6B	<0.005	<0.005	NS	NS	NS	NS	NS	NS	NS	NS	<0.00013	<0.00013	< 0.00013
MW-CB-6BS	NS	NS	NS	NS	**0.0132**	NS	**0.00758**	0.00306J	**0.00147**	<0.0002	**0.0014**	**0.00081 J**	**0.0011**
Water Supply Wells													
Rummell Water Well	<0.005	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.00013	<0.00013	< 0.00013
Wert Water Well	<0.005	NS	NS	NS	<0.005	NS	<0.005	<0.005	<0.00047	<0.0002	<0.00013	<0.00013	< 0.00013

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Method 8260 by Test America, Inc., Houston, Texas. Samples collected in 2001 and 2002 analyzed by EnvironmentalChemistry, Inc., Houston, Texas. Samples collected in 2003 through 2009 analyzed by Test America Laboratories (formerly Severn Trent Laboratories), Houston, Texas.
3. Bold type indicates a measurement exceeding the sample quantitation limit.
4. Well number subscripts generally refer to screen depths as follows:
   A and AS: Zone A wells with screen < 40 ft depth
   AD: Zone A wells with screen > 40 ft depth
   BS: Zone B wells with screen < 85 ft depth.
5. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   < = Not detected at the quantitation limit indicated. NS = Not sampled.
6. Where duplicate samples were collected the value shown is the average of both samples.
7. TRRP Tier 1 Protective Concentration Limit (PCL) for 1,2-DCA = 0.005 mg/L
8. Wells MW-CB-2A, MW-CB-2B, MW-CB-6B, and the Rummell Water well were not sampled between 2000 and 2007 due to lack of permission by property owner.

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TABLE 8
RESULTS OF GROUNDWATER TESTING:
FULL LIST OF VOLATILE ORGANIC COMPOUNDS FOR SELECT WELLS

Sampling Period: 19 October to 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	Zone A Source Wells						
SAMPLE LOCATION	MW-CB-46S	MW-CB-46D	OBS-1	OBS-2	INJ-3	TRW-CB-1	TRW-CB-2
DATE SAMPLED	10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/20/2010	10/20/2010
DATE ANALYZED	10/21/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010
SCREENED INTERVAL (ft bgs)	51.5-61.0	58.5-68.0	25-50	40-50	40-42	—	—
Volatile Organic Compounds	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Acetone	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Benzene	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Bromodichloromethane	<0.00014	<0.00014	<0.00014	**0.017**	**0.064**	—	—
Bromoform	<0.00012	<0.00012	<0.00012	**0.015**	**0.049**	<0.00012	<0.00012
Bromomethane	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
Butatone, 2- (MEK)	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076
Carbon disulfide	<0.000070	<0.000070	<0.000070	<0.000070	<0.000070	**0.00023 J**	**0.00016 J**
Carbon tetrachoride	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Chlorobenzene	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Chlorobromomethane	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
Chloroethane	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Chloroform	<0.00012	<0.00012	**0.00048 J**	**0.064**	**0.24**	<0.00012	<0.00012
Chloromethane	<0.00015	<0.00015	<0.00015	**0.00097 J**	**0.0025**	<0.00015	<0.00015
Dibromochloromethane	<0.00045	<0.00045	<0.00045	**0.0078**	**0.027**	<0.00045	<0.00045
Dichloroethane, 1,1-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Dichloroethane, 1,2-	**0.0046**	<0.00013	**0.012**	**0.030**	**0.025**	**0.015**	**0.010**
Dichloroethene, 1,1-	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Dichloroethene, cis-1,2-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Dichloroethene, trans-1,2-	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Dichloroethene, 1,2- Total	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dichloropropane, 1,2-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Dichloropropene, cis-1,3-	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Dichloropropene, trans-1,3-	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Ethylbenzene	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Hexanone, 2-	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
4-Methyl-2-pentanone (MIBK)	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
Methylene Chloride	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042
Styrene	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tetrachloroethene	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080
Toluene	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
Tetrachloroethane, 1,1,2,2-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Trichloroethane, 1,1,1-	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Trichloroethane, 1,1,2-	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
Trichloroethene	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Vinyl Acetate	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
Vinyl Chloride	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Xylene, m- and p-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Xylene, o-	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Xylene, Total	<0.00032	<0.00032	<0.00032	<0.00032	<0.00032	<0.00032	<0.00032

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260B (volatile organic compounds). Samples analyzed by Test America, Inc., Houston Texas.
3. Bold type indicates a detection greater than the sample quantitation limit.
4. NA = Not applicable.
   — = Compound not analyzed.
5. TCEQ Tier 1 Residential PCL concentrations last updated on 31 March 2010.

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TABLE 8
RESULTS OF GROUNDWATER TESTING:
FULL LIST OF VOLATILE ORGANIC COMPOUNDS FOR SELECT WELLS

Sampling Period: 19 October to 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	Zone A Source Wells					
SAMPLE LOCATION	EAB-INJ-01	EAB-INJ-02	EAB-INJ-03	EAB-MW-01	EAB-MW-02	EAB-MW-03
DATE SAMPLED	10/21/2010	10/21/2010	10/21/2010	10/21/2010	10/21/2010	10/21/2010
DATE ANALYZED	10/27/2010	10/27/2010	10/27/2010	10/28/2010	10/26/2010	10/26/2010
SCREENED INTERVAL (ft bgs)	30.68-40.68	30.81-40.81	30.47-40.47	30.98-40.98	30.70-40.70	30-40
Volatile Organic Compounds	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Acetone	**3.5**	**37**	**35**	**0.0070**	<0.0020	<0.0020
Benzene	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Bromodichloromethane	<0.00014	<0.00014	<0.00014	<0.00014	—	—
Bromoform	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Bromomethane	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
Butatone, 2- (MEK)	**0.25**	**0.67**	**0.83**	<0.00076	<0.00076	<0.00076
Carbon disulfide	**0.0019 J**	**0.0032**	**0.0010 J**	**0.00074 J**	**0.0018 J**	**0.00062 J**
Carbon tetrachoride	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Chlorobenzene	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Chlorobromomethane	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
Chloroethane	<0.00019	<0.00019	**0.00088 J**	**0.0043**	**0.00060 J**	**0.0025**
Chloroform	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Chloromethane	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Dibromochloromethane	<0.00045	<0.00045	<0.00045	<0.00045	<0.00045	<0.00045
Dichloroethane, 1,1-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Dichloroethane, 1,2-	**0.00069 J**	**0.0019**	**0.0035**	**0.0092**	**0.0051**	**0.15**
Dichloroethene, 1,1-	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Dichloroethene, cis-1,2-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Dichloroethene, trans-1,2-	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Dichloroethene, 1,2- Total	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dichloropropane, 1,2-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Dichloropropene, cis-1,3-	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Dichloropropene, trans-1,3-	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Ethylbenzene	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Hexanone, 2-	**0.050**	**0.070**	**0.096**	<0.00031	<0.00031	<0.00031
4-Methyl-2-pentanone (MIBK)	**1.1**	**1.7**	**1.7**	**0.00095 J**	**0.0037**	<0.00031
Methylene Chloride	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042
Styrene	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tetrachloroethene	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080
Toluene	**0.00018 J**	**0.00024 J**	**0.00018 J**	<0.00014	**0.00027 J**	<0.00014
Tetrachloroethane, 1,1,2,2-	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
Trichloroethane, 1,1,1-	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Trichloroethane, 1,1,2-	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
Trichloroethene	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Vinyl Acetate	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
Vinyl Chloride	<0.00013	<0.00013	<0.00013	<0.00013	**0.0042**	<0.00013
Xylene, m- and p-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Xylene, o-	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Xylene, Total	<0.00032	<0.00032	<0.00032	<0.00032	<0.00032	<0.00032

Notes:
1. Groundwater samples collected at the locations shown on Figure 2.
2. Samples analyzed in accordance with U.S. EPA Methods 8260B (volatile organic compounds). Samples analyzed by Test America, Inc., Houston Texas.
3. Bold type indicates a detection greater than the sample quantitation limit.
4. NA = Not applicable.
   — = Compound not analyzed.
5. TCEQ Tier 1 Residential PCL concentrations last updated on 31 March 2010.

GSI Job No. G-3516
Issued: 21 February 2011

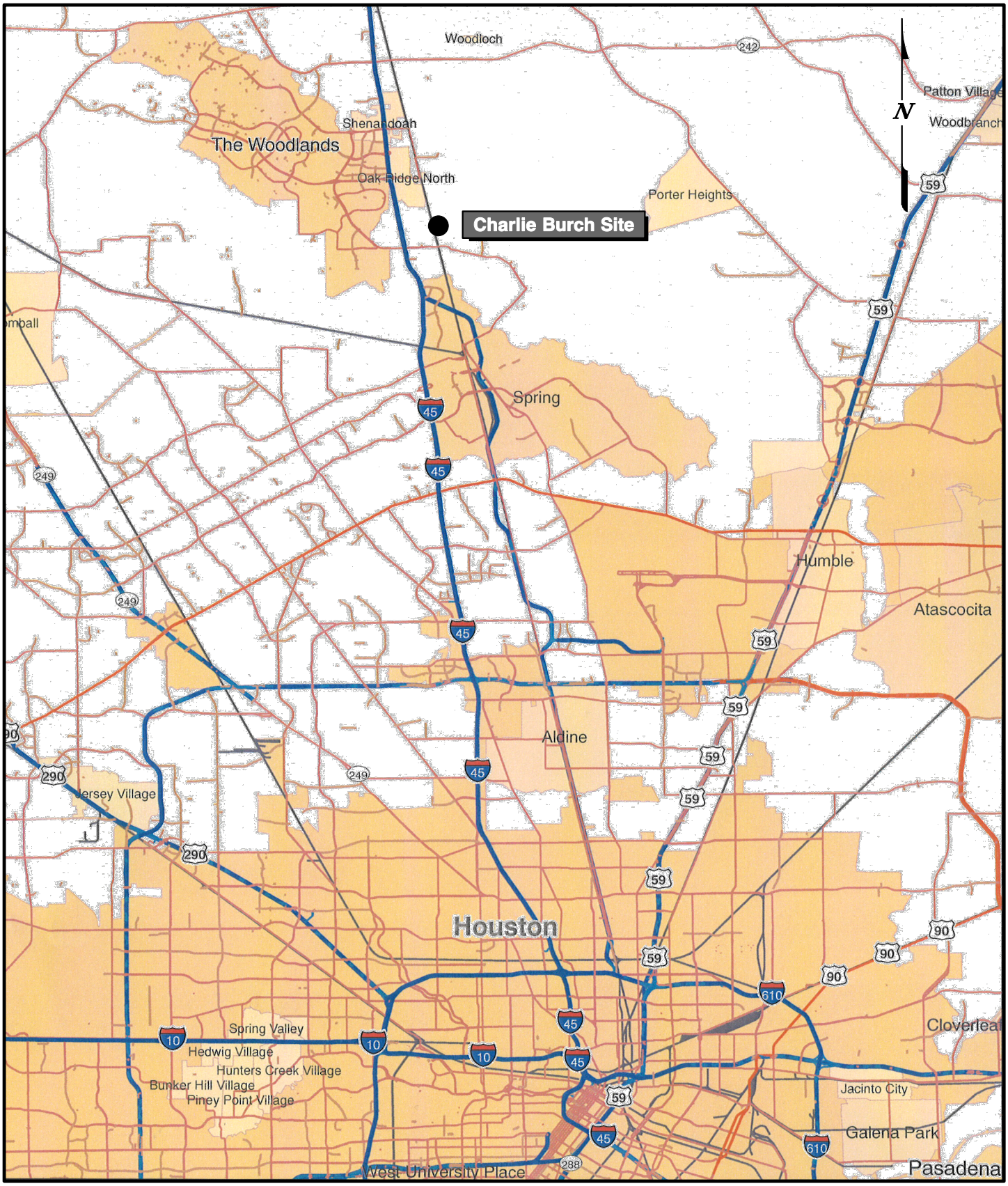
GSI ENVIRONMENTAL

2010 GROUNDWATER MONITORING REPORT

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

FIGURES

Figure 1 Site Location Map
Figure 2 Monitoring Well and Piezometer Location Map
Figure 3 Conceptual Site Geologic Cross-Section
Figure 4 Zone A Potentiometric Surface Contours: 18 October 2010
Figure 5 Zone B Potentiometric Surface Contours: 18 October 2010
Figure 6 Zone A 1,2-DCA Concentration Isopleth: October 2010
Figure 7 Zone B 1,2-DCA Concentration Isopleth: October 2010



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SCALE (mi)

0 2.0 4.0

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Scale:	As Shown	**FIGURE 1**	

SITE LOCATION MAP

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

TP-15
35.2 - 40.2

OW-1
17 - 31.6

North Area

Flood Channel
Flow Direction

OW-2
21.9 - 36.5

West Area

MW-CB-5B
92.5 - 102.0

MW-CB-5A
58.2 - 67.7

MW-CB-3
58.5 - 68.0

East Area

Areas of Waste Removal 1999

PZ-2
35.0-45.0

MW-CB-2B
89.5 - 99.0

MW-CB-2A
52.5 - 62.0

RW-CB-5
36.3 - 65.9

RW-CB-4
37.5 - 67.1

MW-CB-1C
215 - 234.4

RW-CB-3
38.3 - 67.9

RW-CB-3D
71.4 - 101.0

MW-CB-1B
90.5 - 100.0

MW-CB-6B
89.5 - 99.0

PZ-3
34.0-44.0

MW-CB-1BS
70 - 85

MW-CB-1A
51.5 - 61.0

RW-CB-2
36.65 - 66.6

RW-CB-1
33.0 - 62.6

MW-CB-4
58.5 - 68.0

MW-CB-7B
85 - 100

MW-CB-25A
20 - 40

MW-CB-6BS
70 - 85

MW-CB-26A
20 - 40

MW-CB-27A
20 - 40

Rummell water well

Charlie Burch Site

TRACT 2
(6.1793 ac.)
Phillip & Mary Rummell

Wert water well

TRACT 3
(14.3362 ac.)
Warren and Janet Wert

TRACT 4
(10.0 ac.)
John, Tim & Ginger Dyring

TRACT 5
(15.0 ac.)
Tim & Ginger Dyring

Dyring water well

N

MW-CB-28A
20 - 40

TP-21
39.7 - 49.2

MW-CB-8AD
40 - 50

MW-CB-16AS
19.3 - 39.3

Richard Road

MW-CB-9AS
20 - 40

MW-CB-9AD
40 - 60

MW-CB-10AD
40 - 60

MW-CB-11AS
25 - 45

MW-CB-11AD
45 - 65

MW-CB-12AD
39 - 58

MW-CB-12AS
19.5 - 39.5

Forestry Drive

Forestburg Drive

MW-CB-24AS
19.5 - 29.5

MW-CB-17AS
15 - 35

Forestburg Court

Marcus White Tract

MW-CB-13AS
17.7 - 37.8

EAB-INJ-01
30.7 - 40.7

EAB-INJ-03
30.5 - 40.5

EAB-MW-02
30.7 - 40.7

EAB-INJ-02
30.8 - 40.8

EAB-MW-03
30 - 40

EAB-MW-01
31 - 41

MW-CB-15AS
19.8 - 39.7

13-Acre Tract (Rohm & Haas)

TRW-CB-1
25 - 45

MW-CB-14AS
19.0 - 38.9

MW-CB-32A
17 - 37

MW-CB-29A
18 - 38

MW-CB-20AS
19.5 - 39.5

MW-CB-35A
19 - 39

TRW-CB-2
25 - 45

MW-CB-18AS
19.5 - 39.5

MW-CB-30A
18 - 38

MW-CB-21AS
19 - 39

MW-CB-33A
18 - 38

MW-CB-34A
19 - 39

Amerson Tract

Tennessee Gas Pipeline and Gulf State Utilities Easement

PZ-1
30 - 40

CB-IT-1

CB-IT-1 GW

MW-CB-31A
18.5 - 38.5

CB-IT-2

CB-IT-2 GW

TRW-CB-4
25 - 55

TRW-CB-3
25 - 55

MW-CB-19AS
18.5 - 38.5

MW-CB-22AS
19.5 - 39.5

MW-CB-37S
40 - 50

MW-CB-38
40 - 50

MW-CB-36
40 - 50

MW-CB-37D
58 - 68

MW-CB-23AS
18.5 - 38.5

MW-CB-39
40 - 50

Missouri Pacific Railroad

Southwestern Bell Telephone Easement

Texas Pipeline Company Equipment

MW-CB-41S
40 - 50

OBS-1
25- 50

MW-CB-40
40 - 50

MW-CB-42
40 - 50

INJ-3
40 - 42

MW-CB-41D
59 - 69

OBS-2
40 - 50

Southwestern University (Tract 29)

Rayford Business Campus (Tract 13)

MW-CB-43
40 - 50

MW-CB-45
40 - 50

MW-CB-46S
40 - 50

MW-CB-44
40 - 50

MW-CB-46D
65 - 78

Rayford Business Campus (Tract 14)

MW-CB-47S
40 - 50

MW-CB-47D
80 - 90

MW-CB-49
40 - 50

MW-CB-48
40 - 50

MW-CB-50S
45 - 55

MW-CB-50D
65 - 78

Rayford Road

SCALE (ft)
0 150 300

LEGEND

- Monitoring well location (Zone A)
  - AS = Screen less than 40 ft depth
  - AD = Screen greater than 40 ft depth
  - MW = Monitoring well
  - NM = Not measured
  - OW = Flood channel observation well
  - RW = Recovery well
  - TP = Temporary piezometer completed as monitoring well
- Monitoring well location (Zone B)
  - B = Screen greater than 85 ft depth
  - BS = Screen 70 to 85 ft depth
- Monitoring well location (Zone C)
- Recovery well (Zone A)
- Recovery well (Zone B)
- Piezometer for infiltration trench
- Infiltration trench
- Residential water well included in sampling program
- Oil field injection well
- Abandoned oil well
- 33 - 38 Screened interval (ft bgs)
- Waste material removed summer 1999, replaced with clean backfill
- Former landfill area

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Scale:	As Shown	**FIGURE 2**	

MONITORING WELL AND PIEZOMETER LOCATION MAP

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

North
A

South
A'

13 Acre Tract | Amerson Tract | Southwestern University Tract | Rayford Business Campus Tract

MW-CB-1B&C (Zone B) | MW-CB-6BS (Zone B) | Rummell Well (projected) | Wert Well (projected) | MW-CB-28A | MW-CB-11AD | MW-CB-13AS | MW-CB-14AS | MW-CB-31A | MW-CB-37S&D | MW-CB-39 | MW-CB-41S&D | MW-CB-46S&D | MW-CB-47S&D | MW-CB-50S&D | Oliver Lewis Water Well (projected) | GP-RR7

SAND (SP), silty CLAY (CL), and CLAY (CH)

Silty to sandy CLAY (CL)

Silt (ML) and silty to sandy CLAY (CL)

Silty to sandy CLAY (CL), locally grades to clayey SAND (SC)

Approximate Groundwater Elevation in Zone A

TD = 42.0 ft | TD = 40.0 ft | TD = 40.0 ft | TD = 40.0 ft | TD = 51.0 ft | TD = 55.0 ft

Zone A Sand
Silty SAND (SM), SAND (SP), to gravelly SAND (SW)

TD = 70.0 ft | TD = 70.0 ft | TD = 72.0 ft | TD = 80.0 ft | TD = 80.0 ft | TD = 100.0 ft

Zone B Sand
SAND (SP)

TD = 85.0 ft

Silty CLAY (CL)

Zone B Sand
SAND (SP to SW)

Lower Clay
CLAY (CH) to silty CLAY (CL)

Zone C Sand
SAND (SP)

TD = 240.0 ft | TD = 242.0 ft | TD = 250.0 ft

Lower Clay
CLAY (CH) to silty CLAY (CL)

Zone C Sand
SAND (SP or SW)

TD = 250.0 ft

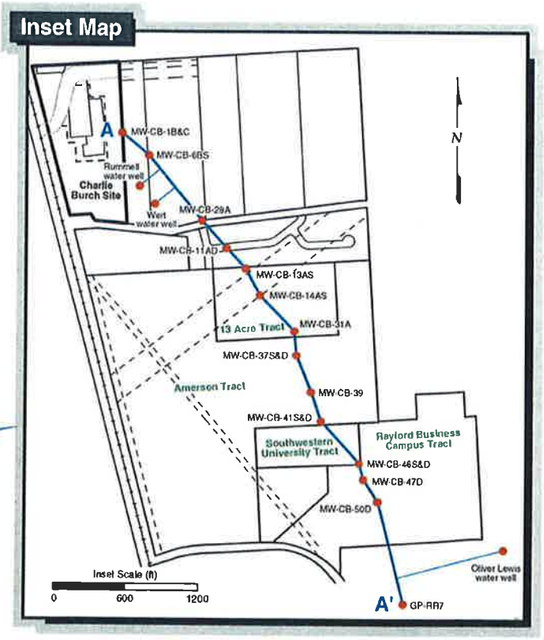
ELEVATION, ft Mean Sea Level (msl)

120 110 100 90 80 70 60 50 40 30 20 10 -0- -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130 -140

HORIZONTAL SCALE, ft
0 150 300 450 600

VERTICAL SCALE: 1 INCH = 40 ft
VERTICAL EXAGGERATION: 7.5X

Inset Map



STATE OF TEXAS
ROBERT S. LEE
GEOLOGY
1473
LICENSED
PROFESSIONAL GEOSCIENTIST

LEGEND

- CLAY (CH)
- Silty to sandy CLAY (CL)
- Clayey SAND (SC)
- SILT (ML)
- Silty SAND (SM)
- SAND (poorly graded)(SP)
- SAND (well graded), SAND w/gravel, and gravelly SAND (SW)
- Well-graded gravel (GW)
- No Recovery
- Static water level elevation (SWL) — *28 Oct 09 Date measured*
- Screened interval
- TD — Total depth of boring ft below ground surface (BGS)

Notes:

1) Surface elevations for the Rummell and Wert wells were approximated.
2) Groundwater elevations are shown for Zone A wells, except where noted.
3) Driller's logs for Lewis, Wert, and Rummell water wells have been projected to the line of cross-section to illustrate deeper strata.

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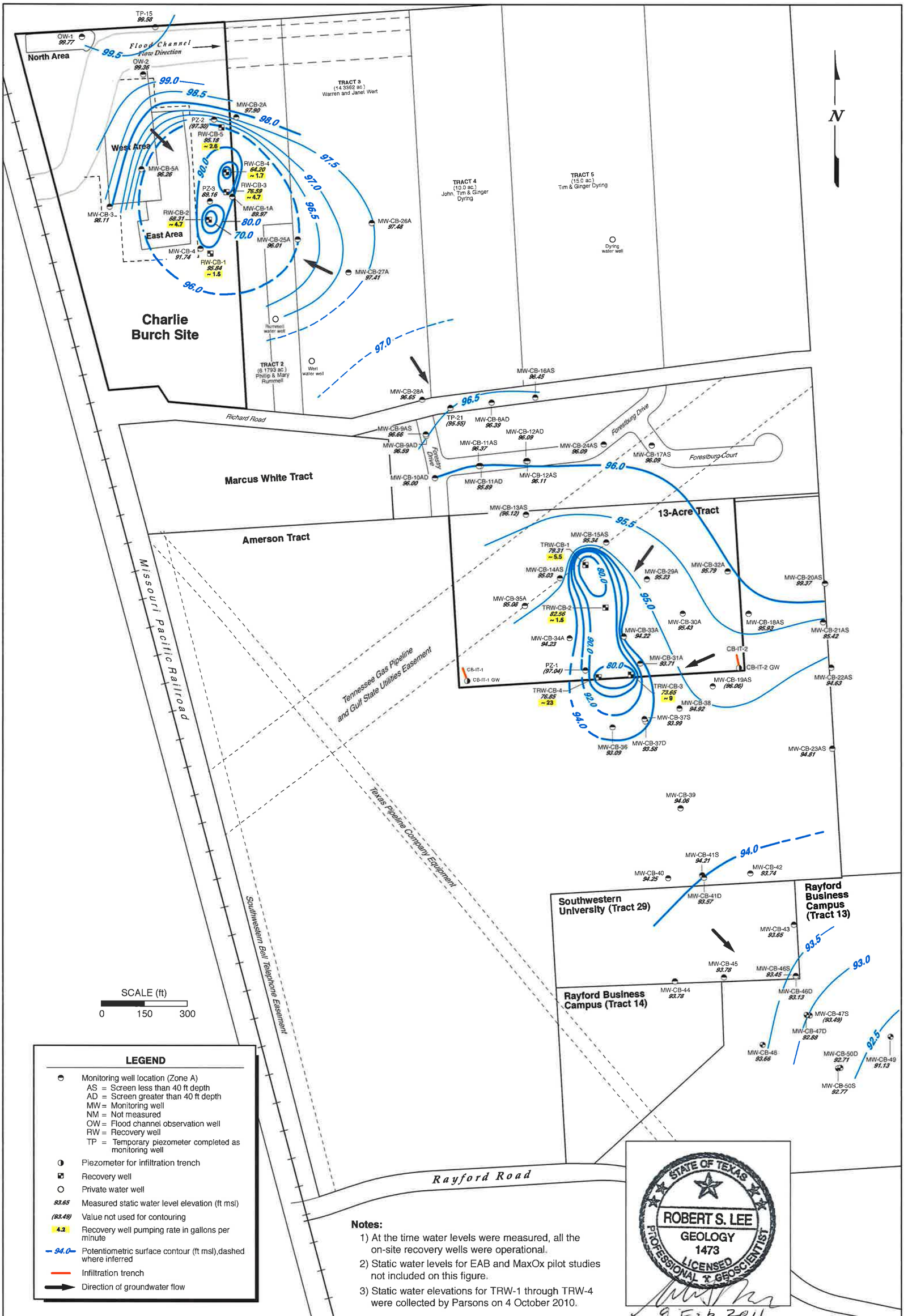
GSI Job No. G-3516	Re-Issued: Feb 2011	Original figure re-issued with no changes.	FIGURE 3
GSI Job No. G-3420	Drawn By: DLB		
Issued: 17-Mar-10	Chk'd By: JMM		
Revised: ———	Aprv'd By: RSL		
Scale: As Shown	FIGURE 3		

CONCEPTUAL SITE GEOLOGIC CROSS-SECTION
Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421



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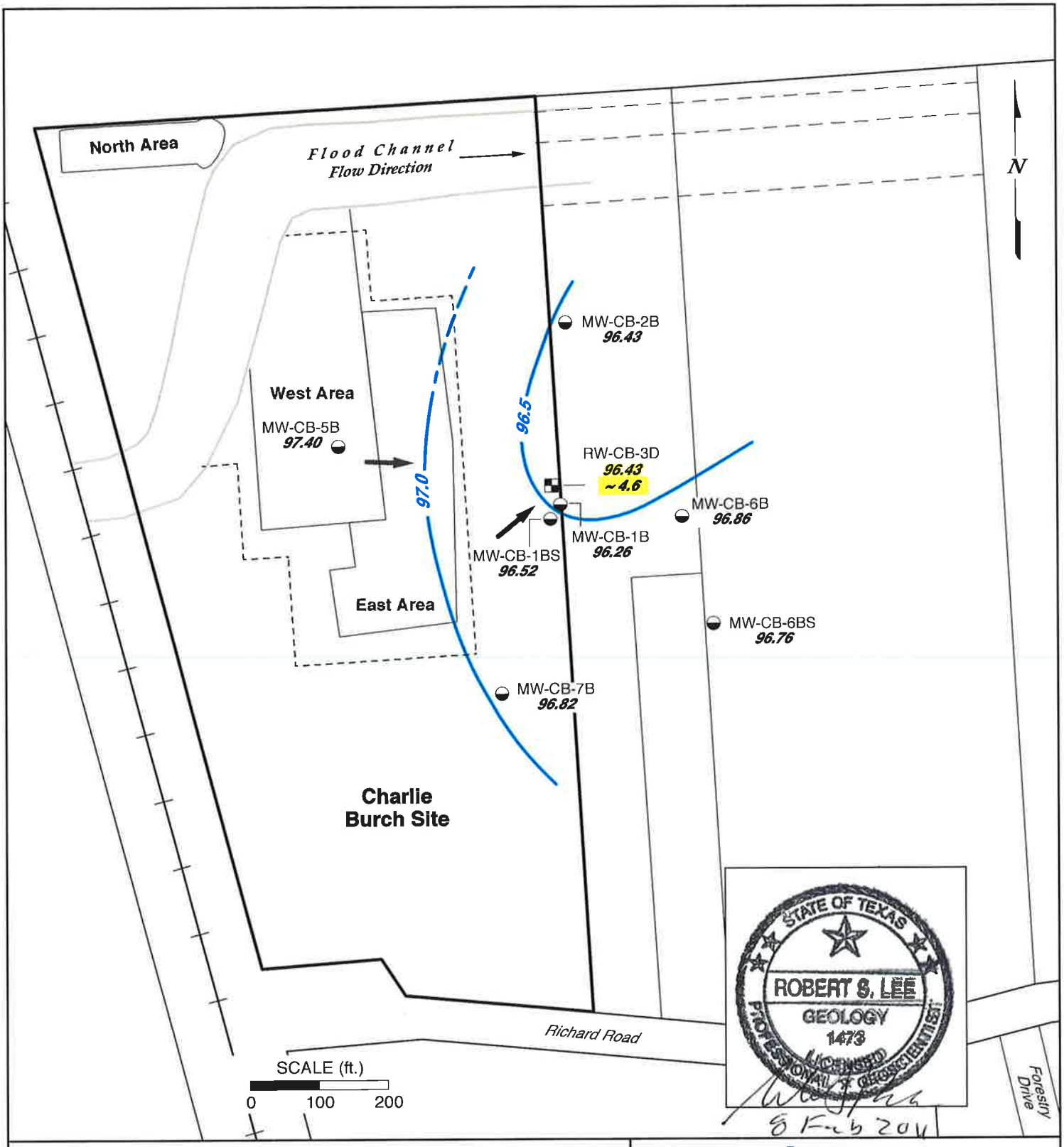
Revised:	———	Aprv'd By:	RSL
Scale:	As Shown		**FIGURE 4**

ZONE A POTENTIOMETRIC SURFACE CONTOURS: 18 OCTOBER 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421



LEGEND

- Monitoring well location (Zone B)
- Recovery well location (B)
- 96.82 — Potentiometric surface elevation (ft msl)
- 97.0 — Potentiometric surface contour (ft msl), dashed where inferred
- ~4.6 — Recovery well pumping rate in gallons per minute
- Direction of groundwater flow

Note: RW-CB-3D pumping at time of static water level survey.

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ZONE B
POTENTIOMETRIC SURFACE CONTOURS: 18 OCTOBER 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

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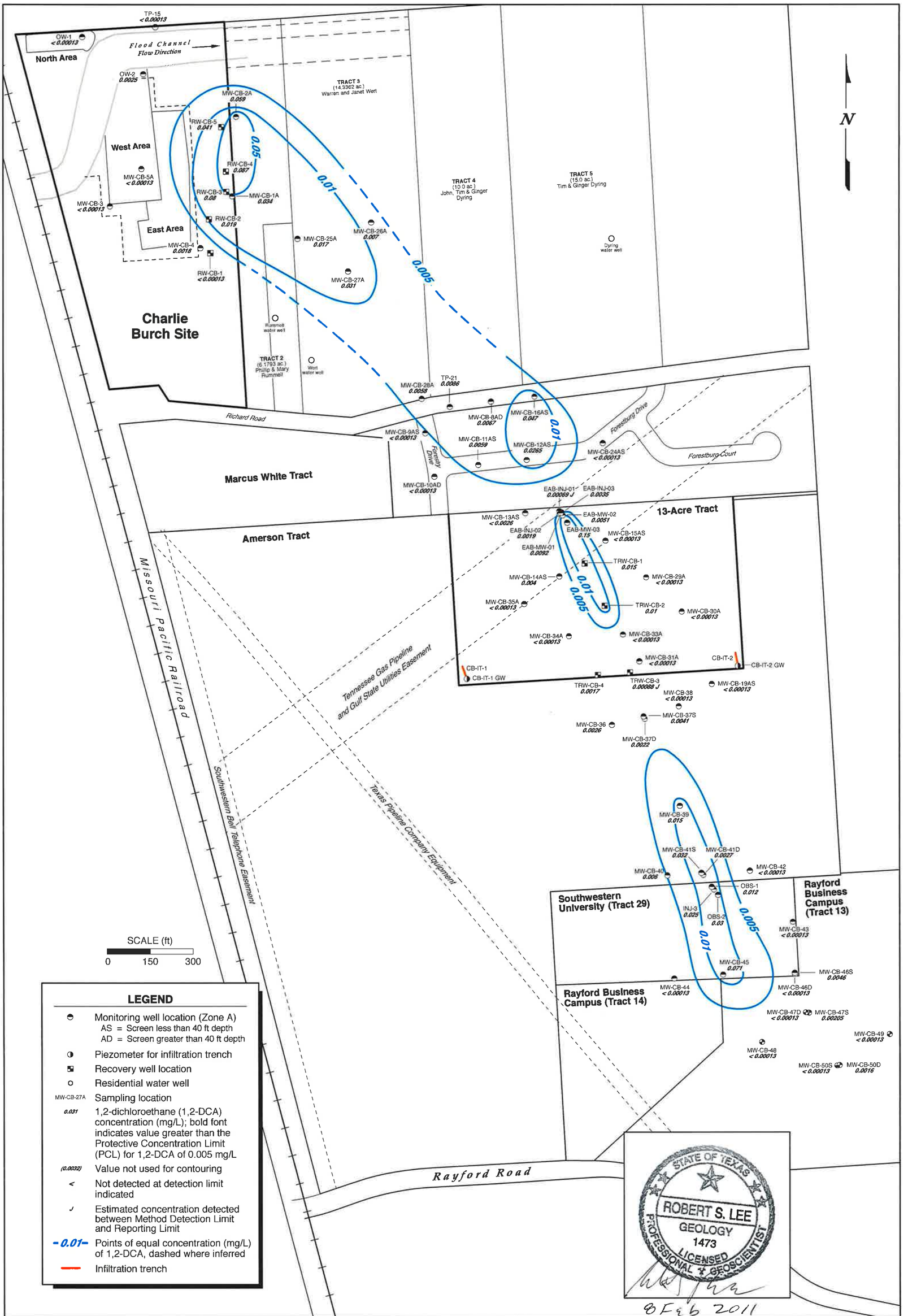
Revised:	———	Appv'd By:	RSL
Scale:	As Shown	**FIGURE 5**	



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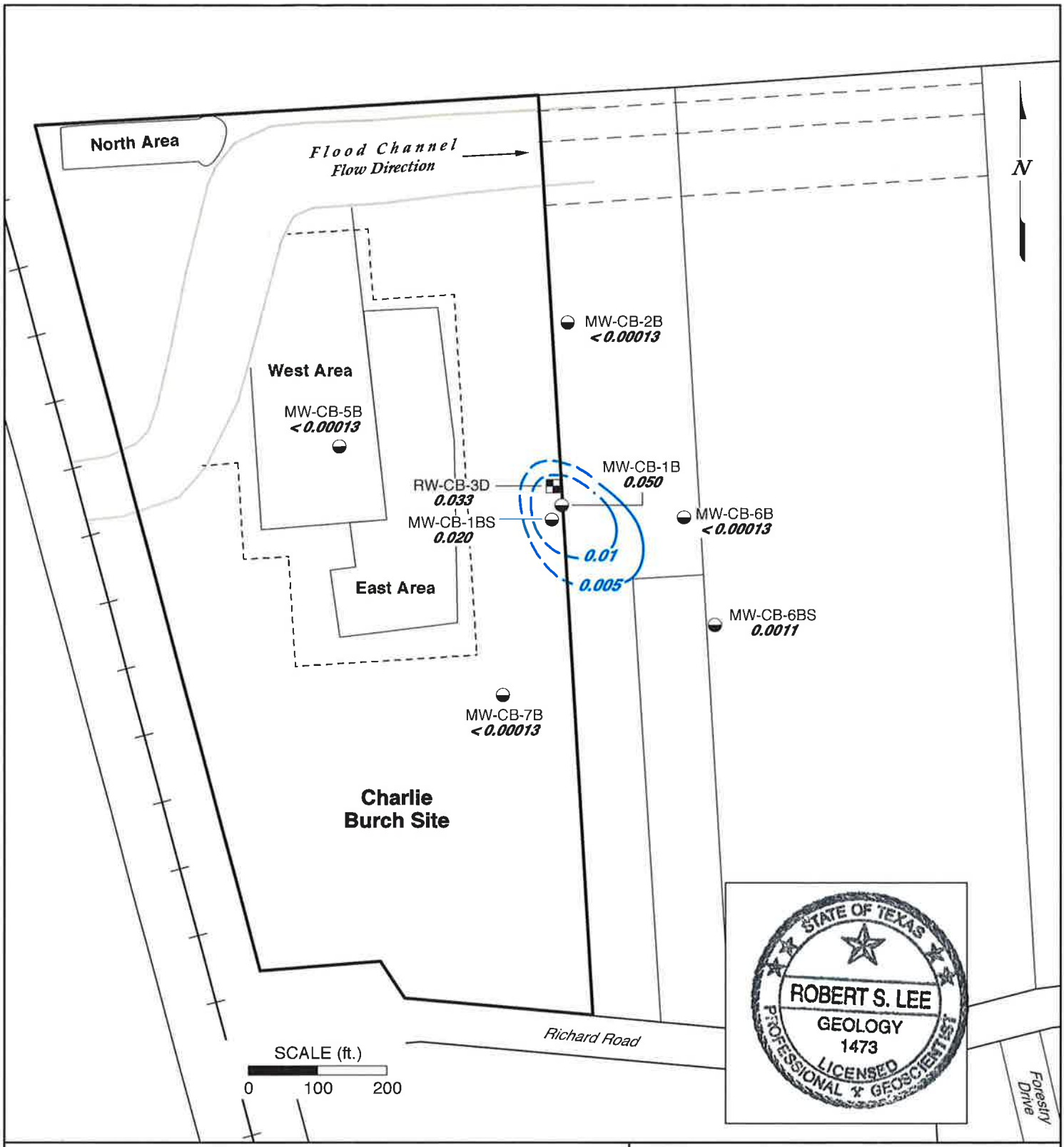
Revised:	———	Aprv'd By:	RSL
Scale:	As Shown		FIGURE 6

ZONE A 1,2-DCA CONCENTRATION ISOPLETH: OCTOBER 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421



LEGEND

- Monitoring well location (Zone B)
- Recovery well location (B)
- *0.050* Concentration of 1,2-dichloroethane (DCA), mg/L
- *– 0.005 –* Points of equal concentration of 1,2-DCA, dashed where inferred

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Texas Registration Number: F-1198

ZONE B
1,2-DCA CONCENTRATION ISOPLETH: OCTOBER 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

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Scale:	As Shown	**FIGURE 7**	

GSI Job No. G-3516
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2010 GROUNDWATER MONITORING REPORT

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

APPENDICES

Appendix A 2010 Status Report: Source Area Groundwater Remediation System
Appendix B 2010 Semi-Annual Status Reports: Class V Aquifer Remediation Injection Wells
Appendix C Laboratory Reports

GSI Job No. G-3516
Issued: 21 February 2011

APPENDIX A
2010 STATUS REPORT:
SOURCE AREA GROUNDWATER REMEDIATION SYSTEM

2010 Groundwater Monitoring Report

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

APPENDIX A
2010 STATUS REPORT:
SOURCE AREA GROUNDWATER REMEDIATION SYSTEM

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

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A.1.2 Report Objectives A-1
A.2 DESCRIPTION OF SOURCE AREA GROUNDWATER RECOVERY AND TREATMENT SYSTEM A-1
A.2.1 System Description A-1
A.2.2 Air and Water Discharge Criteria A-2
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A.3.2 Groundwater Recovery Volume A-5
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Table A.2 Results of Groundwater Testing: Average Concentration of Indicator Parameters in Recovery Wells
Table A.3 Comparison of Estimated Air Discharge from Air Stripper to Limits under Standard Exemption 30 TAC 106.262
Table A.4 Recovery System Inspection Results
Table A.5 Daily pH Measurement Results: January – December 2010

Figures

Figure A.1 Site Plan: Source Area Groundwater Remediation System
Figure A.2 Process Flow Diagram: Groundwater Recovery and Treatment System

A.1 INTRODUCTION

A.1.1 Site Description

A description of the Charlie Burch site, including a summary of previous site investigation results, completed soil response actions, and on-going groundwater remediation and investigation is provided in the main body of this report. This appendix provides a summary of activities in 2010 related to the source area groundwater remediation system located at the downgradient (eastern) boundary of the source area of the Charlie Burch site (see Figure A.1).

A.1.2 Report Objectives

This appendix has been prepared to satisfy certain objectives of the "Response Action Workplan for Groundwater Remediation" (RAWP) which was submitted to the Texas Commission on Environmental Quality (TCEQ) on 8 October 1999, and approved on 10 November 1999. In part, the RAWP calls for documenting groundwater remediation system operations in an annual report which includes summary information regarding the total gallons of groundwater recovered as well as analytical results for treated and discharged groundwater.

A.2 DESCRIPTION OF SOURCE AREA GROUNDWATER RECOVERY AND TREATMENT SYSTEM

A.2.1 System Description

The locations of the on-site groundwater recovery wells and treatment system are shown on Figure A.1 and described below. A process flow diagram of the treatment system is shown on Figure A.2. The system includes the following major components:

- Five Zone A recovery wells (each approximately 65 ft deep) and one Zone B recovery well (approximately 101 ft deep), equipped with positive displacement pneumatically-powered pumps. The wells are equipped with sampling ports and pump cycle counters, and are enclosed within above-ground locked vaults.

- An air compressor and subsurface air line header to the six pumps;

- Sub-surface piping to convey recovered groundwater from the wells to an above-ground treatment system.

- A treatment system, including a stainless steel, multi-tray air stripper, which is equipped with sampling ports upstream and downstream of the air stripper to facilitate influent and effluent sample collection. A flow meter records total flow through the system from the six recovery wells.

- System controls consisting of sensors and a control panel with automated logic controls to shut off the system in the event of alarm conditions (e.g., low air pressure in the air stripper).

Following treatment, system effluent is discharged to an outfall at the flood control channel immediately north of the site.

A.2.2 Air and Water Discharge Criteria

A.2.2.1 Air Discharge Criteria

Rohm and Haas Texas Inc. (Rohm and Haas) submitted Documentation of Claim for Standard Exemptions TAC 106.533 and 106.262 to the TNRCC on 15 February 1999 for discharge to the air from operation of the groundwater remediation system. The TNRCC authorized the exemptions in a letter dated 23 March 1999 (Appendix F of RAWP).

A.2.2.2 Water Discharge Criteria

The treated groundwater is discharged to Flood Control Channel IIID, which is a constructed channel managed by the Montgomery County Drainage District No. 6. Rohm and Haas received permission to discharge treated water from the District (letter dated 20 January 1999, from Herman I. Little, Jr., to Rohm and Haas; Appendix D of RAWP). Authorization to discharge treated water to State waterways, with associated discharge criteria, was received from the TCEQ (letter dated 23 March 1999; Appendix E of RAWP). In an interoffice memorandum attached to a TCEQ letter dated 18 March 2002, the Industrial Permits Team of the TCEQ recommended changes to several of the effluent limits for the discharge (i.e., reductions for 2-butanone, ethyl methacrylate, methyl methacrylate; increases for acetone and 2,4-dimethylphenol; and a tighter range for pH).

Current principal key effluent limitations are summarized below:

- The daily average flow of effluent shall not exceed 170,000 gallons per day.

- Specified effluent limitations shall not be exceeded (see Table A.1). Current effluent limitations reflect the recommendations of the TCEQ interoffice memorandum dated 18 March 2002, including a pH between 6.0 and 9.0 standard units and modifications to effluent limits for 2-butanone, ethyl methacrylate, methyl methacrylate, acetone, and 2,4-dimethylphenol.

- Water discharge from the site shall be monitored at a minimum of once every two weeks for all listed parameters.

- Water discharge from the site shall be monitored daily for pH.

- Water discharge from the site shall not contain floating solids, visible oils or visible foam in other than trace amounts.

A.2.3 2010 Air Discharge Calculations

Previous estimates indicated that quantities of COCs to be discharged from the air stripper would be less than applicable limits. To verify previous findings, concentrations in recovered groundwater, as measured in samples collected in October 2010, have been used to estimate the current discharge of COCs to air. The five indicator parameters measured in groundwater collected from source area recovery wells included two VOCs (benzene and 1,2-dichloroethane [1,2-DCA]) and three SVOCs (aniline; o-cresol; and 2,4-dimethylphenol). Influent groundwater concentrations to the air stripper were estimated as the average of the detected values reported by the laboratory (see Table A.2). Two of the COCs, o-Cresol and 2,4-dimethylphenol, were not detected in any of the six groundwater recovery wells; therefore, air discharge calculations were completed for benzene, 1,2-DCA, and aniline.

Current calculations indicate that quantities of benzene, 1,2-DCA, and aniline discharged are far less than the maximum allowable emission rates. Input parameters, rationale for input values used to calculate emissions, and results are summarized on Table A.3. Discharge rates from the air stripper for benzene, 1,2-DCA, and aniline are three to six orders of magnitude below the respective maximum allowable emissions. Therefore, the air stripper system is in compliance with Standard Exemptions 106.533 and 106.262. The following table summarizes the maximum allowable emission rate and calculated emission from the air stripper for 1,2-DCA and aniline:

Constituent	Maximum Allowable Emission (lb/hr)	Calculated Emission from Air Stripper (lb/hr)
Benzene	4.6E-02	2.4E-06
1,2-DCA	6.2E-01	4.7E-04
Aniline	1.2E-01	2.9E-07

A.3 SYSTEM OPERATION, MAINTENANCE, AND SAMPLING

This section discusses system operation and maintenance during the period from January through December 2010.

A.3.1 System Operation and Maintenance

Site inspections were performed on a bi-weekly (once every two weeks) schedule. The inspection/monitoring program included the following elements during each bi-weekly visit:

- *System Inspection:* During inspection of the treatment system and recovery wells, the following parameters were recorded: i) pump pressures; ii) total pump cycle counts in each well; and iii) treatment system flow totals from the combined flow line upstream of the treatment system. Additional data was gathered during system

inspections as part of optimization efforts and further calibration of the site-wide groundwater model, which included: i) cycle volume of each pump; and ii) static water level of monitoring and recovery wells in the source area.

- *Effluent Monitoring:* An effluent water sample was collected from the treatment equipment and the sample was submitted to Test America Laboratories for laboratory analysis of the parameters listed on Table A.1.

Maintenance and operation issues encountered during the period of operation covered by this report include the following:

- *Buildup of iron oxide in air stripper:* Due to oxidation of naturally-occurring iron dissolved in the shallow groundwater, some iron oxide (rust) has precipitated and accumulated in the air stripper, on discharge piping leading to the outfall, and on rocks directly below the outfall. This accumulation of iron oxide does not currently represent an environmental concern. However, uncontrolled precipitation of iron oxide can restrict airflow and decrease treatment efficiency in the air stripper. Iron oxide precipitate in the air stripping system will continue to be monitored and cleaned with a high pressure water hose once per quarter, or more frequently as needed.

- *Temporary System Shutdowns:* System shutdowns of greater than 24-hrs occurred for the following reasons:

    i) No Electrical Supply: The system was not operating due to a blown fuse on the electrical supplier's power pole for the system during the period of 6 to 7 April 2010;
    ii) Air Compressor Maintenance: Routine maintenance was conducted on the air compressor, and the system was shut down during the period of 3 to 8 August 2010;
    iii) Metering Power Pole: The metering power pole was knocked down due to termite infestation and heavy winds, and the system was off-line from 7 to 17 September 2010. The power pole, meter, and fuses were replaced on 17 September 2010, and the system re-started the same day; and
    iv) Leaking Subsurface Piping: A leak was detected in the conveyance lines from RW-CB-3 and RW-CB-4 to the treatment system on 16 April 2010. RW-CB-3 and RW-CB-4 were shutdown immediately; however, the remaining recovery wells continued to operate. The system was shut down on 3 May 2010 to repair the leaking pipes.

- *Miscellaneous repairs:* Miscellaneous repairs made to the system during the January through December 2010 period include:
    - Routine maintenance of the air compressor,
    - Replacement of the in-line pH meter probe,
    - Replacement of pump cycle counter on recovery wells RW-CB-3 and RW-CB-5, and
    - Monthly mowing in the vicinity of the treatment system and system recovery wells.

- *Planned additional maintenance/repairs:* Maintenance items planned for 2011 include:
  - Annual air compressor maintenance and oil change, and
  - Removal of excess iron oxide from the air stripper on a quarterly basis.

A.3.2 Groundwater Recovery Volume

In 2010 Rohm and Haas continued to compare and evaluate the flow volumes between the flow totalizer at the treatment system and the estimated sum of the individual wells based on pump cycle. Comparison of these two values for flow measurements indicates that the totalizing flow meter on average read approximately 2 times less than the sum of the individual well values. This is considerably less than the 4.5 times discrepancy between the two values observed before the new flow meter was installed on 6 March 2009.

The totalizing flow meter indicated that approximately 117.7 million gallons of groundwater had been recovered from system start-up in 2000 to 23 December 2010, approximately 4.4 million gallons of which were recovered during 2010 (see Table A.4). In comparison, the total volume from individual wells was calculated to be approximately 8.1 million gallons during 2010. Rohm and Haas will continue to monitor the discrepancy between the two flow totals and evaluate whether any system modifications can be implemented to resolve the uncertainties.

A.3.3 Effluent Sampling Results

The results of effluent sample analyses are shown on Table A.4. As shown, all results from 2010 are significantly below applicable discharge criteria. During 2010, 1,2-DCA concentrations were well below both the daily average and daily maximum discharge limits of 1.1 mg/L and 2.4 mg/L, respectively (see Table A.1). Concentrations of 1,2-DCA in the effluent ranged from non-detect (<0.0011 mg/L) to 0.0049 J mg/L (see Table A.4). Water discharge from the site has not exhibited floating solids, visible oils, or visible foam. During 2010 the outfall pH never fell below 6.0 or rose above 9.0, with an average pH of 6.86 (see Table A.5)

A.3.4 Summary

The following objectives, originally discussed in the RAWP, have been met for the operation of the groundwater treatment system for 2010:

- *Capture Zone:* The treatment system continues to create a capture zone to prevent the further off-site migration of impacted groundwater by recovering impacted groundwater (see Section 4.1 in main text of this report).

- *Treatment Effectiveness:* The treatment system continues to operate and meet discharge standards listed in Table A.1 in accordance with the discharge permit.

APPENDIX A
2010 STATUS REPORT:
SOURCE AREA GROUNDWATER REMEDIATION SYSTEM

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

TABLES

Table A.1 Effluent Limitations for Discharge of Treated Water to Flood Control Channel IIID
Table A.2 Results of Groundwater Testing: Average Concentration of Indicator Parameters in Recovery Wells
Table A.3 Comparison of Estimated Air Discharge from Air Stripper to Limits under Standard Exemption 30 TAC 106.262
Table A.4 Recovery System Inspection Results
Table A.5 Daily pH Measurement Results: January – December 2010

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TABLE A.1
EFFLUENT LIMITATIONS FOR DISCHARGE OF TREATED WATER TO FLOOD CONTROL CHANNEL IIID

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

Pollutant	Daily Average mg/L	Daily Maximum mg/L
1,2-Dichloroethane	1.1	2.4
2-Butanone	214	453
Acetone	512	711
Benzene	—	0.05
BTEX (benzene, toluene, ethylbenzene, and xylene)	—	0.5
Ethyl Methacrylate	58.7	124
Methyl Methacrylate	58.7	124
Isobutanol	297	629
2,4-Dimethylphenol	1.7	3.6
Cresols, Total	944	1998
pH	Maintain between 6 and 9 standard units	

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TABLE A.2
RESULTS OF GROUNDWATER TESTING:
AVERAGE CONCENTRATION OF INDICATOR PARAMETERS IN RECOVERY WELLS

Sampling Period: 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	Zone A							***Zone B***
SAMPLE LOCATION	RW-CB-1	RW-CB-2	RW-CB-2 DUP	RW-CB-2 Avg	RW-CB-3	RW-CB-4	RW-CB-5	RW-CB-3D
DATE SAMPLED	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010
DATE ANALYZED	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010
SCREENED INTERVAL (ft bgs)	33-62.6	36.65-66.6	36.65-66.6	36.65-66.6	38.3-67.9	37.5-67.1	36.3-65.9	71.4-101.0
ANALYTE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds								
Benzene	<0.00013	**0.00023 J**	**0.00024 J**	**0.00024 J**	<0.00013	**0.00022 J**	**0.00036 J**	<0.00013
Dichloroethane, 1,2-	<0.00013	**0.019**	**0.019**	**0.019**	**0.080**	**0.087**	**0.041**	**0.033**
Semivolatile Organic Compounds								
Aniline	<0.000079	<0.000079	<0.000079	<0.000079	<0.000079	**0.00064 J**	<0.000079	<0.000079
Cresol, o-	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
Dimethylphenol, 2,4-	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031

	Summary Statistics						
	No. of Samples	No. of Detects	Minimum	Maximum	Average	Standard Deviation	COV
ANALYTE	—	—	mg/L	mg/L	mg/L	mg/L	—
Volatile Organic Compounds							
Benzene	6	3	0.00022 J	0.00036 J	0.00027	0.00008	0.29
Dichloroethane, 1,2-	6	5	0.019	0.087	0.052	0.030	0.58
Semivolatile Organic Compounds							
Aniline	6	1	0.00064 J	0.00064 J	0.00064	0.00010	0.2
Cresol, o-	6	0	—	—	—	—	—
Dimethylphenol, 2,4-	6	0	—	—	—	—	—

Notes:

1. Groundwater samples collected at the locations shown on Figure A.1.
2. Samples analyzed in accordance with U.S. EPA Methods 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds) by TestAmerica, Houston Texas.
3. Bold type indicates a detection greater than the sample quantitation limit.
4. J = Estimated result. Analyte positively identified but detected at a concentration less than the lowest calibration standard.
   — = Value could not be calculated.
5. Summary statistics calculated using average value for RW-CB-2.

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TABLE A.3
COMPARISON OF ESTIMATED AIR DISCHARGE FROM AIR STRIPPER TO LIMITS UNDER STANDARD EXEMPTION 30 TAC 106.262

Sampling Period: 22 October 2010

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

	CALCULATION OF ALLOWABLE EMISSIONS			***CALCULATION OF ESTIMATED EMISSIONS***				
Analyte	**Limit Value (L) for Standard Exemption 106.262 (mg/m^3)**	**K —**	**Maximum Allowable Emission (E) (lb/hr)**	**Estimated Concentration in GW 10/10 (mg/L)**	**Estimated GW Flow Rate (gpm)**	**Fraction Discharged Into Air (%)**	**Calculated Emission from Air Stripper (lb/hr)**	**Calculated Emission Less Than Allowable (E)?**
Volatile Organic Compounds (VOCs)								
Benzene	3	65	4.6E-02	2.7E-04	18	100%	2.4E-06	YES
Dichloroethane, 1,2	40	65	6.2E-01	5.2E-02	18	100%	4.7E-04	YES
Semivolatile Organic Compounds (SVOCs)								
Aniline	7.6	65	1.2E-01	6.4E-04	18	5%	2.9E-07	YES
Cresol, o-	0.12	65	1.8E-03	ND	18	5%	—	—
Dimethylphenol, 2,4-	45	65	6.9E-01	ND	18	5%	—	—

Notes:

1. Limit Values obtained from the following sources:
   a. Benzene: Figure 2 [30 TAC 106.262(a)(2)].
   b. O-cresol: Outdated Exemption List, Subchapter K - 11/26/97 (GSI, "Documentation of Claim for Standard Exemptions 106.533 and 106.262 for Soil and Groundwater Remediation Project," Charlie Burch Site, Rohm and Haas Texas, Inc., 2/15/99). Note that current rule lists 0.5 as the Limit Value for o-cresol.
   c. 1,2-dichloroethane and aniline: time-weighted average Threshold Limit Value (ACGIH, "TLVs and BEIs, 1997).
   d. 2,4-dimethylphenol: time-weighted average Threshold Limit Value (U.S. Coast Guard, "Chemical Hazards Response Information System, Hazardous Chemical Data Manual," Commandant Instruction M16465.12B, 1997).
2. Maximum allowable emission (E) calculated in accordance with 30 TAC 106.262 as E= L/K, where K obtained from Figure 1, 30 TAC 106.262(a)(2) based on distance to nearest off-site receptor of 600 ft.
3. Estimated concentration in groundwater based on samples collected during October 2010. Estimated concentration represents average of concentrations from the six recovery wells whose flow is routed to the air stripper. For values less than detection limit, concentration of the analyte was assumed to be zero for calculating the average value (see Table A.2).
4. Air stripper removal efficiency estimated as 100% of VOCs and 5% of SVOCs (GSI, "Documentation of Claim for Standard Exemptions 106.533 and 106.262 for Soil and Groundwater Remediation Project," Charlie Burch Site, Rohm and Haas, Spring, Texas, 2/15/99).
5. Groundwater flowrate is an average of the system pumping rate calculated during 2010 (see Table A.4).
6. ND = constituent not detected in any groundwater sample from recovery wells.
   — = Value could not be calculated.

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TABLE A.4
RECOVERY SYSTEM INSPECTION RESULTS

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, VCP No. 421

		Daily Effluent Limitation														
	Units	Avg	Max	1/6/10	1/22/10	2/5/10	2/19/10	3/5/10	3/19/10	4/1/10	4/16/10	4/30/10	5/14/10	5/28/10	6/11/10	6/25/10
Field Measurements																
Instrument Readings																
Flow Totalizer	gal	-	170,000	113,333,588	113,540,754	113,585,739	113,837,883	114,095,437	114,275,037	114,482,039	114,705,120	114,978,842	115,105,067	115,323,617	115,529,969	115,739,982
Flow Totalizer Rate	gpm	-	-	15	3	18	23	25	25	20	27	22	22	19	10	13
RW-CB-1 Counter	cycles	-	-	908,018	910,808	750	5,176	8,715	73,727	75,593	77,852	77,873	151,762	230,149	258,219	338,737
RW-CB-2 Counter	cycles	-	-	439,210	439,210	466,101	623,861	787,677	951,847	108,509	227,809	399,240	550,069	681,494	811,331	956,175
RW-CB-3 Counter	cycles	-	-	675,168	856,152	856,152	8,088	166,790	329,663	412,146	413,209	413,209	413,413	551,515	646,834	795,707
RW-CB-3D Counter	cycles	-	-	561,904	791,996	809,565	82,104	272,803	457,999	629,984	757,717	938,948	114,873	270,403	418,409	597,865
RW-CB-4 Counter	cycles	-	-	783,343	866,519	978,402	978,402	24,271	81,417	131,249	131,885	131,885	176,798	232,855	285,958	346,558
RW-CB-5 Counter	cycles	-	-	172,291	174,241	175,554	175,643	176,903	201	231,586	407,743	659,088	919,965	170,813	411,559	707,491
Calculated Flow Volumes																
Total System - Totalizer	gal	-	-	189,656	207,166	44,985	252,144	257,554	179,600	207,002	223,081	273,722	126,225	218,550	206,352	210,013
Total System - Pump Sum	gal	-	-	335,299	240,137	179,897	282,954	278,523	374,860	376,854	239,355	334,490	286,662	400,458	399,382	472,499
Flow Volume Variance	**gal**	**-**	**-**	**-145,643**	**-32,971**	**-134,912**	**-30,810**	**-20,969**	**-195,260**	**-169,852**	**-16,274**	**-60,768**	**-160,437**	**-181,908**	**-193,030**	**-262,486**
RW-CB-1	gal	-	-	115,682	3,320	95,069	4,692	3,751	68,913	1,978	2,395	22	35,171	37,312	16,028	45,976
RW-CB-2	gal	-	-	33,452	0	20,330	116,742	112,869	112,785	101,047	81,959	115,887	95,626	86,741	80,239	94,149
RW-CB-3	gal	-	-	45,379	59,363	0	3,124	65,385	61,892	31,344	404	0	119	94,876	65,961	96,767
RW-CB-3D	gal	-	-	106,634	136,214	10,032	158,345	68,461	97,783	99,923	76,895	97,684	92,888	82,120	79,035	98,701
RW-CB-4	gal	-	-	33,644	39,592	53,704	0	27,384	33,488	28,952	370	0	21,379	33,186	28,357	33,330
RW-CB-5	gal	-	-	508	1,648	763	52	673	NM	113,610	77,333	120,897	41,479	66,224	129,762	103,576
Measured Cycles per Minutes																
RW-CB-1	cycles/min	-	-	1	0	3	2	1	2	1	2	1	6	2	5	6
RW-CB-2	cycles/min	-	-	11	NM	8	8	8	8	8	9	8	8	7	7	8
RW-CB-3	cycles/min	-	-	7	7	7	7	7	6	NM	NM	NM	7	7	7	8
RW-CB-3D	cycles/min	-	-	10	10	9	10	9	9	9	9	9	9	9	8	9
RW-CB-4	cycles/min	-	-	3	4	NM	NM	3	2	3	NM	NM	3	3	3	4
RW-CB-5	cycles/min	-	-	7	6	11	12	12	12	12	12	13	13	14	14	15
Measured Cycle Volume																
RW-CB-1	gal/cycle	-	-	NM	NM	1.06	1.06	NM	NM	NM	NM	NM	0.48	NM	0.57	NM
RW-CB-2	gal/cycle	-	-	0.16	0.00	0.76	0.74	0.69	0.69	0.65	0.69	0.68	0.63	0.66	0.62	0.65
RW-CB-3	gal/cycle	-	-	0.28	0.33	0.37	0.40	0.41	0.38	NM	NM	NM	0.58	0.69	0.69	0.65
RW-CB-3D	gal/cycle	-	-	0.53	0.59	0.57	0.58	0.36	0.53	0.58	0.60	0.54	0.53	0.53	0.53	0.55
RW-CB-4	gal/cycle	-	-	0.48	0.48	0.48	NM	0.60	0.59	0.58	NM	NM	0.48	0.59	0.53	0.55
RW-CB-5	gal/cycle	-	-	0.11	0.85	0.58	0.58	0.53	0.52	0.49	0.44	0.48	0.16	0.26	0.54	0.35
Pump Operating Pressures																
RW-CB-1	psig	-	-	40	50	55	50	50	50	50	55	60	55	55	55	55
RW-CB-2	psig	-	-	100	0	100	100	100	100	100	100	100	100	100	100	100
RW-CB-3	psig	-	-	100	100	100	100	100	100	NM	NM	NM	100	100	100	100
RW-CB-3D	psig	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100
RW-CB-4	psig	-	-	50	60	NM	NM	50	50	50	NM	NM	60	60	60	60
RW-CB-5	psig	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100
Calculated Flow Rates																
Total System - Totalizer	gpm	-	118	9.4	9.0	2.2	12.5	12.8	8.9	11.1	11.9	13.6	6.7	11.7	11.0	10.4
Total System - Pump Sum	gpm	-	-	16.6	10.4	8.9	14.0	13.8	18.6	20.1	12.8	16.6	15.3	21.4	23.1	23.4
Flow Rate Variance	**gpm**	**-**	**-**	**-7.2**	**-1.4**	**-6.7**	**-1.5**	**-1.0**	**-9.7**	**-9.1**	**-0.9**	**-3.0**	**-8.6**	**-9.7**	**-12.1**	**-13.0**
RW-CB-1	gpm	-	-	5.7	0.1	4.7	0.2	0.2	3.4	0.1	0.1	0.0	1.9	2.0	0.9	2.3
RW-CB-2	gpm	-	-	1.7	0.0	1.0	5.8	5.6	5.6	5.4	4.4	5.7	5.1	4.6	4.6	4.7
RW-CB-3	gpm	-	-	2.3	2.6	0.0	0.2	3.2	3.1	1.7	0.0	0.0	0.0	5.1	3.8	4.8
RW-CB-3D	gpm	-	-	5.3	5.9	0.5	7.9	3.4	4.9	5.3	4.1	4.8	5.0	4.4	4.6	4.9
RW-CB-4	gpm	-	-	1.7	1.7	2.7	0.0	1.4	1.7	1.5	0.0	0.0	1.1	1.8	1.6	1.7
RW-CB-5	gpm	-	-	0.0	0.1	0.0	0.0	0.0	NC	6.1	4.1	6.0	2.2	3.5	7.5	5.1

GSI ENVIRONMENTAL

TABLE A.4
RECOVERY SYSTEM INSPECTION RESULTS

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, VCP No. 421

		Daily Effluent Limitation														
	Units	Avg	Max	1/6/10	1/22/10	2/5/10	2/19/10	3/5/10	3/19/10	4/1/10	4/16/10	4/30/10	5/14/10	5/28/10	6/11/10	6/25/10
Field Measurements - Continued																
Static Water Level																
RW-CB-1	ft, MSL	-	-	100.04	99.54	95.94	93.08	95.89	95.89	90.94	97.82	96.71	68.78	92.19	84.84	90.44
RW-CB-2	ft, MSL	-	-	87.55	NM	83.01	77.89	78.13	77.11	76.93	81.91	76.88	67.35	69.96	72.41	77.75
RW-CB-3	ft, MSL	-	-	95.76	98.96	91.21	94.29	94.23	96.19	NM	NM	96.00	75.91	77.24	76.44	76.94
RW-CB-3D	ft, MSL	-	-	95.73	96.13	96.76	96.57	96.60	96.35	96.53	96.75	97.15	96.17	96.10	97.96	95.90
RW-CB-4	ft, MSL	-	-	80.49	82.75	NM	NM	73.87	81.25	85.25	NM	99.12	65.09	74.86	69.90	79.02
RW-CB-5	ft, MSL	-	-	97.83	96.90	88.03	87.54	87.47	89.15	86.88	87.83	86.80	89.80	91.17	91.28	92.00
Field Analysis of Treated Effluent																
pH (Outfall)	std units	6 > pH > 9		8.28	7.54	7.65	6.68	7.20	6.85	7.39	7.69	7.56	6.85	7.24	7.25	7.34
pH (10' upstream)	std units	-	-	7.95	7.68	7.65	8.81	8.17	7.85	8.25	7.85	8.95	8.13	7.58	8.13	7.80
pH (30' downstream)	std units	-	-	7.89	7.93	7.61	8.55	8.38	7.80	8.10	7.93	8.86	8.25	7.63	8.15	7.69
Analysis of System Effluent																
Volatile Organic Compounds																
1,2-Dichoroethane	mg/L	1.1	2.4	<0.0011	<0.0011	0.0011 J	0.002 J	0.0028 J	0.0026 J	<0.0011	0.0015 J	0.0014 J	0.0042 J	0.0011 J	0.004	0.0033 J
2-Butanone	mg/L	214	453	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.00076	<0.0016
Benzene	mg/L	-	0.05	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.00013	<0.0011
Acetone	mg/L	512	711	<0.0014	<0.0014	0.0054 J	<0.0014	0.0015 J	<0.0014	<0.0014	0.0035 J	0.0019 J	0.0019 J	0.0049 J	0.0059 J	<0.0014
Toluene	mg/L	-	0.5	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0014	<0.0010
Ethylbenzene	mg/L	-	0.5	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00013	<0.00092
Xylenes	mg/L	-	0.5	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00032	<0.00095
Isobutanol	mg/L	297	629	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.0041	<0.016
Ethyl Methacrylate	mg/L	58.7	124	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.00021	<0.0019
Methyl Methacrylate	mg/L	58.7	124	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.00033	<0.0014
Semi-Volatile Organic Compounds																
Cresols, Total	mg/L	944	1998	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
2,4-Dimethylphenol	mg/L	1.7	3.6	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Analysis of System Influent																
Volatile Organic Compounds																
1,2-Dichoroethane	mg/L	-	-	0.027	NM	NM	NM	NM	NM	0.027	NM	NM	NM	NM	NM	NM

Notes:

1. Cyles counters reset to zero after reaching 1 million.
2. Samples analyzed by Test America Laboratories (TA), Houston, Texas, in accordance with the follow USEPA SW-846 methods; volatile organic compounds (VOCs) by Method 8260B and semi-volatile organic compounds (SVOCs) by Method 8270C.
3. Flow calculations:
   a. Total system flow volume (Totalizer) = current flow totalizer reading - previous flow totalizer reading.
   b. Well flow volume = (current cycle count - previous cycle count) * measured cycle volume in units of gal/cycle.
   c. Well flow rate = Well flow volume/ [(current date - previous date) * (1440 min/day)].
   d. System flow rate (Totalizer) = (current flow totalizer reading - previous flow totalizer reading)/[(current date - previous date)*1440 min/day]
4. Note that the summed flow volume and flow rate from the individual wells does not correspond to the totalizer volume and flow rate due to uncertainties in flow measurements and differences in instrumentation.
5. The volume per pump cycle count was used to calculate the system total flow and flow rate.
6. J = Estimated concentration; constituent detected between the Method Detection Limit and the Report Limit.
   NM = Not measured; NC = Value could not be calculated; - = No effluent limitation value specified.
7. Maintenance activities or power outages resulting in system downtime or decreased system flow:
   a. System was not operating on 4/6/10 and 4/7/10 due to power outage caused by a blown fuse on the Center Point Energy power pole for the system.
   b. Pump RW-CB-3 was off-line from 4/1/10 to 5/3/10 due to iron fouling clogging the discharge pipe. RW-CB-4 was off-line from 4/16/10 to 5/3/10 due to iron fouling clogging the discharge pipe.
   c. System was shutdown on 5/3/10 to replace discharge pipe at RW-CB-3 and -4.
   d. System was not operating from 8/3/10 to 8/8/10 due to air compressor maintenance.
8. The flow counter for RW-CB-3 was replaced on 2/19/10. The flow counter for RW-CB-5 was replaced on 3/19/10.
9. The metering power pole was down from 9/7/10 to 9/17/10. The system did not have power and was off-line during this time period; therefore, no inspection was conducted on 9/17/10.

GSI ENVIRONMENTAL

TABLE A.4
RECOVERY SYSTEM INSPECTION RESULTS

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, VCP No. 421

		Daily Effluent Limitation													
	Units	Avg	Max	7/9/10	7/23/10	8/6/10	8/20/10	9/3/10	10/1/10	10/15/10	10/29/10	11/12/10	11/23/10	12/10/10	12/23/10
Field Measurements															
Instrument Readings															
Flow Totalizer	gal	-	170,000	115,946,208	116,104,171	116,215,983	116,365,694	116,598,349	116,799,671	117,039,013	117,107,652	117,262,783	117,409,683	117,583,208	117,744,612
Flow Totalizer Rate	gpm	-	-	30	25	15	12	10	10	20	20	20	20	10	8.5
RW-CB-1 Counter	cycles	-	-	341,931	351,987	354,068	409,487	509,640	617,313	671,856	686,737	703,717	778,779	841,447	939,228
RW-CB-2 Counter	cycles	-	-	65,616	195,028	255,262	357,085	499,986	631,881	763,157	906,627	975,412	103,264	296,555	424,555
RW-CB-3 Counter	cycles	-	-	905,683	32,231	85,422	189,069	320,250	460,713	606,037	757,987	820,660	942,786	123,730	260,780
RW-CB-3D Counter	cycles	-	-	724,437	871,927	930,311	49,257	217,244	392,239	560,244	725,147	792,096	930,786	136,138	301,777
RW-CB-4 Counter	cycles	-	-	391,826	433,484	456,271	499,457	553,929	620,730	682,492	744,067	769,641	819,377	890,225	947,676
RW-CB-5 Counter	cycles	-	-	917,624	160,352	222,696	452,944	725,382	3,263	267,456	483,109	536,265	666,908	885,625	24,685
Calculated Flow Volumes															
Total System - Totalizer	gal	-	-	206,226	157,963	111,812	149,711	232,655	201,322	239,342	68,639	155,131	146,900	173,525	161,404
Total System - Pump Sum	gal	-	-	311,419	344,336	139,036	320,577	432,287	391,196	388,999	361,048	148,513	320,492	452,146	348,606
Flow Volume Variance	**gal**	**-**	**-**	**-105,193**	**-186,373**	**-27,224**	**-170,866**	**-199,632**	**-189,874**	**-149,657**	**-292,409**	**6,618**	**-173,592**	**-278,621**	**-187,202**
RW-CB-1	gal	-	-	1,824	5,742	1,188	33,251	50,077	59,220	29,999	8,929	10,188	41,284	31,334	48,891
RW-CB-2	gal	-	-	71,137	90,588	42,164	50,912	92,886	85,732	85,329	93,256	41,271	83,104	125,639	76,800
RW-CB-3	gal	-	-	65,986	88,584	37,234	62,188	78,709	84,278	94,461	91,170	37,604	73,276	99,519	82,230
RW-CB-3D	gal	-	-	82,272	73,745	29,192	65,420	92,393	76,998	92,403	90,697	33,475	69,345	112,944	91,101
RW-CB-4	gal	-	-	27,161	24,995	13,672	39,731	50,114	29,392	33,969	33,866	15,344	27,355	38,966	28,726
RW-CB-5	gal	-	-	63,040	60,682	15,586	69,074	68,110	55,576	52,839	43,131	10,631	26,129	43,743	20,859
Measured Cycles per Minutes															
RW-CB-1	cycles/min	-	-	6	1	NM	6	5	5	1	1	5	5	5	5
RW-CB-2	cycles/min	-	-	8	7	NM	9	7	7	7	6	7	6	7	6
RW-CB-3	cycles/min	-	-	7	7	NM	9	7	7	7	8	7	8	6	7
RW-CB-3D	cycles/min	-	-	9	8	NM	9	8	8	9	8	8	8	7	9
RW-CB-4	cycles/min	-	-	3	4	NM	3	4	5	2	3	3	3	3	3
RW-CB-5	cycles/min	-	-	10	11	NM	14	14	12	13	12	13	12	13	12
Measured Cycle Volume															
RW-CB-1	gal/cycle	-	-	NM	NM	NM	0.60	0.50	0.55	0.55	0.60	0.60	0.55	0.50	0.50
RW-CB-2	gal/cycle	-	-	0.65	0.70	NM	0.50	0.65	0.65	0.65	0.65	0.60	0.65	0.65	0.60
RW-CB-3	gal/cycle	-	-	0.60	0.70	NM	0.60	0.60	0.60	0.65	0.60	0.60	0.60	0.55	0.60
RW-CB-3D	gal/cycle	-	-	0.65	0.50	NM	0.55	0.55	0.44	0.55	0.55	0.50	0.50	0.55	0.55
RW-CB-4	gal/cycle	-	-	0.60	0.60	NM	0.92	NM	0.44	0.55	0.55	0.60	0.55	0.55	0.50
RW-CB-5	gal/cycle	-	-	0.30	0.25	NM	0.30	0.25	0.20	0.20	0.20	0.20	0.20	0.20	0.15
Pump Operating Pressures															
RW-CB-1	psig	-	-	60	55	NM	55	55	55	50	50	55	55	55	60
RW-CB-2	psig	-	-	100	100	NM	100	100	95	90	95	100	100	100	100
RW-CB-3	psig	-	-	100	100	NM	100	100	100	100	100	100	100	100	100
RW-CB-3D	psig	-	-	100	100	NM	100	100	100	100	100	100	100	100	100
RW-CB-4	psig	-	-	55	60	NM	60	55	50	55	60	60	60	60	60
RW-CB-5	psig	-	-	100	100	NM	100	100	100	100	100	100	100	100	100
Calculated Flow Rates															
Total System - Totalizer	gpm	-	118	13.0	9.1	9.7	10.4	16.2	8.2	11.9	3.4	7.7	8.5	7.1	6.6
Total System - Pump Sum	gpm	-	-	19.7	19.9	8.0	22.3	21.4	16.0	19.3	17.9	9.4	18.5	18.5	18.6
Flow Rate Variance	**gpm**	**-**	**-**	**-6.6**	**-10.8**	**1.7**	**-11.9**	**-5.3**	**-7.8**	**-7.4**	**-14.5**	**-1.7**	**-10.0**	**-11.4**	**-12.0**
RW-CB-1	gpm	-	-	0.1	0.3	0.1	2.3	2.5	2.4	1.5	0.4	0.6	2.4	1.3	2.6
RW-CB-2	gpm	-	-	4.5	5.2	2.4	3.5	4.6	3.5	4.2	4.6	2.6	4.8	5.1	4.1
RW-CB-3	gpm	-	-	4.2	5.1	2.2	4.3	3.9	3.4	4.7	4.5	2.4	4.2	4.1	4.4
RW-CB-3D	gpm	-	-	5.2	4.3	1.7	4.5	4.6	3.1	4.6	4.5	2.1	4.0	4.6	4.9
RW-CB-4	gpm	-	-	1.7	1.4	0.8	2.8	2.5	1.2	1.7	1.7	1.0	1.6	1.6	1.5
RW-CB-5	gpm	-	-	4.0	3.5	0.9	4.8	3.4	2.3	2.6	2.1	0.7	1.5	1.8	1.1

TABLE A.4
RECOVERY SYSTEM INSPECTION RESULTS

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, VCP No. 421

	Units	Daily Effluent Limitation Avg	Daily Effluent Limitation Max	7/9/10	7/23/10	8/6/10	8/20/10	9/3/10	10/1/10	10/15/10	10/29/10	11/12/10	11/23/10	12/10/10	12/23/10
Field Measurements - Continued															
Static Water Level															
RW-CB-1	ft, MSL	-	-	87.00	95.31	NM	84.68	81.84	80.04	93.69	86.62	72.66	84.14	84.83	82.65
RW-CB-2	ft, MSL	-	-	69.53	74.81	NM	81.29	67.45	80.91	71.96	68.25	76.11	73.55	72.44	78.46
RW-CB-3	ft, MSL	-	-	77.33	76.48	NM	82.17	76.29	74.99	76.79	76.79	76.39	76.33	75.67	78.12
RW-CB-3D	ft, MSL	-	-	96.40	96.32	NM	96.94	94.03	95.70	95.33	94.60	96.35	95.26	94.47	94.43
RW-CB-4	ft, MSL	-	-	76.90	86.97	NM	82.55	83.30	78.62	73.00	76.92	77.09	78.52	77.50	77.21
RW-CB-5	ft, MSL	-	-	91.63	93.73	NM	93.89	94.20	94.83	94.98	96.27	97.23	99.13	95.93	98.60
Field Analysis of Treated Effluent															
pH (Outfall)	std units	6 > pH > 9		7.35	7.25	7.25	7.02	7.41	7.72	7.05	7.33	7.63	7.12	7.12	7.62
pH (10' upstream)	std units	-	-	7.54	8.13	7.84	7.98	7.89	8.13	8.15	8.13	8.20	7.84	7.84	7.68
pH (30' downstream)	std units	-	-	7.24	8.07	7.75	8.08	7.93	8.12	8.10	8.08	8.10	7.79	7.79	7.33
Analysis of System Effluent															
Volatile Organic Compounds															
1,2-Dichoroethane	mg/L	1.1	2.4	0.0041 J	<0.0011	0.0031 J	0.0049 J	0.0021 J	0.0031 J	<0.0011	0.0021 J	<0.0011	0.0027 J	0.0022 J	<0.0011
2-Butanone	mg/L	214	453	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Benzene	mg/L	-	0.05	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
Acetone	mg/L	512	711	0.0016 J	<0.0014	<0.0014	0.0042 J	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Toluene	mg/L	-	0.5	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0027 J	<0.0010	<0.0010	<0.0010
Ethylbenzene	mg/L	-	0.5	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092
Xylenes	mg/L	-	0.5	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095
Isobutanol	mg/L	297	629	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Ethyl Methacrylate	mg/L	58.7	124	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019
Methyl Methacrylate	mg/L	58.7	124	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Semi-Volatile Organic Compounds															
Cresols, Total	mg/L	944	1998	<0.00020	<0.00020	<0.00019	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
2,4-Dimethylphenol	mg/L	1.7	3.6	<0.00031	<0.00031	<0.00030	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
Analysis of System Influent															
Volatile Organic Compounds															
1,2-Dichoroethane	mg/L	-	-	0.040	NM	NM	NM	NM	NM	0.036	NM	NM	NM	NM	NM

Notes:

1. Cyles counters reset to zero after reaching 1 million.
2. Samples analyzed by Test America Laboratories (TA), Houston, Texas, in accordance with the follow USEPA SW-846 methods; volatile organic compounds (VOCs) by Method 8260B and semi-volatile organic compounds (SVOCs) by Method 8270C.
3. Flow calculations:
   a. Total system flow volume (Totalizer) = current flow totalizer reading - previous flow totalizer reading.
   b. Well flow volume = (current cycle count - previous cycle count) * measured cycle volume in units of gal/cycle.
   c. Well flow rate = Well flow volume/ [(current date - previous date) * (1440 min/day)].
   d. System flow rate (Totalizer) = (current flow totalizer reading - previous flow totalizer reading)/[(current date - previous date)*1440 min/day]
4. Note that the summed flow volume and flow rate from the individual wells does not correspond to the totalizer volume and flow rate due to uncertainties in flow measurements and differences in instrumentation.
5. The volume per pump cycle count was used to calculate the system total flow and flow rate.
6. J = Estimated concentration; constituent detected between the Method Detection Limit and the Report Limit.
   NM = Not measured; NC = Value could not be calculated; - = No effluent limitation value specified.
7. Maintenance activities or power outages resulting in system downtime or decreased system flow:
   a. System was not operating on 4/6/10 and 4/7/10 due to power outage caused by a blown fuse on the Center Point Energy power pole for the system.
   b. Pump RW-CB-3 was off-line from 4/1/10 to 5/3/10 due to iron fouling clogging the discharge pipe. RW-CB-4 was off-line from 4/16/10 to 5/3/10 due to iron fouling clogging the discharge pipe.
   c. System was shutdown on 5/3/10 to replace discharge pipe at RW-CB-3 and -4.
   d. System was not operating from 8/3/10 to 8/8/10 due to air compressor maintenance.
8. The flow counter for RW-CB-3 was replaced on 2/19/10. The flow counter for RW-CB-5 was replaced on 3/19/10.
9. The metering power pole was down from 9/7/10 to 9/17/10. The system did not have power and was off-line during this time period; therefore, no inspection was conducted on 9/17/10.

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TABLE A.5
DAILY pH MEASUREMENT RESULTS: JANUARY - DECEMBER 2010

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, Voluntary Cleanup Program No. 421

Date	Time	Measured Outfall pH	Analyst	Calibration Standards	Notes
January 2010					
1/1/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/2/10	900	7.40	In-line	4.01, 7.00, 10.01	
1/3/10	900	7.90	In-line	4.01, 7.00, 10.01	
1/4/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/5/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/6/10	900	7.80	In-line	4.01, 7.00, 10.01	8.28 measured by handheld meter.
1/7/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/8/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/9/10	900	7.70	In-line	4.01, 7.00, 10.01	
1/10/10	900	7.70	In-line	4.01, 7.00, 10.01	
1/11/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/12/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/13/10	900	7.90	In-line	4.01, 7.00, 10.01	
1/14/10	900	7.80	In-line	4.01, 7.00, 10.01	
1/15/10	900	7.70	In-line	4.01, 7.00, 10.01	
1/16/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/17/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/18/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/19/10	900	7.20	In-line	4.01, 7.00, 10.01	
1/20/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/21/10	900	7.10	In-line	4.01, 7.00, 10.01	
1/22/10	900	7.10	In-line	4.01, 7.00, 10.01	7.54 measured by handheld meter.
1/23/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/24/10	900	7.10	In-line	4.01, 7.00, 10.01	
1/25/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/26/10	900	7.10	In-line	4.01, 7.00, 10.01	
1/27/10	900	7.20	In-line	4.01, 7.00, 10.01	
1/28/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/29/10	900	7.50	In-line	4.01, 7.00, 10.01	
1/30/10	900	7.60	In-line	4.01, 7.00, 10.01	
1/31/10	900	7.40	In-line	4.01, 7.00, 10.01	
February 2010					
2/1/10	900	7.70	In-line	4.01, 7.00, 10.01	
2/2/10	900	7.80	In-line	4.01, 7.00, 10.01	
2/3/10	900	8.00	In-line	4.01, 7.00, 10.01	
2/4/10	900	7.90	In-line	4.01, 7.00, 10.01	
2/5/10	900	7.60	In-line	4.01, 7.00, 10.01	7.65 measured by handheld meter.
2/6/10	900	6.90	In-line	4.01, 7.00, 10.01	
2/7/10	900	7.60	In-line	4.01, 7.00, 10.01	
2/8/10	900	6.80	In-line	4.01, 7.00, 10.01	
2/9/10	900	7.10	In-line	4.01, 7.00, 10.01	
2/10/10	900	7.10	In-line	4.01, 7.00, 10.01	
2/11/10	900	6.90	In-line	4.01, 7.00, 10.01	
2/12/10	900	7.60	In-line	4.01, 7.00, 10.01	
2/13/10	900	7.60	In-line	4.01, 7.00, 10.01	
2/14/10	900	7.10	In-line	4.01, 7.00, 10.01	
2/15/10	900	7.20	In-line	4.01, 7.00, 10.01	
2/16/10	900	7.20	In-line	4.01, 7.00, 10.01	
2/17/10	900	7.20	In-line	4.01, 7.00, 10.01	
2/18/10	900	7.20	In-line	4.01, 7.00, 10.01	
2/19/10	900	7.20	In-line	4.01, 7.00, 10.01	6.68 measured by handheld meter.
2/20/10	900	7.00	In-line	4.01, 7.00, 10.01	
2/21/10	900	7.10	In-line	4.01, 7.00, 10.01	
2/22/10	900	7.30	In-line	4.01, 7.00, 10.01	
2/23/10	900	7.40	In-line	4.01, 7.00, 10.01	
2/24/10	900	7.20	In-line	4.01, 7.00, 10.01	
2/25/10	900	7.10	In-line	4.01, 7.00, 10.01	
2/26/10	900	7.40	In-line	4.01, 7.00, 10.01	
2/27/10	900	7.10	In-line	4.01, 7.00, 10.01	
2/28/10	900	7.10	In-line	4.01, 7.00, 10.01	

Notes:
1. Omega Engineering pH meter model PHE-6820 used for in-line measurements.
2. Cole-Parmer handheld meter used to collect outfall pH measurements during bi-weekly inspections.

TABLE A.5
DAILY pH MEASUREMENT RESULTS: JANUARY - DECEMBER 2010

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, Voluntary Cleanup Program No. 421

Date	Time	Measured Outfall pH	Analyst	Calibration Standards	Notes
March 2010					
3/1/10	900	7.50	In-line	4.01, 7.00, 10.01	
3/2/10	900	7.00	In-line	4.01, 7.00, 10.01	
3/3/10	900	7.00	In-line	4.01, 7.00, 10.01	
3/4/10	900	7.00	In-line	4.01, 7.00, 10.01	
3/5/10	900	7.00	In-line	4.01, 7.00, 10.01	7.20 measured by handheld meter.
3/6/10	900	6.90	In-line	4.01, 7.00, 10.01	
3/7/10	900	6.90	In-line	4.01, 7.00, 10.01	
3/8/10	900	7.80	In-line	4.01, 7.00, 10.01	
3/9/10	900	6.70	In-line	4.01, 7.00, 10.01	
3/10/10	900	6.60	In-line	4.01, 7.00, 10.01	
3/11/10	900	6.50	In-line	4.01, 7.00, 10.01	
3/12/10	900	6.60	In-line	4.01, 7.00, 10.01	
3/13/10	900	6.60	In-line	4.01, 7.00, 10.01	
3/14/10	900	6.50	In-line	4.01, 7.00, 10.01	
3/15/10	900	6.60	In-line	4.01, 7.00, 10.01	
3/16/10	900	6.90	In-line	4.01, 7.00, 10.01	
3/17/10	900	6.70	In-line	4.01, 7.00, 10.01	
3/18/10	900	6.60	In-line	4.01, 7.00, 10.01	
3/19/10	900	6.60	In-line	4.01, 7.00, 10.01	6.85 measured by handheld meter.
3/20/10	900	7.70	In-line	4.01, 7.00, 10.01	
3/21/10	900	6.90	In-line	4.01, 7.00, 10.01	
3/22/10	900	6.90	In-line	4.01, 7.00, 10.01	
3/23/10	900	6.80	In-line	4.01, 7.00, 10.01	
3/24/10	900	7.30	In-line	4.01, 7.00, 10.01	
3/25/10	900	7.00	In-line	4.01, 7.00, 10.01	
3/26/10	900	6.70	In-line	4.01, 7.00, 10.01	
3/27/10	900	6.50	In-line	4.01, 7.00, 10.01	
3/28/10	900	6.50	In-line	4.01, 7.00, 10.01	
3/29/10	900	6.50	In-line	4.01, 7.00, 10.01	
3/30/10	900	6.40	In-line	4.01, 7.00, 10.01	
3/31/10	900	6.40	In-line	4.01, 7.00, 10.01	
April 2010					
4/1/10	900	6.30	In-line	4.01, 7.00, 10.01	7.39 measured by handheld meter.
4/2/10	900	6.40	In-line	4.01, 7.00, 10.01	
4/3/10	900	6.30	In-line	4.01, 7.00, 10.01	
4/4/10	900	7.30	In-line	4.01, 7.00, 10.01	
4/5/10	900	6.80	In-line	4.01, 7.00, 10.01	
4/6/10	System off-line: Center Point Energy power fuse blown				
4/7/10	System off-line: Center Point Energy power fuse blown				
4/8/10	900	6.90	In-line	4.01, 7.00, 10.01	
4/9/10	900	7.00	In-line	4.01, 7.00, 10.01	
4/10/10	900	8.00	In-line	4.01, 7.00, 10.01	
4/11/10	900	7.10	In-line	4.01, 7.00, 10.01	
4/12/10	900	7.00	In-line	4.01, 7.00, 10.01	
4/13/10	900	6.90	In-line	4.01, 7.00, 10.01	
4/14/10	900	7.00	In-line	4.01, 7.00, 10.01	
4/15/10	900	7.10	In-line	4.01, 7.00, 10.01	
4/16/10	900	6.40	In-line	4.01, 7.00, 10.01	7.69 measured by handheld meter. Meter
4/17/10	900	6.40	In-line	4.01, 7.00, 10.01	was re-calibrated.
4/18/10	900	6.70	In-line	4.01, 7.00, 10.01	
4/19/10	900	7.70	In-line	4.01, 7.00, 10.01	
4/20/10	900	6.40	In-line	4.01, 7.00, 10.01	
4/21/10	900	6.30	In-line	4.01, 7.00, 10.01	
4/22/10	900	6.30	In-line	4.01, 7.00, 10.01	
4/23/10	900	6.40	In-line	4.01, 7.00, 10.01	
4/24/10	900	6.40	In-line	4.01, 7.00, 10.01	
4/25/10	900	6.10	In-line	4.01, 7.00, 10.01	
4/26/10	900	6.20	In-line	4.01, 7.00, 10.01	
4/27/10	900	6.20	In-line	4.01, 7.00, 10.01	
4/28/10	900	6.10	In-line	4.01, 7.00, 10.01	
4/29/10	900	6.40	In-line	4.01, 7.00, 10.01	
4/30/10	900	7.00	In-line	4.01, 7.00, 10.01	7.56 measured by handheld meter.

Notes:
1. Omega Engineering pH meter model PHE-6820 used for in-line measurements.
2. Cole-Parmer handheld meter used to collect outfall pH measurements during bi-weekly inspections.

TABLE A.5
DAILY pH MEASUREMENT RESULTS: JANUARY - DECEMBER 2010

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, Voluntary Cleanup Program No. 421

Date	Time	Measured Outfall pH	Analyst	Calibration Standards	Notes
May 2010					
5/1/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/2/10	900	6.10	In-line	4.01, 7.00, 10.01	
5/3/10	System off-line: Repair discharge pipe for RW-CB-3 and -4				
5/4/10	900	6.60	In-line	4.01, 7.00, 10.01	
5/5/10	900	6.30	In-line	4.01, 7.00, 10.01	
5/6/10	900	6.80	In-line	4.01, 7.00, 10.01	
5/7/10	900	6.10	In-line	4.01, 7.00, 10.01	
5/8/10	900	6.30	In-line	4.01, 7.00, 10.01	
5/9/10	900	6.30	In-line	4.01, 7.00, 10.01	
5/10/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/11/10	900	6.10	In-line	4.01, 7.00, 10.01	
5/12/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/13/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/14/10	900	6.30	In-line	4.01, 7.00, 10.01	6.85 measured by handheld meter.
5/15/10	900	7.70	In-line	4.01, 7.00, 10.01	
5/16/10	900	6.60	In-line	4.01, 7.00, 10.01	
5/17/10	900	6.30	In-line	4.01, 7.00, 10.01	
5/18/10	900	6.30	In-line	4.01, 7.00, 10.01	
5/19/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/20/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/21/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/22/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/23/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/24/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/25/10	900	6.20	In-line	4.01, 7.00, 10.01	
5/26/10	System off-line: Compressor not operating				
5/27/10	900	6.50	In-line	4.01, 7.00, 10.01	Compressor oil changed; system re-started
5/28/10	900	6.60	In-line	4.01, 7.00, 10.01	7.24 measured by handheld meter.
5/29/10	900	6.40	In-line	4.01, 7.00, 10.01	
5/30/10	900	6.10	In-line	4.01, 7.00, 10.01	
5/31/10	System off-line: Heavy storms knocked the compressor off-line				
June 2010					
6/1/10	900	6.30	In-line	4.01, 7.00, 10.01	System re-started at 730.
6/2/10	900	6.10	In-line	4.01, 7.00, 10.01	
6/3/10	System off-line: Heavy storms knocked the compressor off-line				
6/4/10	900	6.40	In-line	4.01, 7.00, 10.01	
6/5/10	900	6.30	In-line	4.01, 7.00, 10.01	
6/6/10	900	6.40	In-line	4.01, 7.00, 10.01	
6/7/10	900	6.50	In-line	4.01, 7.00, 10.01	
6/8/10	900	6.80	In-line	4.01, 7.00, 10.01	
6/9/10	900	6.10	In-line	4.01, 7.00, 10.01	
6/10/10	900	6.00	In-line	4.01, 7.00, 10.01	
6/11/10	900	6.10	In-line	4.01, 7.00, 10.01	7.25 measured by handheld meter.
6/12/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/13/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/14/10	900	6.10	In-line	4.01, 7.00, 10.01	
6/15/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/16/10	900	6.10	In-line	4.01, 7.00, 10.01	
6/17/10	900	6.00	In-line	4.01, 7.00, 10.01	
6/18/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/19/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/20/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/21/10	900	6.10	In-line	4.01, 7.00, 10.01	
6/22/10	900	6.00	In-line	4.01, 7.00, 10.01	
6/23/10	900	6.10	In-line	4.01, 7.00, 10.01	
6/24/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/25/10	900	6.10	In-line	4.01, 7.00, 10.01	7.34 measured by handheld meter.
6/26/10	900	6.20	In-line	4.01, 7.00, 10.01	Replaced the in-line pH meter on 6/25/10.
6/27/10	900	6.40	In-line	4.01, 7.00, 10.01	
6/28/10	900	6.20	In-line	4.01, 7.00, 10.01	
6/29/10	900	6.30	In-line	4.01, 7.00, 10.01	
6/30/10	900	6.20	In-line	4.01, 7.00, 10.01	

Notes:
1. Omega Engineering pH meter model PHE-6820 used for in-line measurements.
2. Cole-Parmer handheld meter used to collect outfall pH measurements during bi-weekly inspections.

TABLE A.5
DAILY pH MEASUREMENT RESULTS: JANUARY - DECEMBER 2010

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, Voluntary Cleanup Program No. 421

Date	Time	Measured Outfall pH	Analyst	Calibration Standards	Notes
July 2010					
7/1/10	900	6.20	In-line	4.01, 7.00, 10.01	
7/2/10	900	6.80	In-line	4.01, 7.00, 10.01	
7/3/10	System off-line: Heavy storms knocked the compressor off-line				
7/4/10	System off-line: Heavy storms knocked the compressor off-line				
7/5/10	System off-line: Heavy storms knocked the compressor off-line				
7/6/10	900	6.40	In-line	4.01, 7.00, 10.01	
7/7/10	900	7.30	In-line	4.01, 7.00, 10.01	
7/8/10	900	7.20	In-line	4.01, 7.00, 10.01	
7/9/10	900	6.90	In-line	4.01, 7.00, 10.01	7.35 measured by handheld meter.
7/10/10	900	6.70	In-line	4.01, 7.00, 10.01	
7/11/10	900	6.70	In-line	4.01, 7.00, 10.01	
7/12/10	900	6.40	In-line	4.01, 7.00, 10.01	
7/13/10	900	6.70	In-line	4.01, 7.00, 10.01	
7/14/10	900	6.40	In-line	4.01, 7.00, 10.01	
7/15/10	900	6.70	In-line	4.01, 7.00, 10.01	
7/16/10	900	6.80	In-line	4.01, 7.00, 10.01	
7/17/10	900	6.70	In-line	4.01, 7.00, 10.01	
7/18/10	900	6.70	In-line	4.01, 7.00, 10.01	
7/19/10	System off-line: Heavy storms knocked the compressor off-line				
7/20/10	System off-line: Heavy storms knocked the compressor off-line				
7/21/10	900	6.70	In-line	4.01, 7.00, 10.01	
7/22/10	900	6.60	In-line	4.01, 7.00, 10.01	
7/23/10	900	6.90	In-line	4.01, 7.00, 10.01	7.25 measured by handheld meter.
7/24/10	900	6.50	In-line	4.01, 7.00, 10.01	
7/25/10	System off-line: Heavy storms knocked the compressor off-line				
7/26/10	System off-line: Heavy storms knocked the compressor off-line				
7/27/10	System off-line: Heavy storms knocked the compressor off-line				
7/28/10	900	6.40	In-line	4.01, 7.00, 10.01	
7/29/10	900	6.30	In-line	4.01, 7.00, 10.01	
7/30/10	900	6.50	In-line	4.01, 7.00, 10.01	
7/31/10	900	6.70	In-line	4.01, 7.00, 10.01	
August 2010					
8/1/10	900	6.90	In-line	4.01, 7.00, 10.01	
8/2/10	900	6.40	In-line	4.01, 7.00, 10.01	
8/3/10	System off-line: Compressor not operating				
8/4/10	System off-line: Compressor not operating				System re-started at 1500; pH = 7.22
8/5/10	System off-line: Compressor not operating				
8/6/10	System off-line: Compressor not operating				System re-started at 800; system ran for
8/7/10	System off-line: Compressor not operating				approximately 3 hrs before shutting down.
8/8/10	System off-line: Compressor not operating				
8/9/10	900	6.60	In-line	4.01, 7.00, 10.01	Routine maintenance on compressor was
8/10/10	900	6.60	In-line	4.01, 7.00, 10.01	completed, and system re-started.
8/11/10	900	6.60	In-line	4.01, 7.00, 10.01	
8/12/10	900	6.80	In-line	4.01, 7.00, 10.01	
8/13/10	900	6.70	In-line	4.01, 7.00, 10.01	
8/14/10	900	6.70	In-line	4.01, 7.00, 10.01	
8/15/10	900	6.70	In-line	4.01, 7.00, 10.01	
8/16/10	900	6.90	In-line	4.01, 7.00, 10.01	
8/17/10	900	6.90	In-line	4.01, 7.00, 10.01	
8/18/10	900	6.60	In-line	4.01, 7.00, 10.01	
8/19/10	System off-line: Heavy storms knocked the compressor off-line				
8/20/10	900	6.40	In-line	4.01, 7.00, 10.01	7.02 measured by handheld meter.
8/21/10	900	6.40	In-line	4.01, 7.00, 10.01	
8/22/10	900	6.40	In-line	4.01, 7.00, 10.01	
8/23/10	900	6.40	In-line	4.01, 7.00, 10.01	
8/24/10	900	6.20	In-line	4.01, 7.00, 10.01	
8/25/10	900	6.70	In-line	4.01, 7.00, 10.01	
8/26/10	900	6.80	In-line	4.01, 7.00, 10.01	
8/27/10	900	6.40	In-line	4.01, 7.00, 10.01	
8/28/10	900	7.20	In-line	4.01, 7.00, 10.01	
8/29/10	900	6.70	In-line	4.01, 7.00, 10.01	
8/30/10	900	6.70	In-line	4.01, 7.00, 10.01	
8/31/10	900	6.70	In-line	4.01, 7.00, 10.01	

Notes:
1. Omega Engineering pH meter model PHE-6820 used for in-line measurements.
2. Cole-Parmer handheld meter used to collect outfall pH measurements during bi-weekly inspections.

TABLE A.5
DAILY pH MEASUREMENT RESULTS: JANUARY - DECEMBER 2010

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, Voluntary Cleanup Program No. 421

Date	Time	Measured Outfall pH	Analyst	Calibration Standards	Notes
September 2010					
9/1/10	900	6.70	In-line	4.01, 7.00, 10.01	
9/2/10	900	6.50	In-line	4.01, 7.00, 10.01	
9/3/10	900	6.90	In-line	4.01, 7.00, 10.01	7.12 measured by handheld meter.
9/4/10	900	6.70	In-line	4.01, 7.00, 10.01	
9/5/10	900	6.40	In-line	4.01, 7.00, 10.01	
9/6/10	900	6.40	In-line	4.01, 7.00, 10.01	
9/7/10	System off-line: Metering power pole down				
9/8/10	System off-line: Metering power pole down				
9/9/10	System off-line: Metering power pole down				
9/10/10	System off-line: Metering power pole down				
9/11/10	System off-line: Metering power pole down				
9/12/10	System off-line: Metering power pole down				
9/13/10	System off-line: Metering power pole down				
9/14/10	System off-line: Metering power pole down				
9/15/10	System off-line: Metering power pole down				
9/16/10	System off-line: Metering power pole down				
9/17/10	Power restored to the system; phone line remains off-line				No inspection conducted
9/18/10	Phone line restored				
9/19/10	900	6.60	In-line	4.01, 7.00, 10.01	
9/20/10	900	6.60	In-line	4.01, 7.00, 10.01	
9/21/10	900	6.90	In-line	4.01, 7.00, 10.01	
9/22/10	900	6.60	In-line	4.01, 7.00, 10.01	
9/23/10	900	6.50	In-line	4.01, 7.00, 10.01	
9/24/10	900	6.40	In-line	4.01, 7.00, 10.01	
9/25/10	900	6.00	In-line	4.01, 7.00, 10.01	
9/26/10	900	6.60	In-line	4.01, 7.00, 10.01	
9/27/10	900	6.60	In-line	4.01, 7.00, 10.01	
9/28/10	900	6.50	In-line	4.01, 7.00, 10.01	
9/29/10	900	6.40	In-line	4.01, 7.00, 10.01	
9/30/10	900	6.50	In-line	4.01, 7.00, 10.01	
October 2010					
10/1/10	900	6.20	In-line	4.01, 7.00, 10.01	7.72 measured by handheld meter.
10/2/10	900	6.70	In-line	4.01, 7.00, 10.01	
10/3/10	900	6.80	In-line	4.01, 7.00, 10.01	
10/4/10	900	6.50	In-line	4.01, 7.00, 10.01	
10/5/10	900	6.70	In-line	4.01, 7.00, 10.01	
10/6/10	900	6.70	In-line	4.01, 7.00, 10.01	
10/7/10	900	6.60	In-line	4.01, 7.00, 10.01	
10/8/10	900	6.80	In-line	4.01, 7.00, 10.01	
10/9/10	900	6.60	In-line	4.01, 7.00, 10.01	
10/10/10	900	6.70	In-line	4.01, 7.00, 10.01	
10/11/10	900	6.50	In-line	4.01, 7.00, 10.01	
10/12/10	900	6.50	In-line	4.01, 7.00, 10.01	
10/13/10	900	6.60	In-line	4.01, 7.00, 10.01	
10/14/10	900	6.70	In-line	4.01, 7.00, 10.01	
10/15/10	900	6.60	In-line	4.01, 7.00, 10.01	7.05 measured by handheld meter.
10/16/10	900	7.00	In-line	4.01, 7.00, 10.01	
10/17/10	900	6.80	In-line	4.01, 7.00, 10.01	
10/18/10	900	7.00	In-line	4.01, 7.00, 10.01	
10/19/10	900	7.00	In-line	4.01, 7.00, 10.01	
10/20/10	900	6.90	In-line	4.01, 7.00, 10.01	
10/21/10	900	6.90	In-line	4.01, 7.00, 10.01	
10/22/10	900	6.90	In-line	4.01, 7.00, 10.01	
10/23/10	900	6.90	In-line	4.01, 7.00, 10.01	
10/24/10	900	7.00	In-line	4.01, 7.00, 10.01	
10/25/10	900	7.00	In-line	4.01, 7.00, 10.01	
10/26/10	900	7.10	In-line	4.01, 7.00, 10.01	
10/27/10	900	6.90	In-line	4.01, 7.00, 10.01	
10/28/10	900	7.00	In-line	4.01, 7.00, 10.01	
10/29/10	900	7.10	In-line	4.01, 7.00, 10.01	7.33 measured by handheld meter.
10/30/10	900	7.00	In-line	4.01, 7.00, 10.01	
10/31/10	900	6.90	In-line	4.01, 7.00, 10.01	

Notes:
1. Omega Engineering pH meter model PHE-6820 used for in-line measurements.
2. Cole-Parmer handheld meter used to collect outfall pH measurements during bi-weekly inspections.

TABLE A.5
DAILY pH MEASUREMENT RESULTS: JANUARY - DECEMBER 2010

Charlie Burch Site Groundwater Remediation System, Spring, Texas
The Dow Chemical Company, Voluntary Cleanup Program No. 421

Date	Time	Measured Outfall pH	Analyst	Calibration Standards	Notes
November 2010					
11/1/10	900	6.50	In-line	4.01, 7.00, 10.01	
11/2/10	900	6.00	In-line	4.01, 7.00, 10.01	
11/3/10	900	7.10	In-line	4.01, 7.00, 10.01	
11/4/10	900	6.20	In-line	4.01, 7.00, 10.01	
11/5/10	900	6.20	In-line	4.01, 7.00, 10.01	
11/6/10	900	6.10	In-line	4.01, 7.00, 10.01	
11/7/10	System off-line: Compressor not operating				
11/8/10	System off-line: Compressor not operating				
11/9/10	System off-line: Compressor not operating				
11/10/10	900	7.70	In-line	4.01, 7.00, 10.01	
11/11/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/12/10	900	7.20	In-line	4.01, 7.00, 10.01	7.63 measured by handheld meter.
11/13/10	900	7.40	In-line	4.01, 7.00, 10.01	
11/14/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/15/10	900	7.40	In-line	4.01, 7.00, 10.01	
11/16/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/17/10	900	7.20	In-line	4.01, 7.00, 10.01	
11/18/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/19/10	900	7.20	In-line	4.01, 7.00, 10.01	
11/20/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/21/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/22/10	900	7.20	In-line	4.01, 7.00, 10.01	
11/23/10	900	7.20	In-line	4.01, 7.00, 10.01	7.12 measured by handheld meter.
11/24/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/25/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/26/10	900	7.40	In-line	4.01, 7.00, 10.01	
11/27/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/28/10	900	7.30	In-line	4.01, 7.00, 10.01	
11/29/10	900	7.50	In-line	4.01, 7.00, 10.01	
11/30/10	System off-line: Compressor not operating				
December 2010					
12/1/10	900	7.60	In-line	4.01, 7.00, 10.01	
12/2/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/3/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/4/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/5/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/6/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/7/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/8/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/9/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/10/10	900	7.40	In-line	4.01, 7.00, 10.01	7.65 measured by handheld meter.
12/11/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/12/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/13/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/14/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/15/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/16/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/17/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/18/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/19/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/20/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/21/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/22/10	900	7.40	In-line	4.01, 7.00, 10.01	
12/23/10	900	7.40	In-line	4.01, 7.00, 10.01	7.62 measured by handheld meter.
12/24/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/25/10	900	7.20	In-line	4.01, 7.00, 10.01	
12/26/10	900	7.60	In-line	4.01, 7.00, 10.01	
12/27/10	900	7.70	In-line	4.01, 7.00, 10.01	
12/28/10	900	7.60	In-line	4.01, 7.00, 10.01	
12/29/10	900	7.50	In-line	4.01, 7.00, 10.01	
12/30/10	900	7.70	In-line	4.01, 7.00, 10.01	
12/31/10	900	7.70	In-line	4.01, 7.00, 10.01	

Notes:
1. Omega Engineering pH meter model PHE-6820 used for in-line measurements.
2. Cole-Parmer handheld meter used to collect outfall pH measurements during bi-weekly inspections.

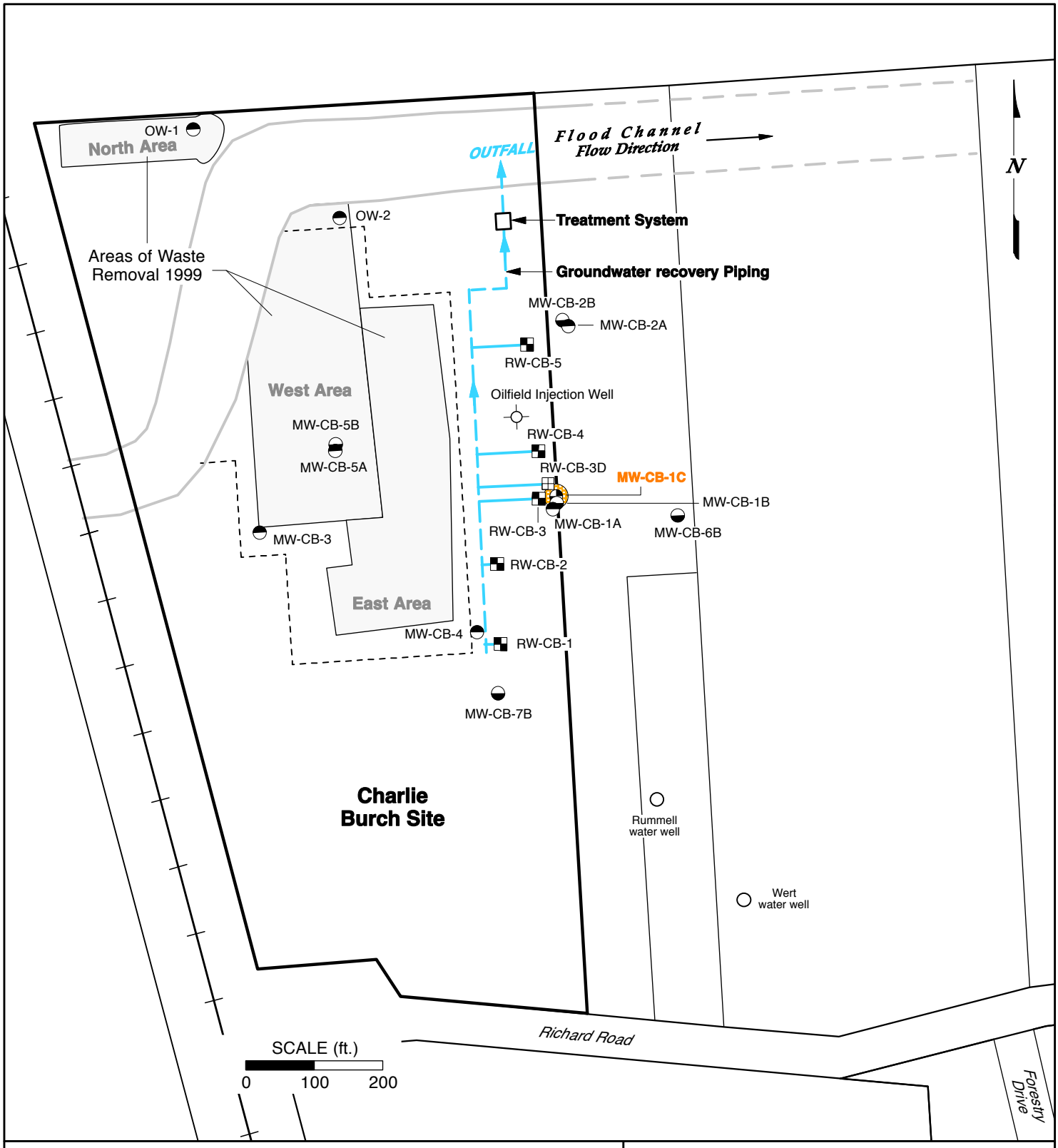
GSI Job No. G-3516
Issued: 21 February 2011

APPENDIX A
2010 STATUS REPORT:
SOURCE AREA GROUNDWATER REMEDIATION SYSTEM

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

FIGURES

Figure A.1 Site Plan: Source Area Groundwater Remediation System
Figure A.2 Process Flow Diagram



LEGEND

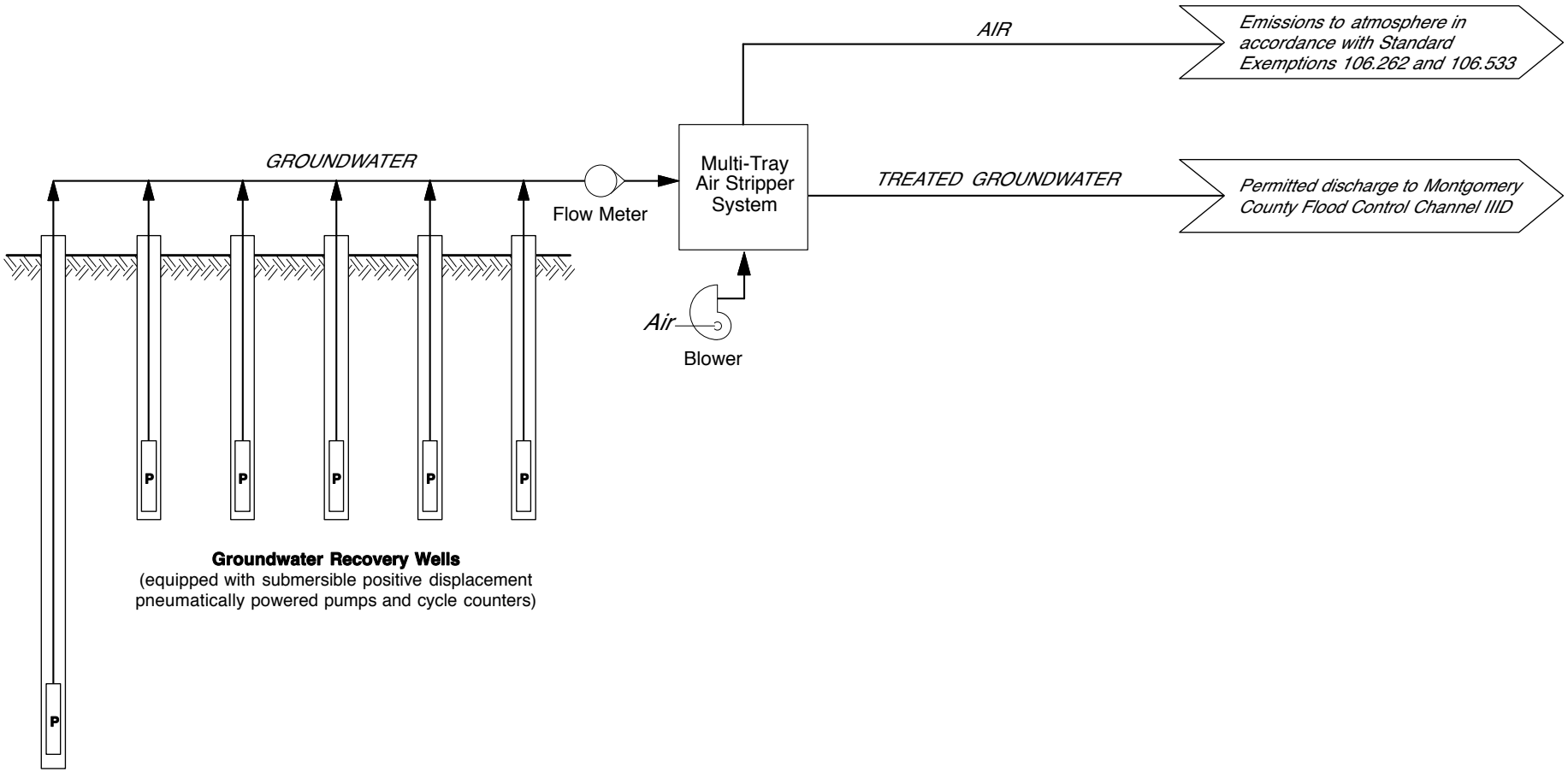
- Recovery well screened in Transmissive Zone A
- Monitoring well screened in Transmissive Zone A
- Recovery well screened in Transmissive Zone B
- Monitoring well screened in Transmissive Zone B
- Monitoring well screened in Transmissive Zone C

GSI ENVIRONMENTAL
Texas Registration Number: F-1198

SITE PLAN: SOURCE AREA GROUNDWATER REMEDIATION SYSTEM

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

GSI Job No:	G-3516	Drawn By:	DLB
Issued:	21-Feb-11	Chk'd By:	JMM
Revised:	———	Appv'd By:	JMM
Scale:	As Shown	**FIGURE A.1**	



GSI ENVIRONMENTAL

Texas Registration Number: F-1198

GSI Job No.	G-3516	Drawn By:	DLB
Issued:	21-Feb-11	Chk'd By:	JMM
Revised:	_____	Aprv'd By:	JMM
Scale:	Not to Scale	**FIGURE A.2**	

PROCESS FLOW DIAGRAM: GROUNDWATER RECOVERY AND TREATMENT SYSTEM

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

GSI Job No. G-3516
Issued: 21 February 2011

GSI ENVIRONMENTAL

APPENDIX B
2010 SEMI-ANNUAL STATUS REPORTS: CLASS V AQUIFER REMEDIATION INJECTION WELLS

2010 Groundwater Monitoring Report

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

PARSONS

8000 Centre Park Drive, Suite 200 Austin, Texas • 78754-5140 • (512) 719-6000 • Fax: (512) 719-6099 • www.parsons.com

July 21, 2010

Mr. Bryan Smith
Texas Commission on Environmental Quality
Industrial and Hazardous Waste Permits Section
P.O. Box 13087 (MC-130)
Austin, TX 78711-3087

Re: Semi-annual Status Report of Class V Aquifer Remediation Injection Wells
TCEQ Authorization No. 5X2600416 WWC11210254 & WWC11272167
CN601510035/RN102970829
VCP 421
Charlie Burch Site
25529 Richards Road
Spring, TX 77386

Dear Mr. Smith,

On behalf of the Rohm and Haas Company, Parsons is submitting this semi-annual report summarizing the injection activities performed at the 13-Acre Tract of the Charlie Burch Site in Spring, Texas between December 1, 2009 and May 31, 2010. This semi-annual report has been prepared in accordance with the above-mentioned Underground Injection Control (UIC) authorization and subsequent modifications.

The injection activities are part of ongoing groundwater containment and treatment efforts addressing the impacted groundwater plume at the site. The plume underlying the site contains dissolved concentrations of 1,2-dichloroethane (1,2-DCA) above the protective concentration level (PCL) set by the Texas Commission on Environmental Quality (TCEQ). The groundwater containment system was installed in May 2006 to provide hydraulic capture of the dissolved plume and includes treatment followed by infiltration of the treated water through an infiltration trench. Infiltration of the treated water is performed under the approved UIC Class V Inventory Authorization Form referenced above.

Hydraulic containment of the groundwater plume at the site is maintained through continuous pumping from four recovery wells (TRW-CB-1 through TRW-CB-4). Groundwater extracted by the recovery wells is treated on site using granular activated carbon (GAC) absorption technology utilizing two GAC vessels connected in series to ensure contaminant removal prior to reinjection. Following treatment, the groundwater is reinjected into the aquifer through an infiltration gallery located at the southeast corner of the property. Although two infiltration trenches (CB-IT-1 and CB-IT-2) were constructed, all treated water is currently being injected through infiltrating trench CB-IT-2 due to infiltration capacity limitations observed in trench CB-IT-1 shortly after start-up.

During the reporting period, the groundwater containment and treatment system continued to operate with only minor interruptions. Regular site maintenance was performed during the monthly inspections.

Ongoing operation and maintenance of the system is performed on a monthly basis and includes collection of system operational data and measurement of flow rates and total flows through the system. Groundwater elevations are recorded and water samples are collected quarterly to monitor performance of the recovery and treatment operations. The samples collected at the treatment system are analyzed for 1,2-DCA, total dissolved solids (TDS), and pH as required under the UIC authorization. Analytical results for the samples collected at the inlet (Pre-GAC), between vessels (Intermediate), and outlet (Post-GAC) of the treatment system during the reporting period are summarized in Table 1.

Table 1 Analytical Results

Location	Date	1,2-DCA (µg/L)	TDS (mg/L)	pH
Pre-GAC	2/25/2010	3.4	730	5.96
	5/28/2010	3.9	720	6.25
Intermediate	2/25/2010	2.2	730	5.75
	5/28/2010	4.3	730	6.22
Post-GAC	2/25/2010	<0.13 U	740	6.40
	5/28/2010	<0.13 U	720	6.12

U – Analyte not present above the detection limit

As indicated in the quarterly sample results, contaminant breakthrough of the lead GAC vessel occurred in February and May 2010. Concentrations of 1,2-DCA in the discharge from the lag vessel to the infiltration trench was below the established groundwater PCL of 5.0 µg/L. The next carbon changeout is planned for June 2010.

Groundwater flow rates and total volumes pumped through the system are measured during each site visit. In general, except during maintenance events, the flow rates of the groundwater treated by the system and reinjected into the aquifer ranged from approximately 31 gallons per minute (gpm) to approximately 39 gpm, and the total volume being reinjected averaged approximately 1,400,000 gallons per month. The flow rates and total volume of water pumped to the infiltration trench are summarized in Table 2.

Table 2 Summary of Flow Rates and Volumes Reinjected

Date	Measured Flow Rates (gpm)			Measured Injection Volumes (gal)		
	Flow Rate to Infiltration Trench CB-IT-1	Flow Rate to Infiltration Trench CB-IT-2	Total Flow Rate to Infiltration Trenches	Volume Reinjected at Infiltration Trench CB-IT-1	Volume Reinjected at Infiltration Trench CB-IT-2	Total Volume Reinjected at Infiltration Trenches
12/29/2009	0.0	33.9	33.9	1,612	58,630,843	58,632,455
1/27/2010	0.0	39.0	39.0	1,612	59,874,245	59,875,857
2/25/2010	0.0	37.2	37.2	1,612	61,426,633	61,428,245
3/29/2010	0.0	37.3	37.3	1,612	62,997,347	62,998,959
4/30/2010	0.0	38.1	38.1	1,612	64,662,082	64,663,694
5/28/2010	0.0	31.5	31.5	1,613	65,614,485	65,616,097

Monitoring results from the groundwater treatment operations demonstrate that the carbon absorption treatment system is effectively treating the 1,2-DCA concentrations to below its groundwater PCL prior to reinjection into the aquifer. Additionally, the sample results for total dissolved solids and pH indicate that treatment is not degrading water quality prior to reinjection. Reinjection rates for the system are within the limits established in the UIC authorization. Therefore, based on the information presented herein, the groundwater injection operations are within the requirements established in the UIC authorization for the site.

During the period there were no additional injections of organic substrate material or pH buffer for the enhanced anaerobic biodegradation (EAB) pilot study conducted at the site. No further injections for the EAB pilot study are anticipated at this time.

Please contact me at gary.cobb@parsons.com or (512) 719-6011 if you have any questions or require additional information.

Sincerely,

Gary Cobb, P.G.

Attachment

cc: Joe Bell, TCEQ
Ed Tokarski, Rohm and Haas Company
Ricky Wenzel, Rohm and Haas Company
Jim Strunk, Rohm and Haas Company
Brian Vanderglas, Parsons

PARSONS

8000 Centre Park Drive, Suite 200 Austin, Texas ◆ 78754-5140 ◆ (512) 719-6000 ◆ Fax: (512) 719-6099 ◆ www.parsons.com

January 20, 2010

Mr. Bryan Smith
Texas Commission on Environmental Quality
Industrial and Hazardous Waste Permits Section
P.O. Box 13087 (MC-130)
Austin, TX 78711-3087

Re: Semi-annual Status Report of Class V Aquifer Remediation Injection Wells
TCEQ Authorization No. 5X2600416 WWC11210254 & WWC11272167
CN601510035/RN102970829
VCP 421
Charlie Burch Site
25529 Richards Road
Spring, TX 77386

Dear Mr. Smith,

On behalf of the Rohm and Haas Texas, Inc. Parsons is submitting this semi-annual report summarizing the injection activities performed at the 13-Acre Tract of the Charlie Burch Site in Spring, Texas between June 1, 2010 and November 30, 2010. This semi-annual report has been prepared in accordance with the above-mentioned Underground Injection Control (UIC) authorization and subsequent modifications.

The injection activities are part of ongoing groundwater containment and treatment efforts addressing the impacted groundwater plume at the site. The plume underlying the site contains dissolved concentrations of 1,2-dichloroethane (1,2-DCA) above the protective concentration level (PCL) set by the Texas Commission on Environmental Quality (TCEQ). The groundwater containment system was installed in May 2006 to provide hydraulic capture of the dissolved plume and includes treatment followed by infiltration of the treated water through an infiltration trench. Infiltration of the treated water is performed under the approved UIC Class V Inventory Authorization Form referenced above.

Hydraulic containment of the groundwater plume at the site is maintained through continuous pumping from four recovery wells (TRW-CB-1 through TRW-CB-4). Groundwater extracted by the recovery wells is treated on site using granular activated carbon (GAC) absorption technology utilizing two GAC vessels connected in series to ensure contaminant removal prior to reinjection. Following treatment, the groundwater is reinjected into the aquifer through an infiltration gallery located at the southeast corner of the property. Although two infiltration trenches (CB-IT-1 and CB-IT-2) were constructed, all treated water is currently being injected through infiltrating trench CB-IT-2 due to infiltration capacity limitations observed in trench CB-IT-1 shortly after start-up.

During the reporting period, the groundwater containment and treatment system continued to operate with only minor interruptions. Regular site maintenance was performed during the monthly inspections.

Ongoing operation and maintenance of the system is performed on a monthly basis and includes collection of system operational data and measurement of flow rates and total flows through the system. Groundwater elevations are recorded and water samples are collected quarterly to monitor performance of the recovery and treatment operations. The samples collected at the treatment system are analyzed for 1,2-DCA, total dissolved solids (TDS), and pH as required under the UIC authorization. Analytical results for the samples collected at the inlet (Pre-GAC), between vessels (Intermediate), and outlet (Post-GAC) of the treatment system during the reporting period are summarized in Table 1.

Table 1 Analytical Results

Location	Date	1,2-DCA (µg/L)	TDS (mg/L)	pH
Pre-GAC	8/25/2010	5.9	790	6.02
	11/29/2010	2.7	1200	6.15
Intermediate	8/25/2010	4.2	770	6.02
	11/29/2010	1.7	710	6.15
Post-GAC	8/25/2010	<0.13 U	780	5.98
	11/29/2010	<0.13 U	680	6.127

U – Analyte not present above the detection limit

As indicated in the quarterly sample results, contaminant breakthrough of the lead GAC vessel occurred in August and November 2010. Concentrations of 1,2-DCA in the discharge from the lag vessel to the infiltration trench was below the established groundwater PCL of 5.0 µg/L. The next carbon changeout is planned for February 2011.

Groundwater flow rates and total volumes pumped through the system are measured during each site visit. In general, except during maintenance events, the flow rates of the groundwater treated by the system and reinjected into the aquifer ranged from approximately 33 gallons per minute (gpm) to approximately 42 gpm, and the total volume being reinjected averaged approximately 1,500,000 gallons per month. The flow rates and total volume of water pumped to the infiltration trench are summarized in Table 2.

Table 2 Summary of Flow Rates and Volumes Reinjected

Date	Measured Flow Rates (gpm)			Measured Injection Volumes (gal)		
	Flow Rate to Infiltration Trench CB-IT-1	Flow Rate to Infiltration Trench CB-IT-2	Total Flow Rate to Infiltration Trenches	Volume Reinjected at Infiltration Trench CB-IT-1	Volume Reinjected at Infiltration Trench CB-IT-2	Total Volume Reinjected at Infiltration Trenches
6/29/2010	0.0	33.3	33.3	1,612	67,253,292	67,254,067
7/30/2010	0.0	38.5	38.5	1,612	68,558,995	68,557,469
8/25/2010	0.0	33.5	33.5	1,626	69,865,056	69,868,245
9/30/2010	0.0	42.7	42.7	1,626	71,343,166	63,000,585
10/27/2010	0.0	41.5	41.5	1,626	72,987,965	72,989,591
11/29/2010	0.0	40.0	40.0	1,626	74,954,315	74,955,941

Monitoring results from the groundwater treatment operations demonstrate that the carbon absorption treatment system is effectively treating the 1,2-DCA concentrations to below its groundwater PCL prior to reinjection into the aquifer. Additionally, the sample results for total dissolved solids and pH indicate that treatment is not degrading water quality prior to reinjection. Reinjection rates for the system are within the limits established in the UIC authorization. Therefore, based on the information presented herein, the groundwater injection operations are within the requirements established in the UIC authorization for the site.

During the period there were no additional injections of organic substrate material or pH buffer for the enhanced anaerobic biodegradation (EAB) pilot study conducted at the site. No further injections for the EAB pilot study are anticipated at this time.

Please contact me at gary.cobb@parsons.com or (512) 719-6011 if you have any questions or require additional information.

Sincerely,

Gary Cobb, P.G.

cc: Joe Bell, TCEQ
Ed Tokarski, Rohm and Haas Company
Ricky Wenzel, Rohm and Haas Company
Jim Strunk, Rohm and Haas Company
Brian Vanderglas, Parsons

GSI Job No. G-3516
Issued: 21 February 2011

APPENDIX C
LABORATORY REPORTS

2010 Groundwater Monitoring Report

Charlie Burch Site, Spring, Texas
Rohm and Haas Texas Inc., VCP No. 421

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-30485-1

Job Description: Rohm and Haas

For:
Groundwater Services, Inc.
2211 Norfolk, Suite 1000
Houston, TX 77098-4044

Attention: Jim McDade

Approved for release.
Lance C Tigrett
Data Review Analyst I
10/28/2010 1:34 PM

Designee for
Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
10/28/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

TestAmerica Laboratories, Inc.
TestAmerica Houston 6310 Rothway Street, Houston, TX 77040
Tel (713) 690-4444 Fax (713) 690-5646 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

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Appendix A - Laboratory Data Package Cover Page

This data package is for Job No. 600-30485 and consists of:

- ☒ This signature page, the laboratory review checklists, and the following reportable data:
- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC Chapter 5,
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist and for each analyte, matrix and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all methods, analytes and matrices reported in the data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory Exception Reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC 25.6 and was last inspected by [] TCEQ or [] _____ on _____. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Chris Schepcoff		Laboratory Director	10/28/10
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/28/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30485
Reviewer Name: YX	Prep Batch Number: 600-42142, 42143, 42236, and 42266-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			1
		Were MS/MSD RPDs within laboratory QC limits?		X			2
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				3
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/28/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30485
Reviewer Name: YX	Prep Batch Number: 600-42142, 42143, 42236, and 42266-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 10/28/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30485
Reviewer Name: YX	Prep Batch Number: 600-42142, 42143, 42236, and 42266-VOA

ER #[1]	DESCRIPTION
1	The Carbon disulfide recovery in sample 600-30485-10 MS and the Chloromethane, Styrene, and Vinyl chloride recoveries in samples 600-30485-10 MS and 10 MSD were below acceptance limits. Method performance is demonstrated by acceptable LCS recoveries.
2	The 2-Hexanone RPD between samples 600-30485-10 MS and 10 MSD was marginally above the acceptance limit. This analyte was recovered within acceptance limits in the LCS, MS, and MSD. This analyte was not detected in any client samples associated with this MS and MSD; therefore, no corrective action was necessary.
3	The 1,2-Dichloroethane SDLs for samples 600-30485-1 and 10, the Bromodichloromethane SDL for sample 600-30485-20, and the Chloroform SDLs for samples 600-30485-17 and 20 were elevated due to the dilutions necessary for analyses.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Quality Control Report

Detection Check Standard

Matrix:	Water - Low Level
Method:	8260B
Preparation:	5030
Date Analyzed:	7/28/2010
Date Prepared:	7/28/2010
Lab Sample ID:	VSTD001
File #:	VOA_VII.i\072810.b\A20903.D
Units:	ug/L

Analyte	MDL	DCS Spike	DCS Result	MQL
Dichlorodifluoromethane	0.14	1	1.05	1
Chloromethane	0.15	1	1.18	2
Vinyl Chloride	0.13	1	0.787	2
Bromomethane	0.22	1	0.752	2
Chloroethane	0.19	1	0.983	2
Trichlorofluoromethane	0.08	1	0.787	1
Allyl Chloride		2	1.98	
Acrolein	1.41	5	5.71	1
1,1-Dichloroethene	0.13	1	0.787	1
Trichlorotrifluoroethene		1	1.07	
Acetone	2	2	4.32	2
Methyl Iodide		2	1.6	
2-Propanol		10	22.59	
Carbon Disulfide	0.07	2	2.36	1
Acetonitrile	0.66	2	2.07	1
Methylene Chloride	0.42	1	1.14	1
Acrylonitrile	1.09	5	6.31	1
trans-1,2-Dichloroethene	0.12	1	0.783	1
Methyl tert-butyl ether	0.15	1	0.796	1
1,2-Dichloroethene (total)	0.3	2	1.59	1
1,1-Dichloroethane	0.13	1	0.796	1
Vinyl Acetate	0.17	2	2.2	1
Chloroprene		2	1.6	
cis-1,2-Dichloroethene	0.16	1	0.803	1
2,2-Dichloropropane		1	0.764	
2-Butanone (MEK)	0.76	2	2.5	2
Propionitrile		2	2.7	
Methacrylonitrile		2	2.47	1
Bromochloromethane	0.17	1	0.815	
Chloroform	0.12	5	5.43	
1,1,1-Trichloroethane	0.12	1	0.762	
1,1-Dichloropropene	0.13	1	0.854	
Carbon Tetrachloride	0.13	1	0.86	
Isobutyl Alcohol	4.1	10	24.38	
Benzene	0.13	1	0.864	
1,2-Dichloroethane	0.13	1	0.882	
Trichloroethene	0.13	1	0.86	
1,2-Dichloropropane	0.16	1	0.747	
Methyl methacrylate	0.33	2	2.18	

Methylene Bromide		1	0.783
1,4-Dioxane	26.97	50	153.5
Bromodichloromethane	0.14	1	1.05
2-Chloroethyl vinyl ether	0.17	2	2.14
cis-1,3-Dichloropropene	0.11	1	1.13
4-Methyl-2-pentanone	0.31	2	2.21
Toluene	0.14	1	0.874
trans-1,3-Dichloropropene	0.11	1	1.18
Ethyl methacrylate	0.33	2	0.899
1,1,2-Trichloroethane	0.18	1	0.791
1,3-Dichloropropane	0.12	1	8.46
Tetrachloroethene	0.08	1	0.828
2-Hexanone	0.31	2	2.31
Dibromochloromethane	0.45	1	1.15
1,2-Dibromoethane (EDB)	0.36	1	1.05
Chlorobenzene	0.11	1	0.831
1,1,1,2-Tetrachloroethane	0.09	1	1.01
Ethylbenzene	0.13	1	0.833
m,p-Xylene	0.25	2	1.77
o-Xylene	0.12	1	0.827
Xylenes (total)	0.32	3	2.59
Styrene	0.1	1	0.768
Bromoform	0.12	1	2.62
Isopropylbenzene	0.06	1	1.01
1,1,2,2-Tetrachloroethane	0.16	1	1.14
trans-1,4-Dichloro-2-buter	0.86	2	0.669
Bromobenzene	0.14	1	1.08
n-Propylbenzene	0.25	1	0.955
2-Chlorotoluene	0.17	1	0.759
4-Chlorotoluene	0.18	1	0.938
1,3,5-Trimethylbenzene	0.08	1	0.822
tert-Butylbenzene	0.16	1	0.956
1,2,4-Trimethylbenzene	0.1	1	0.913
sec-Butylbenzene	0.14	1	0.767
1,3-Dichlorobenzene	0.13	1	0.762
1,4-Dichlorobenzene	0.05	1	0.847
1,2-Dichlorobenzene	0.1	1	1.08
p-Isopropyltoluene	0.1	1	0.783
n-Butylbenzene	0.09	1	0.877
1,2,3-Trichloropropane	0.13	1	0.798
1,2-Dibromo-3-chloroprop	0.39	1	1.01
1,2,4-Trichlorobenzene	0.2	1	0.976
Hexachlorobutadiene	0.17	1	0.539
1,2,3-Trichlorobenzene	0.28	1	1.02
Naphthalene	0.47	1	1.13

METHOD SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL HOU	SW846 8260B	
Purge and Trap	TAL HOU		SW846 5030B

Lab References:

TAL HOU = TestAmerica Houston

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Method	Analyst	Analyst ID
SW846 8260B	Vela, Kenneth L	KLV
SW846 8260B	Xie, Yali	YX

SAMPLE SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-30485-1	P 172-710	Water	10/19/2010 0000	10/20/2010 1056
600-30485-2	20101019_HOUCB_TB	Water	10/19/2010 0000	10/20/2010 1056
600-30485-3	20101019MW-CB-49V45.0@N	Water	10/19/2010 0900	10/20/2010 1056
600-30485-4	20101019MW-CB-48V45.0@N	Water	10/19/2010 0910	10/20/2010 1056
600-30485-5	20101019MW-CB-47DV85.0@N	Water	10/19/2010 0945	10/20/2010 1056
600-30485-6	20101019MW-CB-47SV45.0@N	Water	10/19/2010 0955	10/20/2010 1056
600-30485-7	20101019MW-CB-47SV45.0@D	Water	10/19/2010 0955	10/20/2010 1056
600-30485-8	20101019MW-CB-50SV50.0@N	Water	10/19/2010 0955	10/20/2010 1056
600-30485-9	20101019MW-CB-50DV73.0@N	Water	10/19/2010 1015	10/20/2010 1056
600-30485-10	20101019MW-CB-45V45.0@N	Water	10/19/2010 1055	10/20/2010 1056
600-30485-11	20101019MW-CB-43V45.0@N	Water	10/19/2010 1115	10/20/2010 1056
600-30485-12	20101019MW-CB-44V45.0@N	Water	10/19/2010 1135	10/20/2010 1056
600-30485-13	20101019MW-CB-46SV45.0@N	Water	10/19/2010 1140	10/20/2010 1056
600-30485-14	20101019MW-CB-46DV73.0@N	Water	10/19/2010 1210	10/20/2010 1056
600-30485-15	20101019MW-CB-42V45.0@N	Water	10/19/2010 1410	10/20/2010 1056
600-30485-16	20101019MW-CB-40V45.0@N	Water	10/19/2010 1415	10/20/2010 1056
600-30485-17	20101019OBS-2V45.0@N	Water	10/19/2010 1445	10/20/2010 1056
600-30485-18	20101019MW-CB-41DV64.0@N	Water	10/19/2010 1515	10/20/2010 1056
600-30485-19	20101019MW-CB-41SV45.0@N	Water	10/19/2010 1535	10/20/2010 1056
600-30485-20	20101019INJ-3V41.0@N	Water	10/19/2010 1535	10/20/2010 1056
600-30485-21	20101019OBS-1V37.5@N	Water	10/19/2010 1605	10/20/2010 1056
600-30485-22	20101019MW-CB-39V45.0@N	Water	10/19/2010 1615	10/20/2010 1056
600-30485-23	20101019MW-CB-36V45.0@N	Water	10/19/2010 1640	10/20/2010 1056
600-30485-24	20101019MW-CB-38V45.0@N	Water	10/19/2010 1645	10/20/2010 1056
600-30485-25	20101019MW-CB-38V45.0@D	Water	10/19/2010 1645	10/20/2010 1056

SAMPLE RESULTS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: P 172-710

Lab Sample ID: 600-30485-1
Client Matrix: Water

Date Sampled: 10/19/2010 00:00
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/23/2010 14:12		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.098			0.00013	0.0010	0.00065	mg/L	42266	10/23/2010 14:12	5	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.066	0.0625	106	50-134		VOAMS06		10/23/2010 14:12	5	KLV
4-Bromofluorobenzene	460-00-4		0.069	0.0625	110	67-139		VOAMS06		10/23/2010 14:12	5	KLV
Dibromofluoromethane	1868-53-7		0.069	0.0625	111	62-130		VOAMS06		10/23/2010 14:12	5	KLV
Toluene-d8 (Surr)	2037-26-5		0.070	0.0625	112	70-130		VOAMS06		10/23/2010 14:12	5	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019_HOUCB_TB

Lab Sample ID: 600-30485-2
Client Matrix: Water

Date Sampled: 10/19/2010 00:00
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 12:35		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42236	10/22/2010 12:35	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0098	0.0100	98	50-134		VOAMS09		10/22/2010 12:35	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	116	67-139		VOAMS09		10/22/2010 12:35	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	105	62-130		VOAMS09		10/22/2010 12:35	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	110	70-130		VOAMS09		10/22/2010 12:35	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-49V45.0@N

Lab Sample ID: 600-30485-3
Client Matrix: Water

Date Sampled: 10/19/2010 09:00
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 18:55		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42142	10/21/2010 18:55	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0093	0.0100	93	50-134		VOAMS09		10/21/2010 18:55	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	113	67-139		VOAMS09		10/21/2010 18:55	1	YX
Dibromofluoromethane	1868-53-7		0.010	0.0100	102	62-130		VOAMS09		10/21/2010 18:55	1	YX
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	109	70-130		VOAMS09		10/21/2010 18:55	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-48V45.0@N

Lab Sample ID: 600-30485-4
Client Matrix: Water

Date Sampled: 10/19/2010 09:10
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 19:18		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42142	10/21/2010 19:18	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0079	0.0100	79	50-134		VOAMS09		10/21/2010 19:18	1	YX
4-Bromofluorobenzene	460-00-4		0.0097	0.0100	97	67-139		VOAMS09		10/21/2010 19:18	1	YX
Dibromofluoromethane	1868-53-7		0.0088	0.0100	88	62-130		VOAMS09		10/21/2010 19:18	1	YX
Toluene-d8 (Surr)	2037-26-5		0.0094	0.0100	94	70-130		VOAMS09		10/21/2010 19:18	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-47DV85.0@N

Lab Sample ID: 600-30485-5
Client Matrix: Water

Date Sampled: 10/19/2010 09:45
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 19:40		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42142	10/21/2010 19:40	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0094	0.0100	94	50-134		VOAMS09		10/21/2010 19:40	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	108	67-139		VOAMS09		10/21/2010 19:40	1	YX
Dibromofluoromethane	1868-53-7		0.010	0.0100	102	62-130		VOAMS09		10/21/2010 19:40	1	YX
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	102	70-130		VOAMS09		10/21/2010 19:40	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-47SV45.0@N

Lab Sample ID: 600-30485-6
Client Matrix: Water

Date Sampled: 10/19/2010 09:55
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 20:03		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0020			0.00013	0.0010	0.00013	mg/L	42142	10/21/2010 20:03	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0099	0.0100	99	50-134		VOAMS09		10/21/2010 20:03	1	YX
4-Bromofluorobenzene	460-00-4		0.012	0.0100	117	67-139		VOAMS09		10/21/2010 20:03	1	YX
Dibromofluoromethane	1868-53-7		0.011	0.0100	105	62-130		VOAMS09		10/21/2010 20:03	1	YX
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	113	70-130		VOAMS09		10/21/2010 20:03	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-47SV45.0@D

Lab Sample ID: 600-30485-7
Client Matrix: Water

Date Sampled: 10/19/2010 09:55
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 20:26		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0021			0.00013	0.0010	0.00013	mg/L	42142	10/21/2010 20:26	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0094	0.0100	94	50-134		VOAMS09		10/21/2010 20:26	1	YX
4-Bromofluorobenzene	460-00-4		0.012	0.0100	116	67-139		VOAMS09		10/21/2010 20:26	1	YX
Dibromofluoromethane	1868-53-7		0.010	0.0100	103	62-130		VOAMS09		10/21/2010 20:26	1	YX
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	113	70-130		VOAMS09		10/21/2010 20:26	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-50SV50.0@N

Lab Sample ID: 600-30485-8
Client Matrix: Water

Date Sampled: 10/19/2010 09:55
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 20:48		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42142	10/21/2010 20:48	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0092	0.0100	92	50-134		VOAMS09		10/21/2010 20:48	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	115	67-139		VOAMS09		10/21/2010 20:48	1	YX
Dibromofluoromethane	1868-53-7		0.010	0.0100	100	62-130		VOAMS09		10/21/2010 20:48	1	YX
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	109	70-130		VOAMS09		10/21/2010 20:48	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-50DV73.0@N

Lab Sample ID: 600-30485-9
Client Matrix: Water

Date Sampled: 10/19/2010 10:15
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 21:11		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0016			0.00013	0.0010	0.00013	mg/L	42142	10/21/2010 21:11	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0094	0.0100	94	50-134		VOAMS09		10/21/2010 21:11	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	114	67-139		VOAMS09		10/21/2010 21:11	1	YX
Dibromofluoromethane	1868-53-7		0.010	0.0100	104	62-130		VOAMS09		10/21/2010 21:11	1	YX
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	111	70-130		VOAMS09		10/21/2010 21:11	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-45V45.0@N

Lab Sample ID: 600-30485-10 DL
Client Matrix: Water

Date Sampled: 10/19/2010 10:55
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 15:37		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.071			0.00013	0.0010	0.0013	mg/L	42236	10/22/2010 15:37	10	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.093	0.100	93	50-134		VOAMS09		10/22/2010 15:37	10	KLV
4-Bromofluorobenzene	460-00-4		0.11	0.100	114	67-139		VOAMS09		10/22/2010 15:37	10	KLV
Dibromofluoromethane	1868-53-7		0.10	0.100	103	62-130		VOAMS09		10/22/2010 15:37	10	KLV
Toluene-d8 (Surr)	2037-26-5		0.11	0.100	112	70-130		VOAMS09		10/22/2010 15:37	10	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-43V45.0@N

Lab Sample ID: 600-30485-11
Client Matrix: Water

Date Sampled: 10/19/2010 11:15
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 13:20		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42236	10/22/2010 13:20	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0096	0.0100	96	50-134		VOAMS09		10/22/2010 13:20	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	113	67-139		VOAMS09		10/22/2010 13:20	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	104	62-130		VOAMS09		10/22/2010 13:20	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS09		10/22/2010 13:20	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-44V45.0@N

Lab Sample ID: 600-30485-12
Client Matrix: Water

Date Sampled: 10/19/2010 11:35
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 19:17		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 19:17	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	105	50-134		VOAMS06		10/21/2010 19:17	1	KLV
4-Bromofluorobenzene	460-00-4		0.014	0.0125	109	67-139		VOAMS06		10/21/2010 19:17	1	KLV
Dibromofluoromethane	1868-53-7		0.014	0.0125	111	62-130		VOAMS06		10/21/2010 19:17	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	112	70-130		VOAMS06		10/21/2010 19:17	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-46SV45.0@N

Lab Sample ID: 600-30485-13
Client Matrix: Water

Date Sampled: 10/19/2010 11:40
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 21:35		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42142	10/21/2010 21:35	1	YX
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42142	10/21/2010 21:35	1	YX
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42142	10/21/2010 21:35	1	YX
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42142	10/21/2010 21:35	1	YX
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42142	10/21/2010 21:35	1	YX
1,2-Dichloroethane	107-06-2	4.6			0.13	1.0	0.13	ug/L	42142	10/21/2010 21:35	1	YX
1,2-Dichloroethene, Total	540-59-0	0.30	U		0.30	1.0	0.30	ug/L	42142	10/21/2010 21:35	1	YX
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42142	10/21/2010 21:35	1	YX
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42142	10/21/2010 21:35	1	YX
2-Hexanone	591-78-6	0.31	U		0.31	1.0	0.31	ug/L	42142	10/21/2010 21:35	1	YX
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42142	10/21/2010 21:35	1	YX
Acetone	67-64-1	2.0	U		2.0	2.0	2.0	ug/L	42142	10/21/2010 21:35	1	YX
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42142	10/21/2010 21:35	1	YX
Bromodichloromethane	75-27-4	0.14	U		0.14	1.0	0.14	ug/L	42142	10/21/2010 21:35	1	YX
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42142	10/21/2010 21:35	1	YX
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42142	10/21/2010 21:35	1	YX
Carbon disulfide	75-15-0	0.070	U		0.070	1.0	0.070	ug/L	42142	10/21/2010 21:35	1	YX
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42142	10/21/2010 21:35	1	YX
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42142	10/21/2010 21:35	1	YX
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42142	10/21/2010 21:35	1	YX
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42142	10/21/2010 21:35	1	YX
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42142	10/21/2010 21:35	1	YX
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42142	10/21/2010 21:35	1	YX
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42142	10/21/2010 21:35	1	YX
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42142	10/21/2010 21:35	1	YX
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42142	10/21/2010 21:35	1	YX
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42142	10/21/2010 21:35	1	YX
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	2.0	0.25	ug/L	42142	10/21/2010 21:35	1	YX
Methylene Chloride	75-09-2	0.42	U		0.42	1.0	0.42	ug/L	42142	10/21/2010 21:35	1	YX
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42142	10/21/2010 21:35	1	YX
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42142	10/21/2010 21:35	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-46SV45.0@N

Lab Sample ID: 600-30485-13
Client Matrix: Water

Date Sampled: 10/19/2010 11:40
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42142	10/21/2010 21:35	1	YX
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42142	10/21/2010 21:35	1	YX
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42142	10/21/2010 21:35	1	YX
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42142	10/21/2010 21:35	1	YX
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42142	10/21/2010 21:35	1	YX
Vinyl acetate	108-05-4	0.17	U		0.17	1.0	0.17	ug/L	42142	10/21/2010 21:35	1	YX
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42142	10/21/2010 21:35	1	YX
Xylenes, Total	1330-20-7	0.32	U		0.32	3.0	0.32	ug/L	42142	10/21/2010 21:35	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		10	10.0	102	50-134		VOAMS09		10/21/2010 21:35	1	YX
4-Bromofluorobenzene	460-00-4		12	10.0	120	67-139		VOAMS09		10/21/2010 21:35	1	YX
Dibromofluoromethane	1868-53-7		11	10.0	109	62-130		VOAMS09		10/21/2010 21:35	1	YX
Toluene-d8 (Surr)	2037-26-5		11	10.0	114	70-130		VOAMS09		10/21/2010 21:35	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-46DV73.0@N

Lab Sample ID: 600-30485-14
Client Matrix: Water

Date Sampled: 10/19/2010 12:10
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 13:43		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 13:43	1	KLV
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 13:43	1	KLV
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42236	10/22/2010 13:43	1	KLV
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 13:43	1	KLV
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 13:43	1	KLV
1,2-Dichloroethane	107-06-2	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 13:43	1	KLV
1,2-Dichloroethene, Total	540-59-0	0.30	U		0.30	1.0	0.30	ug/L	42236	10/22/2010 13:43	1	KLV
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 13:43	1	KLV
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42236	10/22/2010 13:43	1	KLV
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 13:43	1	KLV
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 13:43	1	KLV
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42236	10/22/2010 13:43	1	KLV
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 13:43	1	KLV
Bromodichloromethane	75-27-4	0.14	U		0.14	1.0	0.14	ug/L	42236	10/22/2010 13:43	1	KLV
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 13:43	1	KLV
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42236	10/22/2010 13:43	1	KLV
Carbon disulfide	75-15-0	0.070	U		0.070	2.0	0.070	ug/L	42236	10/22/2010 13:43	1	KLV
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 13:43	1	KLV
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 13:43	1	KLV
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42236	10/22/2010 13:43	1	KLV
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42236	10/22/2010 13:43	1	KLV
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 13:43	1	KLV
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42236	10/22/2010 13:43	1	KLV
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 13:43	1	KLV
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 13:43	1	KLV
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42236	10/22/2010 13:43	1	KLV
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 13:43	1	KLV
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42236	10/22/2010 13:43	1	KLV
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42236	10/22/2010 13:43	1	KLV
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 13:43	1	KLV
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42236	10/22/2010 13:43	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-46DV73.0@N

Lab Sample ID: 600-30485-14
Client Matrix: Water

Date Sampled: 10/19/2010 12:10
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42236	10/22/2010 13:43	1	KLV
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42236	10/22/2010 13:43	1	KLV
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 13:43	1	KLV
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 13:43	1	KLV
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 13:43	1	KLV
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42236	10/22/2010 13:43	1	KLV
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42236	10/22/2010 13:43	1	KLV
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42236	10/22/2010 13:43	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		8.3	10.0	83	50-134		VOAMS09		10/22/2010 13:43	1	KLV
4-Bromofluorobenzene	460-00-4		10	10.0	104	67-139		VOAMS09		10/22/2010 13:43	1	KLV
Dibromofluoromethane	1868-53-7		9.1	10.0	91	62-130		VOAMS09		10/22/2010 13:43	1	KLV
Toluene-d8 (Surr)	2037-26-5		9.6	10.0	96	70-130		VOAMS09		10/22/2010 13:43	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-42V45.0@N

Lab Sample ID: 600-30485-15
Client Matrix: Water

Date Sampled: 10/19/2010 14:10
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 19:44		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 19:44	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	103	50-134		VOAMS06		10/21/2010 19:44	1	KLV
4-Bromofluorobenzene	460-00-4		0.014	0.0125	111	67-139		VOAMS06		10/21/2010 19:44	1	KLV
Dibromofluoromethane	1868-53-7		0.013	0.0125	108	62-130		VOAMS06		10/21/2010 19:44	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	114	70-130		VOAMS06		10/21/2010 19:44	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-40V45.0@N

Lab Sample ID: 600-30485-16
Client Matrix: Water

Date Sampled: 10/19/2010 14:15
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 20:11		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0060			0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 20:11	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	104	50-134		VOAMS06		10/21/2010 20:11	1	KLV
4-Bromofluorobenzene	460-00-4		0.014	0.0125	108	67-139		VOAMS06		10/21/2010 20:11	1	KLV
Dibromofluoromethane	1868-53-7		0.013	0.0125	106	62-130		VOAMS06		10/21/2010 20:11	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	114	70-130		VOAMS06		10/21/2010 20:11	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019OBS-2V45.0@N

Lab Sample ID: 600-30485-17
Client Matrix: Water

Date Sampled: 10/19/2010 14:45
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 14:06		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 14:06	1	KLV
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:06	1	KLV
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42236	10/22/2010 14:06	1	KLV
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:06	1	KLV
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:06	1	KLV
1,2-Dichloroethane	107-06-2	30			0.13	1.0	0.13	ug/L	42236	10/22/2010 14:06	1	KLV
1,2-Dichloroethene, Total	540-59-0	0.30	U		0.30	1.0	0.30	ug/L	42236	10/22/2010 14:06	1	KLV
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:06	1	KLV
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42236	10/22/2010 14:06	1	KLV
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 14:06	1	KLV
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 14:06	1	KLV
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42236	10/22/2010 14:06	1	KLV
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:06	1	KLV
Bromodichloromethane	75-27-4	17			0.14	1.0	0.14	ug/L	42236	10/22/2010 14:06	1	KLV
Bromoform	75-25-2	15			0.12	1.0	0.12	ug/L	42236	10/22/2010 14:06	1	KLV
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42236	10/22/2010 14:06	1	KLV
Carbon disulfide	75-15-0	0.070	U		0.070	2.0	0.070	ug/L	42236	10/22/2010 14:06	1	KLV
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:06	1	KLV
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 14:06	1	KLV
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42236	10/22/2010 14:06	1	KLV
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42236	10/22/2010 14:06	1	KLV
Chloromethane	74-87-3	0.97	J		0.15	2.0	0.15	ug/L	42236	10/22/2010 14:06	1	KLV
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:06	1	KLV
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 14:06	1	KLV
Dibromochloromethane	124-48-1	7.8			0.45	1.0	0.45	ug/L	42236	10/22/2010 14:06	1	KLV
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:06	1	KLV
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42236	10/22/2010 14:06	1	KLV
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42236	10/22/2010 14:06	1	KLV
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 14:06	1	KLV
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42236	10/22/2010 14:06	1	KLV
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42236	10/22/2010 14:06	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019OBS-2V45.0@N

Lab Sample ID: 600-30485-17
Client Matrix: Water

Date Sampled: 10/19/2010 14:45
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42236	10/22/2010 14:06	1	KLV
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 14:06	1	KLV
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 14:06	1	KLV
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:06	1	KLV
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42236	10/22/2010 14:06	1	KLV
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42236	10/22/2010 14:06	1	KLV
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42236	10/22/2010 14:06	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		9.7	10.0	97	50-134		VOAMS09		10/22/2010 14:06	1	KLV
4-Bromofluorobenzene	460-00-4		12	10.0	117	67-139		VOAMS09		10/22/2010 14:06	1	KLV
Dibromofluoromethane	1868-53-7		11	10.0	107	62-130		VOAMS09		10/22/2010 14:06	1	KLV
Toluene-d8 (Surr)	2037-26-5		11	10.0	113	70-130		VOAMS09		10/22/2010 14:06	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019OBS-2V45.0@N

Lab Sample ID: 600-30485-17 DL
Client Matrix: Water

Date Sampled: 10/19/2010 14:45
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 16:00		
Method: SW846 8260B,Water												
Chloroform	67-66-3	64			0.12	1.0	1.2	ug/L	42236	10/22/2010 16:00	10	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		91	100	91	50-134		VOAMS09		10/22/2010 16:00	10	KLV
4-Bromofluorobenzene	460-00-4		120	100	116	67-139		VOAMS09		10/22/2010 16:00	10	KLV
Dibromofluoromethane	1868-53-7		100	100	102	62-130		VOAMS09		10/22/2010 16:00	10	KLV
Toluene-d8 (Surr)	2037-26-5		110	100	112	70-130		VOAMS09		10/22/2010 16:00	10	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-41DV64.0@N

Lab Sample ID: 600-30485-18
Client Matrix: Water

Date Sampled: 10/19/2010 15:15
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 20:37		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0027			0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 20:37	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	108	50-134		VOAMS06		10/21/2010 20:37	1	KLV
4-Bromofluorobenzene	460-00-4		0.013	0.0125	105	67-139		VOAMS06		10/21/2010 20:37	1	KLV
Dibromofluoromethane	1868-53-7		0.013	0.0125	107	62-130		VOAMS06		10/21/2010 20:37	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	109	70-130		VOAMS06		10/21/2010 20:37	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-41SV45.0@N

Lab Sample ID: 600-30485-19
Client Matrix: Water

Date Sampled: 10/19/2010 15:35
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 21:04		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.032			0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 21:04	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	103	50-134		VOAMS06		10/21/2010 21:04	1	KLV
4-Bromofluorobenzene	460-00-4		0.015	0.0125	116	67-139		VOAMS06		10/21/2010 21:04	1	KLV
Dibromofluoromethane	1868-53-7		0.014	0.0125	111	62-130		VOAMS06		10/21/2010 21:04	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.015	0.0125	117	70-130		VOAMS06		10/21/2010 21:04	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019INJ-3V41.0@N

Lab Sample ID: 600-30485-20
Client Matrix: Water

Date Sampled: 10/19/2010 15:35
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 14:28		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 14:28	1	KLV
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:28	1	KLV
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42236	10/22/2010 14:28	1	KLV
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:28	1	KLV
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:28	1	KLV
1,2-Dichloroethane	107-06-2	25			0.13	1.0	0.13	ug/L	42236	10/22/2010 14:28	1	KLV
1,2-Dichloroethene, Total	540-59-0	0.30	U		0.30	1.0	0.30	ug/L	42236	10/22/2010 14:28	1	KLV
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:28	1	KLV
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42236	10/22/2010 14:28	1	KLV
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 14:28	1	KLV
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 14:28	1	KLV
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42236	10/22/2010 14:28	1	KLV
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:28	1	KLV
Bromoform	75-25-2	49			0.12	1.0	0.12	ug/L	42236	10/22/2010 14:28	1	KLV
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42236	10/22/2010 14:28	1	KLV
Carbon disulfide	75-15-0	0.070	U		0.070	2.0	0.070	ug/L	42236	10/22/2010 14:28	1	KLV
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:28	1	KLV
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 14:28	1	KLV
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42236	10/22/2010 14:28	1	KLV
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42236	10/22/2010 14:28	1	KLV
Chloromethane	74-87-3	2.5			0.15	2.0	0.15	ug/L	42236	10/22/2010 14:28	1	KLV
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 14:28	1	KLV
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 14:28	1	KLV
Dibromochloromethane	124-48-1	27			0.45	1.0	0.45	ug/L	42236	10/22/2010 14:28	1	KLV
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:28	1	KLV
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42236	10/22/2010 14:28	1	KLV
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42236	10/22/2010 14:28	1	KLV
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 14:28	1	KLV
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42236	10/22/2010 14:28	1	KLV
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42236	10/22/2010 14:28	1	KLV
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42236	10/22/2010 14:28	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019INJ-3V41.0@N

Lab Sample ID: 600-30485-20
Client Matrix: Water

Date Sampled: 10/19/2010 15:35
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 14:28	1	KLV
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 14:28	1	KLV
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 14:28	1	KLV
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42236	10/22/2010 14:28	1	KLV
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42236	10/22/2010 14:28	1	KLV
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42236	10/22/2010 14:28	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		10	10.0	104	50-134		VOAMS09		10/22/2010 14:28	1	KLV
4-Bromofluorobenzene	460-00-4		12	10.0	119	67-139		VOAMS09		10/22/2010 14:28	1	KLV
Dibromofluoromethane	1868-53-7		11	10.0	111	62-130		VOAMS09		10/22/2010 14:28	1	KLV
Toluene-d8 (Surr)	2037-26-5		11	10.0	110	70-130		VOAMS09		10/22/2010 14:28	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019INJ-3V41.0@N

Lab Sample ID: 600-30485-20 DL
Client Matrix: Water

Date Sampled: 10/19/2010 15:35
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 16:22		
Method: SW846 8260B,Water												
Bromodichloromethane	75-27-4	64			0.14	1.0	2.8	ug/L	42236	10/22/2010 16:22	20	KLV
Chloroform	67-66-3	240			0.12	1.0	2.4	ug/L	42236	10/22/2010 16:22	20	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		200	200	98	50-134		VOAMS09		10/22/2010 16:22	20	KLV
4-Bromofluorobenzene	460-00-4		230	200	116	67-139		VOAMS09		10/22/2010 16:22	20	KLV
Dibromofluoromethane	1868-53-7		220	200	110	62-130		VOAMS09		10/22/2010 16:22	20	KLV
Toluene-d8 (Surr)	2037-26-5		220	200	110	70-130		VOAMS09		10/22/2010 16:22	20	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019OBS-1V37.5@N

Lab Sample ID: 600-30485-21
Client Matrix: Water

Date Sampled: 10/19/2010 16:05
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 16:45		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 16:45	1	KLV
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 16:45	1	KLV
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42236	10/22/2010 16:45	1	KLV
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 16:45	1	KLV
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 16:45	1	KLV
1,2-Dichloroethane	107-06-2	12			0.13	1.0	0.13	ug/L	42236	10/22/2010 16:45	1	KLV
1,2-Dichloroethene, Total	540-59-0	0.30	U		0.30	1.0	0.30	ug/L	42236	10/22/2010 16:45	1	KLV
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 16:45	1	KLV
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42236	10/22/2010 16:45	1	KLV
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 16:45	1	KLV
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42236	10/22/2010 16:45	1	KLV
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42236	10/22/2010 16:45	1	KLV
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 16:45	1	KLV
Bromodichloromethane	75-27-4	0.14	U		0.14	1.0	0.14	ug/L	42236	10/22/2010 16:45	1	KLV
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 16:45	1	KLV
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42236	10/22/2010 16:45	1	KLV
Carbon disulfide	75-15-0	0.070	U		0.070	2.0	0.070	ug/L	42236	10/22/2010 16:45	1	KLV
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 16:45	1	KLV
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 16:45	1	KLV
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42236	10/22/2010 16:45	1	KLV
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42236	10/22/2010 16:45	1	KLV
Chloroform	67-66-3	0.48	J		0.12	1.0	0.12	ug/L	42236	10/22/2010 16:45	1	KLV
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42236	10/22/2010 16:45	1	KLV
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42236	10/22/2010 16:45	1	KLV
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 16:45	1	KLV
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42236	10/22/2010 16:45	1	KLV
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 16:45	1	KLV
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42236	10/22/2010 16:45	1	KLV
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42236	10/22/2010 16:45	1	KLV
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 16:45	1	KLV
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42236	10/22/2010 16:45	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019OBS-1V37.5@N

Lab Sample ID: 600-30485-21
Client Matrix: Water

Date Sampled: 10/19/2010 16:05
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42236	10/22/2010 16:45	1	KLV
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42236	10/22/2010 16:45	1	KLV
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42236	10/22/2010 16:45	1	KLV
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42236	10/22/2010 16:45	1	KLV
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42236	10/22/2010 16:45	1	KLV
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42236	10/22/2010 16:45	1	KLV
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42236	10/22/2010 16:45	1	KLV
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42236	10/22/2010 16:45	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		9.8	10.0	98	50-134		VOAMS09		10/22/2010 16:45	1	KLV
4-Bromofluorobenzene	460-00-4		11	10.0	113	67-139		VOAMS09		10/22/2010 16:45	1	KLV
Dibromofluoromethane	1868-53-7		11	10.0	105	62-130		VOAMS09		10/22/2010 16:45	1	KLV
Toluene-d8 (Surr)	2037-26-5		11	10.0	109	70-130		VOAMS09		10/22/2010 16:45	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-39V45.0@N

Lab Sample ID: 600-30485-22
Client Matrix: Water

Date Sampled: 10/19/2010 16:15
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 21:30		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.015			0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 21:30	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	102	50-134		VOAMS06		10/21/2010 21:30	1	KLV
4-Bromofluorobenzene	460-00-4		0.013	0.0125	107	67-139		VOAMS06		10/21/2010 21:30	1	KLV
Dibromofluoromethane	1868-53-7		0.013	0.0125	107	62-130		VOAMS06		10/21/2010 21:30	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	115	70-130		VOAMS06		10/21/2010 21:30	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-36V45.0@N

Lab Sample ID: 600-30485-23
Client Matrix: Water

Date Sampled: 10/19/2010 16:40
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 21:56		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0026			0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 21:56	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	106	50-134		VOAMS06		10/21/2010 21:56	1	KLV
4-Bromofluorobenzene	460-00-4		0.014	0.0125	114	67-139		VOAMS06		10/21/2010 21:56	1	KLV
Dibromofluoromethane	1868-53-7		0.014	0.0125	110	62-130		VOAMS06		10/21/2010 21:56	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	113	70-130		VOAMS06		10/21/2010 21:56	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-38V45.0@N

Lab Sample ID: 600-30485-24
Client Matrix: Water

Date Sampled: 10/19/2010 16:45
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 22:23		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 22:23	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	103	50-134		VOAMS06		10/21/2010 22:23	1	KLV
4-Bromofluorobenzene	460-00-4		0.014	0.0125	109	67-139		VOAMS06		10/21/2010 22:23	1	KLV
Dibromofluoromethane	1868-53-7		0.013	0.0125	105	62-130		VOAMS06		10/21/2010 22:23	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	115	70-130		VOAMS06		10/21/2010 22:23	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30485-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101019MW-CB-38V45.0@D

Lab Sample ID: 600-30485-25
Client Matrix: Water

Date Sampled: 10/19/2010 16:45
Date Received: 10/20/2010 10:56

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/21/2010 22:50		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42143	10/21/2010 22:50	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.013	0.0125	105	50-134		VOAMS06		10/21/2010 22:50	1	KLV
4-Bromofluorobenzene	460-00-4		0.013	0.0125	108	67-139		VOAMS06		10/21/2010 22:50	1	KLV
Dibromofluoromethane	1868-53-7		0.013	0.0125	107	62-130		VOAMS06		10/21/2010 22:50	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.014	0.0125	110	70-130		VOAMS06		10/21/2010 22:50	1	KLV

DATA REPORTING QUALIFIERS

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits

QUALITY CONTROL RESULTS

Client: Groundwater Services, Inc. Job Number: 600-30485-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:600-42142					
LCS 600-42142/1	Lab Control Sample	T	Water	8260B	
MB 600-42142/2	Method Blank	T	Water	8260B	
600-30485-3	20101019MW-CB-49V45.0@N	T	Water	8260B	
600-30485-4	20101019MW-CB-48V45.0@N	T	Water	8260B	
600-30485-5	20101019MW-CB-47DV85.0@N	T	Water	8260B	
600-30485-6	20101019MW-CB-47SV45.0@N	T	Water	8260B	
600-30485-7	20101019MW-CB-47SV45.0@D	T	Water	8260B	
600-30485-8	20101019MW-CB-50SV50.0@N	T	Water	8260B	
600-30485-9	20101019MW-CB-50DV73.0@N	T	Water	8260B	
600-30485-13	20101019MW-CB-46SV45.0@N	T	Water	8260B	
Analysis Batch:600-42143					
LCS 600-42143/1	Lab Control Sample	T	Water	8260B	
MB 600-42143/3	Method Blank	T	Water	8260B	
600-30485-12	20101019MW-CB-44V45.0@N	T	Water	8260B	
600-30485-15	20101019MW-CB-42V45.0@N	T	Water	8260B	
600-30485-16	20101019MW-CB-40V45.0@N	T	Water	8260B	
600-30485-18	20101019MW-CB-41DV64.0@N	T	Water	8260B	
600-30485-19	20101019MW-CB-41SV45.0@N	T	Water	8260B	
600-30485-22	20101019MW-CB-39V45.0@N	T	Water	8260B	
600-30485-23	20101019MW-CB-36V45.0@N	T	Water	8260B	
600-30485-24	20101019MW-CB-38V45.0@N	T	Water	8260B	
600-30485-25	20101019MW-CB-38V45.0@D	T	Water	8260B	
Analysis Batch:600-42236					
LCS 600-42236/1	Lab Control Sample	T	Water	8260B	
MB 600-42236/2	Method Blank	T	Water	8260B	
600-30485-2	20101019_HOUCB_TB	T	Water	8260B	
600-30485-10DL	20101019MW-CB-45V45.0@N	T	Water	8260B	
600-30485-10MS	Matrix Spike	T	Water	8260B	
600-30485-10MSD	Matrix Spike Duplicate	T	Water	8260B	
600-30485-11	20101019MW-CB-43V45.0@N	T	Water	8260B	
600-30485-14	20101019MW-CB-46DV73.0@N	T	Water	8260B	
600-30485-17	20101019OBS-2V45.0@N	T	Water	8260B	
600-30485-17DL	20101019OBS-2V45.0@N	T	Water	8260B	
600-30485-20	20101019INJ-3V41.0@N	T	Water	8260B	
600-30485-20DL	20101019INJ-3V41.0@N	T	Water	8260B	
600-30485-21	20101019OBS-1V37.5@N	T	Water	8260B	
Analysis Batch:600-42266					
LCS 600-42266/1	Lab Control Sample	T	Water	8260B	
MB 600-42266/3	Method Blank	T	Water	8260B	
600-30485-1	P 172-710	T	Water	8260B	

Client: Groundwater Services, Inc. Job Number: 600-30485-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
600-30485-1	P 172-710	110	111	112	106
600-30485-2	20101019_HOUCB_TB	116	105	110	98
600-30485-3	20101019MW-CB-49 V45.0@N	113	102	109	93
600-30485-4	20101019MW-CB-48 V45.0@N	97	88	94	79
600-30485-5	20101019MW-CB-47 DV85.0@N	108	102	102	94
600-30485-6	20101019MW-CB-47 SV45.0@N	117	105	113	99
600-30485-7	20101019MW-CB-47 SV45.0@D	116	103	113	94
600-30485-8	20101019MW-CB-50 SV50.0@N	115	100	109	92
600-30485-9	20101019MW-CB-50 DV73.0@N	114	104	111	94
600-30485-10 DL	20101019MW-CB-45 V45.0@N DL	114	103	112	93
600-30485-11	20101019MW-CB-43 V45.0@N	113	104	107	96
600-30485-12	20101019MW-CB-44 V45.0@N	109	111	112	105
600-30485-15	20101019MW-CB-42 V45.0@N	111	108	114	103
600-30485-16	20101019MW-CB-40 V45.0@N	108	106	114	104
600-30485-18	20101019MW-CB-41 DV64.0@N	105	107	109	108
600-30485-19	20101019MW-CB-41 SV45.0@N	116	111	117	103
600-30485-22	20101019MW-CB-39 V45.0@N	107	107	115	102
600-30485-23	20101019MW-CB-36 V45.0@N	114	110	113	106
600-30485-24	20101019MW-CB-38 V45.0@N	109	105	115	103

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
600-30485-25	20101019MW-CB-38 V45.0@D	108	107	110	105

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	DBFM %Rec	BFB %Rec	DCA %Rec
600-30485-13	20101019MW-CB-46 SV45.0@N	114	109	120	102
600-30485-14	20101019MW-CB-46 DV73.0@N	96	91	104	83
600-30485-17	20101019OBS-2V45. 0@N	113	107	117	97
600-30485-17 DL	20101019OBS-2V45. 0@N DL	112	102	116	91
600-30485-20	20101019INJ-3V41.0 @N	110	111	119	104
600-30485-20 DL	20101019INJ-3V41.0 @N DL	110	110	116	98
600-30485-21	20101019OBS-1V37. 5@N	109	105	113	98
MB 600-42142/2		115	110	119	104
MB 600-42143/3		112	109	107	106
MB 600-42236/2		113	105	115	95
MB 600-42266/3		112	107	106	106
LCS 600-42142/1		124	118	127	111
LCS 600-42143/1		123	120	122	116
LCS 600-42236/1		122	108	124	96
LCS 600-42266/1		121	120	120	114
600-30485-10 MS	20101019MW-CB-45 V45.0@N MS	94	92	97	85
600-30485-10 MSD	20101019MW-CB-45 V45.0@N MSD	119	116	123	108

Surrogate	Acceptance Limits
TOL = Toluene-d8 (Surr)	70-130
DBFM = Dibromofluoromethane	62-130
BFB = 4-Bromofluorobenzene	67-139
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Method Blank - Batch: 600-42142

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42142/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1253
Date Prepared: 10/21/2010 1253

Analysis Batch: 600-42142
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29404.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	115	70 - 130
Dibromofluoromethane	110	62 - 130
4-Bromofluorobenzene	119	67 - 139
1,2-Dichloroethane-d4 (Surr)	104	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Method Blank - Batch: 600-42142

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42142/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1253
Date Prepared: 10/21/2010 1253

Analysis Batch: 600-42142
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29404.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Acetone	2.0	U	2.0	2.0
Benzene	0.13	U	0.13	1.0
Chlorobromomethane	0.17	U	0.17	1.0
Bromoform	0.12	U	0.12	1.0
Bromomethane	0.22	U	0.22	2.0
2-Butanone (MEK)	0.76	U	0.76	2.0
Carbon disulfide	0.070	U	0.070	1.0
Carbon tetrachloride	0.13	U	0.13	1.0
Dibromochloromethane	0.45	U	0.45	1.0
Chlorobenzene	0.11	U	0.11	1.0
Chloroethane	0.19	U	0.19	2.0
Chloroform	0.12	U	0.12	1.0
Chloromethane	0.15	U	0.15	2.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	0.12	U	0.12	1.0
1,2-Dichloropropane	0.16	U	0.16	1.0
cis-1,3-Dichloropropene	0.11	U	0.11	1.0
trans-1,3-Dichloropropene	0.11	U	0.11	1.0
Ethylbenzene	0.13	U	0.13	1.0
2-Hexanone	0.31	U	0.31	1.0
Methylene Chloride	0.42	U	0.42	1.0
4-Methyl-2-pentanone (MIBK)	0.31	U	0.31	2.0
Styrene	0.10	U	0.10	1.0
1,1,2,2-Tetrachloroethane	0.16	U	0.16	1.0
Tetrachloroethene	0.080	U	0.080	1.0
Toluene	0.14	U	0.14	1.0
1,1,1-Trichloroethane	0.12	U	0.12	1.0
1,1,2-Trichloroethane	0.18	U	0.18	1.0
Trichloroethene	0.13	U	0.13	1.0
Vinyl acetate	0.17	U	0.17	1.0
Vinyl chloride	0.13	U	0.13	2.0
o-Xylene	0.12	U	0.12	1.0
m-Xylene & p-Xylene	0.25	U	0.25	2.0
Xylenes, Total	0.32	U	0.32	3.0
cis-1,2-Dichloroethene	0.16	U	0.16	1.0
Bromodichloromethane	0.14	U	0.14	1.0
1,2-Dichloroethene, Total	0.30	U	0.30	1.0

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Lab Control Sample - Batch: 600-42142

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42142/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1208
Date Prepared: 10/21/2010 1208

Analysis Batch: 600-42142
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29402.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0116	116	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	124	70 - 130
Dibromofluoromethane	118	62 - 130
4-Bromofluorobenzene	127	67 - 139
1,2-Dichloroethane-d4 (Surr)	111	50 - 134

Lab Control Sample - Batch: 600-42142

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42142/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1208
Date Prepared: 10/21/2010 1208

Analysis Batch: 600-42142
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29402.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	19.5	97	28 - 152	
Benzene	10.0	11.3	113	69 - 131	
Chlorobromomethane	10.0	10.9	109	60 - 141	
Bromoform	10.0	9.38	94	39 - 149	
Bromomethane	10.0	8.59	86	52 - 146	
2-Butanone (MEK)	20.0	20.8	104	59 - 133	
Carbon disulfide	10.0	9.02	90	32 - 177	
Carbon tetrachloride	10.0	11.3	113	59 - 147	
Dibromochloromethane	10.0	10.2	102	58 - 132	
Chlorobenzene	10.0	11.3	113	60 - 136	
Chloroethane	10.0	9.70	97	56 - 144	
Chloroform	10.0	11.7	117	69 - 128	
Chloromethane	10.0	4.71	47	32 - 151	
1,1-Dichloroethane	10.0	11.1	111	66 - 126	
1,1-Dichloroethene	10.0	9.41	94	59 - 145	
trans-1,2-Dichloroethene	10.0	10.5	105	70 - 132	
1,2-Dichloropropane	10.0	11.2	112	72 - 125	
cis-1,3-Dichloropropene	10.0	10.9	109	60 - 135	
trans-1,3-Dichloropropene	10.0	11.7	117	63 - 133	
Ethylbenzene	10.0	11.2	112	68 - 128	
2-Hexanone	20.0	21.3	107	51 - 130	
Methylene Chloride	10.0	9.64	96	62 - 134	

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Lab Control Sample - Batch: 600-42142

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42142/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1208
Date Prepared: 10/21/2010 1208

Analysis Batch: 600-42142
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29402.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4-Methyl-2-pentanone (MIBK)	20.0	22.1	111	56 - 142	
Styrene	10.0	11.0	110	68 - 133	
1,1,2,2-Tetrachloroethane	10.0	11.0	110	68 - 134	
Tetrachloroethene	10.0	11.6	116	61 - 142	
Toluene	10.0	11.3	113	67 - 130	
1,1,1-Trichloroethane	10.0	11.8	118	65 - 142	
1,1,2-Trichloroethane	10.0	11.0	110	68 - 130	
Trichloroethene	10.0	11.6	116	68 - 130	
Vinyl acetate	10.0	12.6	126	58 - 175	
Vinyl chloride	10.0	6.32	63	47 - 146	
o-Xylene	10.0	11.3	113	68 - 134	
m-Xylene & p-Xylene	20.0	22.6	113	67 - 132	
Xylenes, Total	30.0	33.9	113	68 - 132	
cis-1,2-Dichloroethene	10.0	11.1	111	69 - 129	
Bromodichloromethane	10.0	10.9	109	73 - 130	
1,2-Dichloroethene, Total	20.0	21.6	108	65 - 127	

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Method Blank - Batch: 600-42143

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42143/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1332
Date Prepared: 10/21/2010 1332

Analysis Batch: 600-42143
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS06
Lab File ID: J29406.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	112	70 - 130
Dibromofluoromethane	109	62 - 130
4-Bromofluorobenzene	107	67 - 139
1,2-Dichloroethane-d4 (Surr)	106	50 - 134

Lab Control Sample - Batch: 600-42143

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42143/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1212
Date Prepared: 10/21/2010 1212

Analysis Batch: 600-42143
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS06
Lab File ID: J29403.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0117	117	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	123	70 - 130
Dibromofluoromethane	120	62 - 130
4-Bromofluorobenzene	122	67 - 139
1,2-Dichloroethane-d4 (Surr)	116	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Method Blank - Batch: 600-42236

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42236/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1213
Date Prepared: 10/22/2010 1213

Analysis Batch: 600-42236
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29504.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	113	70 - 130
Dibromofluoromethane	105	62 - 130
4-Bromofluorobenzene	115	67 - 139
1,2-Dichloroethane-d4 (Surr)	95	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Method Blank - Batch: 600-42236

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42236/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1213
Date Prepared: 10/22/2010 1213

Analysis Batch: 600-42236
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29504.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Acetone	2.0	U	2.0	2.0
Benzene	0.13	U	0.13	1.0
Chlorobromomethane	0.17	U	0.17	1.0
Bromoform	0.12	U	0.12	1.0
Bromomethane	0.22	U	0.22	2.0
2-Butanone (MEK)	0.76	U	0.76	2.0
Carbon disulfide	0.070	U	0.070	1.0
Carbon tetrachloride	0.13	U	0.13	1.0
Dibromochloromethane	0.45	U	0.45	1.0
Chlorobenzene	0.11	U	0.11	1.0
Chloroethane	0.19	U	0.19	2.0
Chloroform	0.12	U	0.12	1.0
Chloromethane	0.15	U	0.15	2.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	0.12	U	0.12	1.0
1,2-Dichloropropane	0.16	U	0.16	1.0
cis-1,3-Dichloropropene	0.11	U	0.11	1.0
trans-1,3-Dichloropropene	0.11	U	0.11	1.0
Ethylbenzene	0.13	U	0.13	1.0
2-Hexanone	0.31	U	0.31	1.0
Methylene Chloride	0.42	U	0.42	1.0
4-Methyl-2-pentanone (MIBK)	0.31	U	0.31	2.0
Styrene	0.10	U	0.10	1.0
1,1,2,2-Tetrachloroethane	0.16	U	0.16	1.0
Tetrachloroethene	0.080	U	0.080	1.0
Toluene	0.14	U	0.14	1.0
1,1,1-Trichloroethane	0.12	U	0.12	1.0
1,1,2-Trichloroethane	0.18	U	0.18	1.0
Trichloroethene	0.13	U	0.13	1.0
Vinyl acetate	0.17	U	0.17	1.0
Vinyl chloride	0.13	U	0.13	2.0
o-Xylene	0.12	U	0.12	1.0
m-Xylene & p-Xylene	0.25	U	0.25	2.0
Xylenes, Total	0.32	U	0.32	3.0
cis-1,2-Dichloroethene	0.16	U	0.16	1.0
Bromodichloromethane	0.14	U	0.14	1.0
1,2-Dichloroethene, Total	0.30	U	0.30	1.0

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Lab Control Sample - Batch: 600-42236

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42236/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1127
Date Prepared: 10/22/2010 1127

Analysis Batch: 600-42236
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29502.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0111	111	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	122	70 - 130
Dibromofluoromethane	108	62 - 130
4-Bromofluorobenzene	124	67 - 139
1,2-Dichloroethane-d4 (Surr)	96	50 - 134

Lab Control Sample - Batch: 600-42236

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42236/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1127
Date Prepared: 10/22/2010 1127

Analysis Batch: 600-42236
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29502.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	22.1	111	28 - 152	
Benzene	10.0	10.9	109	69 - 131	
Chlorobromomethane	10.0	10.0	100	60 - 141	
Bromoform	10.0	9.14	91	39 - 149	
Bromomethane	10.0	8.64	86	52 - 146	
2-Butanone (MEK)	20.0	19.0	95	59 - 133	
Carbon disulfide	10.0	6.78	68	32 - 177	
Carbon tetrachloride	10.0	10.6	106	59 - 147	
Dibromochloromethane	10.0	9.99	100	58 - 132	
Chlorobenzene	10.0	11.2	112	60 - 136	
Chloroethane	10.0	10.3	103	56 - 144	
Chloroform	10.0	10.8	108	69 - 128	
Chloromethane	10.0	4.03	40	32 - 151	
1,1-Dichloroethane	10.0	10.5	105	66 - 126	
1,1-Dichloroethene	10.0	8.46	85	59 - 145	
trans-1,2-Dichloroethene	10.0	9.54	95	70 - 132	
1,2-Dichloropropane	10.0	11.2	112	72 - 125	
cis-1,3-Dichloropropene	10.0	10.5	105	60 - 135	
trans-1,3-Dichloropropene	10.0	11.4	114	63 - 133	
Ethylbenzene	10.0	11.3	113	68 - 128	
2-Hexanone	20.0	20.2	101	51 - 130	
Methylene Chloride	10.0	8.86	89	62 - 134	

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Lab Control Sample - Batch: 600-42236

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42236/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1127
Date Prepared: 10/22/2010 1127

Analysis Batch: 600-42236
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29502.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4-Methyl-2-pentanone (MIBK)	20.0	21.3	106	56 - 142	
Styrene	10.0	11.1	111	68 - 133	
1,1,2,2-Tetrachloroethane	10.0	10.9	109	68 - 134	
Tetrachloroethene	10.0	11.4	114	61 - 142	
Toluene	10.0	11.1	111	67 - 130	
1,1,1-Trichloroethane	10.0	11.4	114	65 - 142	
1,1,2-Trichloroethane	10.0	11.0	110	68 - 130	
Trichloroethene	10.0	11.4	114	68 - 130	
Vinyl acetate	10.0	10.8	108	58 - 175	
Vinyl chloride	10.0	5.77	58	47 - 146	
o-Xylene	10.0	11.3	113	68 - 134	
m-Xylene & p-Xylene	20.0	22.7	114	67 - 132	
Xylenes, Total	30.0	34.0	113	68 - 132	
cis-1,2-Dichloroethene	10.0	10.6	106	69 - 129	
Bromodichloromethane	10.0	10.7	107	73 - 130	
1,2-Dichloroethene, Total	20.0	20.1	101	65 - 127	

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42236

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30485-10
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/22/2010 1452
Date Prepared: 10/22/2010 1452

Analysis Batch: 600-42236
Prep Batch: N/A

Instrument ID: VOAMS09
Lab File ID: K29511.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30485-10
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/22/2010 1515
Date Prepared: 10/22/2010 1515

Analysis Batch: 600-42236
Prep Batch: N/A

Instrument ID: VOAMS09
Lab File ID: K29512.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,2-Dichloroethane	84	125	60 - 140	23	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	94	119	70 - 130
Dibromofluoromethane	92	116	62 - 130
4-Bromofluorobenzene	97	123	67 - 139
1,2-Dichloroethane-d4 (Surr)	85	108	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42236

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30485-10
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/22/2010 1452
Date Prepared: 10/22/2010 1452

Analysis Batch: 600-42236
Prep Batch: N/A

Instrument ID: VOAMS09
Lab File ID: K29511.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30485-10
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/22/2010 1515
Date Prepared: 10/22/2010 1515

Analysis Batch: 600-42236
Prep Batch: N/A

Instrument ID: VOAMS09
Lab File ID: K29512.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	87	111	60 - 140	24	30		
Benzene	88	113	65 - 125	26	30		
Chlorobromomethane	87	113	60 - 140	26	30		
Bromoform	77	93	60 - 140	20	30		
Bromomethane	63	78	60 - 140	21	30		
2-Butanone (MEK)	90	115	60 - 140	25	30		
Carbon disulfide	53	69	60 - 140	27	30	F	
Carbon tetrachloride	84	110	60 - 140	27	30		
Dibromochloromethane	82	105	60 - 140	24	30		
Chlorobenzene	89	114	72 - 122	24	30		
Chloroethane	70	92	60 - 140	27	30		
Chloroform	94	119	60 - 140	24	30		
Chloromethane	24	30	60 - 140	21	30	F	F
1,1-Dichloroethane	88	113	60 - 140	25	30		
1,1-Dichloroethene	69	89	22 - 143	26	30		
trans-1,2-Dichloroethene	78	103	60 - 140	27	30		
1,2-Dichloropropane	87	113	60 - 140	25	30		
cis-1,3-Dichloropropene	86	109	60 - 140	24	30		
trans-1,3-Dichloropropene	95	121	60 - 140	24	30		
Ethylbenzene	84	109	60 - 140	26	30		
2-Hexanone	87	118	60 - 140	31	30		F
Methylene Chloride	78	104	60 - 140	29	30		
4-Methyl-2-pentanone (MIBK)	94	117	60 - 140	22	30		
Styrene	28	29	60 - 140	4	30	F	F
1,1,2,2-Tetrachloroethane	93	117	60 - 140	23	30		
Tetrachloroethene	87	113	60 - 140	26	30		
Toluene	86	111	76 - 125	26	30		
1,1,1-Trichloroethane	89	116	60 - 140	27	30		
1,1,2-Trichloroethane	91	114	60 - 140	23	30		
Trichloroethene	87	113	56 - 118	26	30		
Vinyl acetate	61	68	60 - 140	11	30		
Vinyl chloride	36	47	60 - 140	27	30	F	F

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42236

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	600-30485-10	Analysis Batch:	600-42236	Instrument ID:	VOAMS09
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	K29511.D
Dilution:	10			Initial Weight/Volume:	25 mL
Date Analyzed:	10/22/2010 1452			Final Weight/Volume:	25 mL
Date Prepared:	10/22/2010 1452				

MSD Lab Sample ID:	600-30485-10	Analysis Batch:	600-42236	Instrument ID:	VOAMS09
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	K29512.D
Dilution:	10			Initial Weight/Volume:	25 mL
Date Analyzed:	10/22/2010 1515			Final Weight/Volume:	25 mL
Date Prepared:	10/22/2010 1515				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
o-Xylene	85	110	60 - 140	26	30		
m-Xylene & p-Xylene	84	108	60 - 140	25	30		
Xylenes, Total	85	109	60 - 140	25	30		
cis-1,2-Dichloroethene	90	114	60 - 140	24	30		
Bromodichloromethane	86	111	60 - 140	25	30		
1,2-Dichloroethene, Total	84	108	60 - 140	26	30		

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42236

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30485-10
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/22/2010 1452
Date Prepared: 10/22/2010 1452

Units: mg/L

MSD Lab Sample ID: 600-30485-10
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/22/2010 1515
Date Prepared: 10/22/2010 1515

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,2-Dichloroethane	0.071	0.100	0.100	0.155	0.196

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42236

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30485-10 Units: ug/L MSD Lab Sample ID: 600-30485-10
Client Matrix: Water Client Matrix: Water
Dilution: 10 Dilution: 10
Date Analyzed: 10/22/2010 1452 Date Analyzed: 10/22/2010 1515
Date Prepared: 10/22/2010 1452 Date Prepared: 10/22/2010 1515

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Acetone	0.020	U	200	200	175		221	
Benzene	0.0013	U	100	100	87.5		113	
Chlorobromomethane	0.0017	U	100	100	86.9		113	
Bromoform	0.0012	U	100	100	76.7		93.4	
Bromomethane	0.0022	U	100	100	63.2		77.7	
2-Butanone (MEK)	0.0076	U	200	200	179		231	
Carbon disulfide	0.00070	U	100	100	52.6	F	69.3	
Carbon tetrachloride	0.0013	U	100	100	83.9		110	
Dibromochloromethane	0.0045	U	100	100	82.0		105	
Chlorobenzene	0.0011	U	100	100	88.9		114	
Chloroethane	0.0019	U	100	100	70.2		92.0	
Chloroform	0.0012	U	100	100	93.5		119	
Chloromethane	0.0015	U	100	100	24.4	F	30.2	F
1,1-Dichloroethane	0.0016	U	100	100	87.8		113	
1,1-Dichloroethene	0.0013	U	100	100	68.8		89.2	
trans-1,2-Dichloroethene	0.0012	U	100	100	78.2		103	
1,2-Dichloropropane	0.0016	U	100	100	87.2		113	
cis-1,3-Dichloropropene	0.0011	U	100	100	85.7		109	
trans-1,3-Dichloropropene	0.0011	U	100	100	94.8		121	
Ethylbenzene	0.0013	U	100	100	84.2		109	
2-Hexanone	0.0031	U	200	200	173		236	F
Methylene Chloride	0.0042	U	100	100	78.0		104	
4-Methyl-2-pentanone (MIBK)	0.0031	U	200	200	187		234	
Styrene	0.0010	U	100	100	27.6	F	28.7	F
1,1,2,2-Tetrachloroethane	0.0016	U	100	100	92.7		117	
Tetrachloroethene	0.00080	U	100	100	86.9		113	
Toluene	0.0014	U	100	100	85.8		111	
1,1,1-Trichloroethane	0.0012	U	100	100	88.8		116	
1,1,2-Trichloroethane	0.0018	U	100	100	90.6		114	
Trichloroethene	0.0013	U	100	100	87.1		113	
Vinyl acetate	0.0017	U	100	100	60.9		68.3	
Vinyl chloride	0.0013	U	100	100	35.7	F	46.8	F
o-Xylene	0.0012	U	100	100	85.2		110	
m-Xylene & p-Xylene	0.0025	U	200	200	169		217	
Xylenes, Total	0.0032	U	300	300	254		327	
cis-1,2-Dichloroethene	0.0016	U	100	100	89.5		114	
Bromodichloromethane	0.0014	U	100	100	86.5		111	
1,2-Dichloroethene, Total	0.0030	U	200	200	168		217	

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Method Blank - Batch: 600-42266

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42266/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/23/2010 1346
Date Prepared: 10/23/2010 1346

Analysis Batch: 600-42266
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS06
Lab File ID: J29606.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	112	70 - 130
Dibromofluoromethane	107	62 - 130
4-Bromofluorobenzene	106	67 - 139
1,2-Dichloroethane-d4 (Surr)	106	50 - 134

Lab Control Sample - Batch: 600-42266

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42266/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/23/2010 1227
Date Prepared: 10/23/2010 1227

Analysis Batch: 600-42266
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS06
Lab File ID: J29603.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0118	118	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	121	70 - 130
Dibromofluoromethane	120	62 - 130
4-Bromofluorobenzene	120	67 - 139
1,2-Dichloroethane-d4 (Surr)	114	50 - 134

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
30485
#1

600-30485-A-1

Client Information	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone:	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of
Company: GSI Environmental, Inc. (INVOICE ED TOKARSKI @ DOW)		Analysis Requested		Job #: 6-3516
Address: 2211 Norfolk , Suite 1000	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX 77098				
Phone:	PO #: 4510577845 Item 1			Other:
Email: jmmcdade@gsi-net.com	WO #:			
Project Name: Dow- Charlie Burch	Project #: 60000256			
Site: TX	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	8260B VOCs (FULL LIST)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A	A		
P 172 – 710	10/19/10	–	G	Water			✓					
20101019_HOUCB_TB		–		Water			✓					
20101019 MW-CB-49V45.0GN		900		Water			✓					
20101019 MW-CB-48-V45.0GN		910		Water			✓					
20101019 MW-CB-47DV85.0GN		945		Water			✓					
20101019 MW-CB-47SV45.0GN		955		Water			✓					
20101019 MW-CB-47SV45.0GD		955		Water			✓					
20101019 MW-CB-30SV50.0GN		955		Water			✓					
20101019 MW-CB-50DV73.0GN		1015		Water			✓					
20101019 MW-CB-45V45.0GN		1055		Water			✓					
20101019 MW-CB-43V45.0GN		11:15		Water			✓					

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP, invoice to Ed Tokarski @ Dow

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	20-Oct-10 7:00	GSI		10/20/10 1013	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/20/10 1056	TAL		10/20/10 1056	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Page 67 of 70

10/28/2010

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone:	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 2 of 3
Company: GSI Environmental, Inc. (INVOICE TO ED TOKARSKI @ DOW)		Analysis Requested		Job #: G-3516
Address: 2211 Norfolk , Suite 1000	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: TX 77098				
Phone:	PO #: 4510577845 Item 1			Other:
Email: jmmcdade@gsi-net.com	WO #:			
Project Name: Dow- Charlie Burch	Project #: 60000256			
Site: TX	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	8260B VOCs (FULL LIST)	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	N	A	A		
20101019 MW-CB-44V45.0GN	10/19/10	1135	G	Water			✓					
20101019 MW-CB-46S V45.0GN		1140		Water						✓		
20101019 MW-CB-46D V73.0GN		~~1155~~ 1210		Water						✓		sampled @ 1210
20101019 MW-CB-42 V45.0GN		1410		Water			✓					
20101019 MW-CB-40 V45.0GN		1415		Water			✓					
20101019 OBS-2 V 45.0GN		1445		Water						✓		
20101019 MW-CB-41D V64.0GN		1515		Water			✓					
20101019 MW-CB-41S V45.0GN		1535		Water			✓					
20101019 INJ-3 V41.0 GN		1535		Water						✓		
20101019 OBS-1 V37.5GN		1605		Water						✓		
20101019 MW-CB-39 V 45.0GN		1615		Water								

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP, INVOICE ED TOKARSKI @ DOW

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	20-Oct-10 7:00	GSI		10/20/10 1013	TAL
Relinquished by:	Date/Time: 10/20/10 1056	Company TAL	Received by:	Date/Time: 10/20/10 1056	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

10/28/2010

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone:	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 3 of 3
Company: GSI Environmental, Inc. (INVOICE TO ODTOKARSKI GDOW)		Analysis Requested		Job #: 3576
Address: 2211 Norfolk , Suite 1000	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX 77098				
Phone:	PO #: 4510577845 Item 1			
Email: jmmcdade@gsi-net.com	WO #:			Other:
Project Name: Dow- Charlie Burch	Project #: 60000256			
Site: TX	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A		
20101019 MW-CB-36 V45.0 GN	10/19/10	1640	G	Water			✓				
20101019 MW-CB-38 V45.0 GN	↓	1645	↓	Water			✓				
20101019 MW-CB-38 V45.0 GD	↓	1645	↓	Water			✓				
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	20-Oct-10 7:00	GSI		10/20/10 1013	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/20/10 1056	TAL		10/20/10 1056	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

10/28/2010

Login Sample Receipt Check List

Client: Groundwater Services, Inc. Job Number: 600-30485-1

Login Number: 30485 **List Source: TestAmerica Houston**
Creator: Trenery, Michael J
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-30569-1

Job Description: Rohm and Haas

For:
Groundwater Services, Inc.
2211 Norfolk, Suite 1000
Houston, TX 77098-4044

Attention: Jim McDade

C. Lance Tigrett

Approved for release.
Lance C Tigrett
Data Review Analyst I
10/29/2010 10:02 AM

Designee for
Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
10/29/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

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Appendix A - Laboratory Data Package Cover Page

This data package is for Job No. 600-30569 and consists of:

- ☒ This signature page, the laboratory review checklists, and the following reportable data:
- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC Chapter 5,
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist and for each analyte, matrix and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all methods, analytes and matrices reported in the data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory Exception Reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC 25.6 and was last inspected by [] TCEQ or [] _____ on _____. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Chris Schepcoff		Laboratory Director	10/29/10
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/28/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30569
Reviewer Name: YX	Prep Batch Number: 600-42187, 42327, 42395, and 42489-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				1
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				2
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/28/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30569
Reviewer Name: YX	Prep Batch Number: 600-42187, 42327, 42395, and 42489-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 10/28/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30569
Reviewer Name: YX	Prep Batch Number: 600-42187, 42327, 42395, and 42489-VOA

ER #[1]	DESCRIPTION
1	Carbon disulfide and Methylene Chloride were detected above the MDL, but below the MQL in the method blank for batch 600-42187. The levels of detection are below the recommended reporting limits and the appropriate flags have been applied to the report.
2	The 1,2-Dichloroethane SDLs for samples 600-30569-21 and 22 were elevated due to the dilutions necessary for analyses.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Quality Control Report

Detection Check Standard

Matrix:	Water - Low Level
Method:	8260B
Preparation:	5030
Date Analyzed:	7/28/2010
Date Prepared:	7/28/2010
Lab Sample ID:	VSTD001
File #:	VOA_VII.i\072810.b\A20903.D
Units:	ug/L

Analyte	MDL	DCS Spike	DCS Result	MQL
Dichlorodifluoromethane	0.14	1	1.05	1
Chloromethane	0.15	1	1.18	2
Vinyl Chloride	0.13	1	0.787	2
Bromomethane	0.22	1	0.752	2
Chloroethane	0.19	1	0.983	2
Trichlorofluoromethane	0.08	1	0.787	1
Allyl Chloride		2	1.98	
Acrolein	1.41	5	5.71	1
1,1-Dichloroethene	0.13	1	0.787	1
Trichlorotrifluoroethene		1	1.07	
Acetone	2	2	4.32	2
Methyl Iodide		2	1.6	
2-Propanol		10	22.59	
Carbon Disulfide	0.07	2	2.36	1
Acetonitrile	0.66	2	2.07	1
Methylene Chloride	0.42	1	1.14	1
Acrylonitrile	1.09	5	6.31	1
trans-1,2-Dichloroethene	0.12	1	0.783	1
Methyl tert-butyl ether	0.15	1	0.796	1
1,2-Dichloroethene (total)	0.3	2	1.59	1
1,1-Dichloroethane	0.13	1	0.796	1
Vinyl Acetate	0.17	2	2.2	1
Chloroprene		2	1.6	
cis-1,2-Dichloroethene	0.16	1	0.803	1
2,2-Dichloropropane		1	0.764	
2-Butanone (MEK)	0.76	2	2.5	2
Propionitrile		2	2.7	
Methacrylonitrile		2	2.47	1
Bromochloromethane	0.17	1	0.815	
Chloroform	0.12	5	5.43	
1,1,1-Trichloroethane	0.12	1	0.762	
1,1-Dichloropropene	0.13	1	0.854	
Carbon Tetrachloride	0.13	1	0.86	
Isobutyl Alcohol	4.1	10	24.38	
Benzene	0.13	1	0.864	
1,2-Dichloroethane	0.13	1	0.882	
Trichloroethene	0.13	1	0.86	
1,2-Dichloropropane	0.16	1	0.747	
Methyl methacrylate	0.33	2	2.18	

Methylene Bromide		1	0.783
1,4-Dioxane	26.97	50	153.5
Bromodichloromethane	0.14	1	1.05
2-Chloroethyl vinyl ether	0.17	2	2.14
cis-1,3-Dichloropropene	0.11	1	1.13
4-Methyl-2-pentanone	0.31	2	2.21
Toluene	0.14	1	0.874
trans-1,3-Dichloropropene	0.11	1	1.18
Ethyl methacrylate	0.33	2	0.899
1,1,2-Trichloroethane	0.18	1	0.791
1,3-Dichloropropane	0.12	1	8.46
Tetrachloroethene	0.08	1	0.828
2-Hexanone	0.31	2	2.31
Dibromochloromethane	0.45	1	1.15
1,2-Dibromoethane (EDB)	0.36	1	1.05
Chlorobenzene	0.11	1	0.831
1,1,1,2-Tetrachloroethane	0.09	1	1.01
Ethylbenzene	0.13	1	0.833
m,p-Xylene	0.25	2	1.77
o-Xylene	0.12	1	0.827
Xylenes (total)	0.32	3	2.59
Styrene	0.1	1	0.768
Bromoform	0.12	1	2.62
Isopropylbenzene	0.06	1	1.01
1,1,2,2-Tetrachloroethane	0.16	1	1.14
trans-1,4-Dichloro-2-buter	0.86	2	0.669
Bromobenzene	0.14	1	1.08
n-Propylbenzene	0.25	1	0.955
2-Chlorotoluene	0.17	1	0.759
4-Chlorotoluene	0.18	1	0.938
1,3,5-Trimethylbenzene	0.08	1	0.822
tert-Butylbenzene	0.16	1	0.956
1,2,4-Trimethylbenzene	0.1	1	0.913
sec-Butylbenzene	0.14	1	0.767
1,3-Dichlorobenzene	0.13	1	0.762
1,4-Dichlorobenzene	0.05	1	0.847
1,2-Dichlorobenzene	0.1	1	1.08
p-Isopropyltoluene	0.1	1	0.783
n-Butylbenzene	0.09	1	0.877
1,2,3-Trichloropropane	0.13	1	0.798
1,2-Dibromo-3-chloroprop	0.39	1	1.01
1,2,4-Trichlorobenzene	0.2	1	0.976
Hexachlorobutadiene	0.17	1	0.539
1,2,3-Trichlorobenzene	0.28	1	1.02
Naphthalene	0.47	1	1.13

METHOD SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL HOU	SW846 8260B	
Purge and Trap	TAL HOU		SW846 5030B

Lab References:

TAL HOU = TestAmerica Houston

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Method	Analyst	Analyst ID
SW846 8260B	Shen, Wei	WS

SAMPLE SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-30569-1	20101020-HOUCB-TB	Water	10/20/2010 0000	10/21/2010 1529
600-30569-2	20101020 MW-CB-19AS V28.5@N	Water	10/20/2010 0905	10/21/2010 1529
600-30569-3	20101020 MW-CB-37D V53.0@N	Water	10/20/2010 0935	10/21/2010 1529
600-30569-4	20101020 MW-CB-37S V45.0@N	Water	10/20/2010 0940	10/21/2010 1529
600-30569-5	20101020 MW-CB-31A V28.5@N	Water	10/20/2010 1020	10/21/2010 1529
600-30569-6	20101020 MW-CB-33A V28.0@N	Water	10/20/2010 1020	10/21/2010 1529
600-30569-7	20101020 MW-CB-33A V28.0@D	Water	10/20/2010 1020	10/21/2010 1529
600-30569-8	20101020 MW-CB-34A V29.0@N	Water	10/20/2010 1100	10/21/2010 1529
600-30569-9	20101020 MW-CB-29A V28@N	Water	10/20/2010 1110	10/21/2010 1529
600-30569-10	20101020 MW-CB-35A V29.0@N	Water	10/20/2010 1120	10/21/2010 1529
600-30569-11	20101020 TRW-CB-2V@N	Water	10/20/2010 1140	10/21/2010 1529
600-30569-12	20101020 TRW-CB-1V@N	Water	10/20/2010 1140	10/21/2010 1529
600-30569-13	20101020 TRW-CB-3V@N	Water	10/20/2010 1155	10/21/2010 1529
600-30569-14	20101020 TRW-CB-4V@N	Water	10/20/2010 1155	10/21/2010 1529
600-30569-15	20101020 MW-CB-15AS V29.8@N	Water	10/20/2010 1205	10/21/2010 1529
600-30569-16	20101020 MW-CB-15AS V29.8@D	Water	10/20/2010 1205	10/21/2010 1529
600-30569-17	20101020 MW-CB-30A V28.0@N	Water	10/20/2010 1355	10/21/2010 1529
600-30569-18	20101020 TP-21 V44.5@N	Water	10/20/2010 1355	10/21/2010 1529
600-30569-19	20101020 MW-CB-8AD V45.0@N	Water	10/20/2010 1420	10/21/2010 1529
600-30569-20	20101020 MW-CB-14AS V29.0@N	Water	10/20/2010 1435	10/21/2010 1529
600-30569-21	20101020 MW-CB-16AS V29.3@N	Water	10/20/2010 1450	10/21/2010 1529
600-30569-22	20101020 MW-CB-13AS V27.8@N	Water	10/20/2010 1515	10/21/2010 1529
600-30569-23	20101020 MW-CB-9AS V30.0@N	Water	10/20/2010 1515	10/21/2010 1529
600-30569-24	20101020 MW-CB-10AD V50.0@N	Water	10/20/2010 1613	10/21/2010 1529
600-30569-25	20101020 MW-CB-11AS V35.0@N	Water	10/20/2010 1615	10/21/2010 1529
600-30569-26	20101020 MW-CB-24AS V30.0@N	Water	10/20/2010 1640	10/21/2010 1529
600-30569-27	20101020 MW-CB-12AS V29.5@N	Water	10/20/2010 1647	10/21/2010 1529
600-30569-28	20101020 MW-CB-12AS V29.5@D	Water	10/20/2010 1647	10/21/2010 1529

SAMPLE RESULTS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020-HOUCB-TB

Lab Sample ID: 600-30569-1
Client Matrix: Water

Date Sampled: 10/20/2010 00:00
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 16:01		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 16:01	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0066	0.0100	66	50-134		VOAMS07		10/25/2010 16:01	1	WS
4-Bromofluorobenzene	460-00-4		0.0083	0.0100	83	67-139		VOAMS07		10/25/2010 16:01	1	WS
Dibromofluoromethane	1868-53-7		0.0087	0.0100	87	62-130		VOAMS07		10/25/2010 16:01	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	109	70-130		VOAMS07		10/25/2010 16:01	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-19AS V28.5@N

Lab Sample ID: 600-30569-2
Client Matrix: Water

Date Sampled: 10/20/2010 09:05
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 20:51		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42187	10/22/2010 20:51	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0056	0.0100	56	50-134		VOAMS07		10/22/2010 20:51	1	WS
4-Bromofluorobenzene	460-00-4		0.0084	0.0100	84	67-139		VOAMS07		10/22/2010 20:51	1	WS
Dibromofluoromethane	1868-53-7		0.0076	0.0100	76	62-130		VOAMS07		10/22/2010 20:51	1	WS
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	117	70-130		VOAMS07		10/22/2010 20:51	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-37D V53.0@N

Lab Sample ID: 600-30569-3
Client Matrix: Water

Date Sampled: 10/20/2010 09:35
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 15:30		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0022			0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 15:30	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0065	0.0100	65	50-134		VOAMS07		10/25/2010 15:30	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/25/2010 15:30	1	WS
Dibromofluoromethane	1868-53-7		0.0084	0.0100	84	62-130		VOAMS07		10/25/2010 15:30	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS07		10/25/2010 15:30	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-37S V45.0@N

Lab Sample ID: 600-30569-4
Client Matrix: Water

Date Sampled: 10/20/2010 09:40
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 13:28		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0041			0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 13:28	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0063	0.0100	63	50-134		VOAMS07		10/25/2010 13:28	1	WS
4-Bromofluorobenzene	460-00-4		0.0088	0.0100	88	67-139		VOAMS07		10/25/2010 13:28	1	WS
Dibromofluoromethane	1868-53-7		0.0088	0.0100	88	62-130		VOAMS07		10/25/2010 13:28	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	110	70-130		VOAMS07		10/25/2010 13:28	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-31A V28.5@N

Lab Sample ID: 600-30569-5
Client Matrix: Water

Date Sampled: 10/20/2010 10:20
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 13:58		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 13:58	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0061	0.0100	61	50-134		VOAMS07		10/25/2010 13:58	1	WS
4-Bromofluorobenzene	460-00-4		0.0085	0.0100	85	67-139		VOAMS07		10/25/2010 13:58	1	WS
Dibromofluoromethane	1868-53-7		0.0082	0.0100	82	62-130		VOAMS07		10/25/2010 13:58	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS07		10/25/2010 13:58	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-33A V28.0@N

Lab Sample ID: 600-30569-6
Client Matrix: Water

Date Sampled: 10/20/2010 10:20
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 16:31		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 16:31	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/25/2010 16:31	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/25/2010 16:31	1	WS
Dibromofluoromethane	1868-53-7		0.0085	0.0100	85	62-130		VOAMS07		10/25/2010 16:31	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	113	70-130		VOAMS07		10/25/2010 16:31	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-33A V28.0@D

Lab Sample ID: 600-30569-7
Client Matrix: Water

Date Sampled: 10/20/2010 10:20
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 17:01		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 17:01	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/25/2010 17:01	1	WS
4-Bromofluorobenzene	460-00-4		0.0087	0.0100	87	67-139		VOAMS07		10/25/2010 17:01	1	WS
Dibromofluoromethane	1868-53-7		0.0086	0.0100	86	62-130		VOAMS07		10/25/2010 17:01	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	110	70-130		VOAMS07		10/25/2010 17:01	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-34A V29.0@N

Lab Sample ID: 600-30569-8
Client Matrix: Water

Date Sampled: 10/20/2010 11:00
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 17:32		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 17:32	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0062	0.0100	62	50-134		VOAMS07		10/25/2010 17:32	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/25/2010 17:32	1	WS
Dibromofluoromethane	1868-53-7		0.0085	0.0100	85	62-130		VOAMS07		10/25/2010 17:32	1	WS
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	104	70-130		VOAMS07		10/25/2010 17:32	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-29A V28@N

Lab Sample ID: 600-30569-9
Client Matrix: Water

Date Sampled: 10/20/2010 11:10
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 18:02		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 18:02	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/25/2010 18:02	1	WS
4-Bromofluorobenzene	460-00-4		0.0085	0.0100	85	67-139		VOAMS07		10/25/2010 18:02	1	WS
Dibromofluoromethane	1868-53-7		0.0087	0.0100	87	62-130		VOAMS07		10/25/2010 18:02	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	106	70-130		VOAMS07		10/25/2010 18:02	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-35A V29.0@N

Lab Sample ID: 600-30569-10
Client Matrix: Water

Date Sampled: 10/20/2010 11:20
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 18:32		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 18:32	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0069	0.0100	69	50-134		VOAMS07		10/25/2010 18:32	1	WS
4-Bromofluorobenzene	460-00-4		0.0088	0.0100	88	67-139		VOAMS07		10/25/2010 18:32	1	WS
Dibromofluoromethane	1868-53-7		0.0094	0.0100	94	62-130		VOAMS07		10/25/2010 18:32	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	112	70-130		VOAMS07		10/25/2010 18:32	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 TRW-CB-2V@N

Lab Sample ID: 600-30569-11
Client Matrix: Water

Date Sampled: 10/20/2010 11:40
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 17:49		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:49	1	WS
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:49	1	WS
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42187	10/22/2010 17:49	1	WS
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:49	1	WS
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:49	1	WS
1,2-Dichloroethane	107-06-2	10			0.13	1.0	0.13	ug/L	42187	10/22/2010 17:49	1	WS
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:49	1	WS
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42187	10/22/2010 17:49	1	WS
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42187	10/22/2010 17:49	1	WS
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42187	10/22/2010 17:49	1	WS
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42187	10/22/2010 17:49	1	WS
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:49	1	WS
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:49	1	WS
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42187	10/22/2010 17:49	1	WS
Carbon disulfide	75-15-0	0.16	J	B	0.070	2.0	0.070	ug/L	42187	10/22/2010 17:49	1	WS
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:49	1	WS
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42187	10/22/2010 17:49	1	WS
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42187	10/22/2010 17:49	1	WS
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42187	10/22/2010 17:49	1	WS
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:49	1	WS
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42187	10/22/2010 17:49	1	WS
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:49	1	WS
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42187	10/22/2010 17:49	1	WS
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42187	10/22/2010 17:49	1	WS
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:49	1	WS
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42187	10/22/2010 17:49	1	WS
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42187	10/22/2010 17:49	1	WS
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:49	1	WS
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42187	10/22/2010 17:49	1	WS
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42187	10/22/2010 17:49	1	WS
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42187	10/22/2010 17:49	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 TRW-CB-2V@N

Lab Sample ID: 600-30569-11
Client Matrix: Water

Date Sampled: 10/20/2010 11:40
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:49	1	WS
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42187	10/22/2010 17:49	1	WS
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:49	1	WS
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42187	10/22/2010 17:49	1	WS
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42187	10/22/2010 17:49	1	WS
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42187	10/22/2010 17:49	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		5.9	10.0	59	50-134		VOAMS07		10/22/2010 17:49	1	WS
4-Bromofluorobenzene	460-00-4		8.2	10.0	82	67-139		VOAMS07		10/22/2010 17:49	1	WS
Dibromofluoromethane	1868-53-7		8.0	10.0	80	62-130		VOAMS07		10/22/2010 17:49	1	WS
Toluene-d8 (Surr)	2037-26-5		11	10.0	108	70-130		VOAMS07		10/22/2010 17:49	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 TRW-CB-1V@N

Lab Sample ID: 600-30569-12
Client Matrix: Water

Date Sampled: 10/20/2010 11:40
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 17:18		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:18	1	WS
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:18	1	WS
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42187	10/22/2010 17:18	1	WS
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:18	1	WS
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:18	1	WS
1,2-Dichloroethane	107-06-2	15			0.13	1.0	0.13	ug/L	42187	10/22/2010 17:18	1	WS
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:18	1	WS
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42187	10/22/2010 17:18	1	WS
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42187	10/22/2010 17:18	1	WS
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42187	10/22/2010 17:18	1	WS
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42187	10/22/2010 17:18	1	WS
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:18	1	WS
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:18	1	WS
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42187	10/22/2010 17:18	1	WS
Carbon disulfide	75-15-0	0.23	J	B	0.070	2.0	0.070	ug/L	42187	10/22/2010 17:18	1	WS
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:18	1	WS
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42187	10/22/2010 17:18	1	WS
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42187	10/22/2010 17:18	1	WS
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42187	10/22/2010 17:18	1	WS
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:18	1	WS
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42187	10/22/2010 17:18	1	WS
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42187	10/22/2010 17:18	1	WS
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42187	10/22/2010 17:18	1	WS
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42187	10/22/2010 17:18	1	WS
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:18	1	WS
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42187	10/22/2010 17:18	1	WS
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42187	10/22/2010 17:18	1	WS
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:18	1	WS
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42187	10/22/2010 17:18	1	WS
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42187	10/22/2010 17:18	1	WS
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42187	10/22/2010 17:18	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 TRW-CB-1V@N

Lab Sample ID: 600-30569-12
Client Matrix: Water

Date Sampled: 10/20/2010 11:40
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42187	10/22/2010 17:18	1	WS
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42187	10/22/2010 17:18	1	WS
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42187	10/22/2010 17:18	1	WS
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42187	10/22/2010 17:18	1	WS
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42187	10/22/2010 17:18	1	WS
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42187	10/22/2010 17:18	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		5.8	10.0	58	50-134		VOAMS07		10/22/2010 17:18	1	WS
4-Bromofluorobenzene	460-00-4		8.3	10.0	83	67-139		VOAMS07		10/22/2010 17:18	1	WS
Dibromofluoromethane	1868-53-7		7.9	10.0	79	62-130		VOAMS07		10/22/2010 17:18	1	WS
Toluene-d8 (Surr)	2037-26-5		10	10.0	105	70-130		VOAMS07		10/22/2010 17:18	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 TRW-CB-3V@N

Lab Sample ID: 600-30569-13
Client Matrix: Water

Date Sampled: 10/20/2010 11:55
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 19:03		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00088	J		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 19:03	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/25/2010 19:03	1	WS
4-Bromofluorobenzene	460-00-4		0.0082	0.0100	82	67-139		VOAMS07		10/25/2010 19:03	1	WS
Dibromofluoromethane	1868-53-7		0.0085	0.0100	85	62-130		VOAMS07		10/25/2010 19:03	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	108	70-130		VOAMS07		10/25/2010 19:03	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 TRW-CB-4V@N

Lab Sample ID: 600-30569-14
Client Matrix: Water

Date Sampled: 10/20/2010 11:55
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 19:33		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0017			0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 19:33	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0065	0.0100	65	50-134		VOAMS07		10/25/2010 19:33	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/25/2010 19:33	1	WS
Dibromofluoromethane	1868-53-7		0.0087	0.0100	87	62-130		VOAMS07		10/25/2010 19:33	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	110	70-130		VOAMS07		10/25/2010 19:33	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-15AS V29.8@N

Lab Sample ID: 600-30569-15
Client Matrix: Water

Date Sampled: 10/20/2010 12:05
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 20:03		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 20:03	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0065	0.0100	65	50-134		VOAMS07		10/25/2010 20:03	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/25/2010 20:03	1	WS
Dibromofluoromethane	1868-53-7		0.0087	0.0100	87	62-130		VOAMS07		10/25/2010 20:03	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS07		10/25/2010 20:03	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-15AS V29.8@D

Lab Sample ID: 600-30569-16
Client Matrix: Water

Date Sampled: 10/20/2010 12:05
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 20:34		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 20:34	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0065	0.0100	65	50-134		VOAMS07		10/25/2010 20:34	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/25/2010 20:34	1	WS
Dibromofluoromethane	1868-53-7		0.0085	0.0100	85	62-130		VOAMS07		10/25/2010 20:34	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	106	70-130		VOAMS07		10/25/2010 20:34	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-30A V28.0@N

Lab Sample ID: 600-30569-17
Client Matrix: Water

Date Sampled: 10/20/2010 13:55
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 21:04		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 21:04	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0068	0.0100	68	50-134		VOAMS07		10/25/2010 21:04	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/25/2010 21:04	1	WS
Dibromofluoromethane	1868-53-7		0.0090	0.0100	90	62-130		VOAMS07		10/25/2010 21:04	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS07		10/25/2010 21:04	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 TP-21 V44.5@N

Lab Sample ID: 600-30569-18
Client Matrix: Water

Date Sampled: 10/20/2010 13:55
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 12:37		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0086			0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 12:37	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0062	0.0100	62	50-134		VOAMS07		10/26/2010 12:37	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/26/2010 12:37	1	WS
Dibromofluoromethane	1868-53-7		0.0089	0.0100	89	62-130		VOAMS07		10/26/2010 12:37	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	109	70-130		VOAMS07		10/26/2010 12:37	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-8AD V45.0@N

Lab Sample ID: 600-30569-19
Client Matrix: Water

Date Sampled: 10/20/2010 14:20
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/25/2010 21:35		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0067			0.00013	0.0010	0.00013	mg/L	42327	10/25/2010 21:35	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0062	0.0100	62	50-134		VOAMS07		10/25/2010 21:35	1	WS
4-Bromofluorobenzene	460-00-4		0.0083	0.0100	83	67-139		VOAMS07		10/25/2010 21:35	1	WS
Dibromofluoromethane	1868-53-7		0.0082	0.0100	82	62-130		VOAMS07		10/25/2010 21:35	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	106	70-130		VOAMS07		10/25/2010 21:35	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-14AS V29.0@N

Lab Sample ID: 600-30569-20
Client Matrix: Water

Date Sampled: 10/20/2010 14:35
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 13:08		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0040			0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 13:08	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0060	0.0100	60	50-134		VOAMS07		10/26/2010 13:08	1	WS
4-Bromofluorobenzene	460-00-4		0.0087	0.0100	87	67-139		VOAMS07		10/26/2010 13:08	1	WS
Dibromofluoromethane	1868-53-7		0.0085	0.0100	85	62-130		VOAMS07		10/26/2010 13:08	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	108	70-130		VOAMS07		10/26/2010 13:08	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-16AS V29.3@N

Lab Sample ID: 600-30569-21
Client Matrix: Water

Date Sampled: 10/20/2010 14:50
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 12:27		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.047			0.00013	0.0010	0.00065	mg/L	42489	10/27/2010 12:27	5	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.028	0.0500	55	50-134		VOAMS07		10/27/2010 12:27	5	WS
4-Bromofluorobenzene	460-00-4		0.042	0.0500	83	67-139		VOAMS07		10/27/2010 12:27	5	WS
Dibromofluoromethane	1868-53-7		0.039	0.0500	78	62-130		VOAMS07		10/27/2010 12:27	5	WS
Toluene-d8 (Surr)	2037-26-5		0.051	0.0500	102	70-130		VOAMS07		10/27/2010 12:27	5	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-13AS V27.8@N

Lab Sample ID: 600-30569-22
Client Matrix: Water

Date Sampled: 10/20/2010 15:15
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 21:46		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0026	U		0.00013	0.0010	0.0026	mg/L	42395	10/26/2010 21:46	20	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.14	0.200	68	50-134		VOAMS07		10/26/2010 21:46	20	WS
4-Bromofluorobenzene	460-00-4		0.18	0.200	89	67-139		VOAMS07		10/26/2010 21:46	20	WS
Dibromofluoromethane	1868-53-7		0.18	0.200	90	62-130		VOAMS07		10/26/2010 21:46	20	WS
Toluene-d8 (Surr)	2037-26-5		0.22	0.200	112	70-130		VOAMS07		10/26/2010 21:46	20	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-9AS V30.0@N

Lab Sample ID: 600-30569-23
Client Matrix: Water

Date Sampled: 10/20/2010 15:15
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 15:10		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 15:10	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0062	0.0100	62	50-134		VOAMS07		10/26/2010 15:10	1	WS
4-Bromofluorobenzene	460-00-4		0.0088	0.0100	88	67-139		VOAMS07		10/26/2010 15:10	1	WS
Dibromofluoromethane	1868-53-7		0.0085	0.0100	85	62-130		VOAMS07		10/26/2010 15:10	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	110	70-130		VOAMS07		10/26/2010 15:10	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-10AD V50.0@N

Lab Sample ID: 600-30569-24
Client Matrix: Water

Date Sampled: 10/20/2010 16:13
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 15:41		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 15:41	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0067	0.0100	67	50-134		VOAMS07		10/26/2010 15:41	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/26/2010 15:41	1	WS
Dibromofluoromethane	1868-53-7		0.0088	0.0100	88	62-130		VOAMS07		10/26/2010 15:41	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	108	70-130		VOAMS07		10/26/2010 15:41	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-11AS V35.0@N

Lab Sample ID: 600-30569-25
Client Matrix: Water

Date Sampled: 10/20/2010 16:15
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 16:11		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0059			0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 16:11	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/26/2010 16:11	1	WS
4-Bromofluorobenzene	460-00-4		0.0091	0.0100	91	67-139		VOAMS07		10/26/2010 16:11	1	WS
Dibromofluoromethane	1868-53-7		0.0089	0.0100	89	62-130		VOAMS07		10/26/2010 16:11	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	113	70-130		VOAMS07		10/26/2010 16:11	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-24AS V30.0@N

Lab Sample ID: 600-30569-26
Client Matrix: Water

Date Sampled: 10/20/2010 16:40
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 16:42		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 16:42	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0068	0.0100	68	50-134		VOAMS07		10/26/2010 16:42	1	WS
4-Bromofluorobenzene	460-00-4		0.0081	0.0100	81	67-139		VOAMS07		10/26/2010 16:42	1	WS
Dibromofluoromethane	1868-53-7		0.0092	0.0100	92	62-130		VOAMS07		10/26/2010 16:42	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	105	70-130		VOAMS07		10/26/2010 16:42	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-12AS V29.5@N

Lab Sample ID: 600-30569-27
Client Matrix: Water

Date Sampled: 10/20/2010 16:47
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 17:12		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.026			0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 17:12	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0060	0.0100	60	50-134		VOAMS07		10/26/2010 17:12	1	WS
4-Bromofluorobenzene	460-00-4		0.0087	0.0100	87	67-139		VOAMS07		10/26/2010 17:12	1	WS
Dibromofluoromethane	1868-53-7		0.0084	0.0100	84	62-130		VOAMS07		10/26/2010 17:12	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	108	70-130		VOAMS07		10/26/2010 17:12	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30569-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101020 MW-CB-12AS V29.5@D

Lab Sample ID: 600-30569-28
Client Matrix: Water

Date Sampled: 10/20/2010 16:47
Date Received: 10/21/2010 15:29

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 17:42		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.027			0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 17:42	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0065	0.0100	65	50-134		VOAMS07		10/26/2010 17:42	1	WS
4-Bromofluorobenzene	460-00-4		0.0084	0.0100	84	67-139		VOAMS07		10/26/2010 17:42	1	WS
Dibromofluoromethane	1868-53-7		0.0093	0.0100	93	62-130		VOAMS07		10/26/2010 17:42	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	111	70-130		VOAMS07		10/26/2010 17:42	1	WS

DATA REPORTING QUALIFIERS

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: Groundwater Services, Inc. Job Number: 600-30569-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:600-42187					
LCS 600-42187/1	Lab Control Sample	T	Water	8260B	
LCS 600-42187/2	Lab Control Sample	T	Water	8260B	
MB 600-42187/3	Method Blank	T	Water	8260B	
600-30569-2	20101020 MW-CB-19AS V28.5@N	T	Water	8260B	
600-30569-11	20101020 TRW-CB-2V@N	T	Water	8260B	
600-30569-12	20101020 TRW-CB-1V@N	T	Water	8260B	
Analysis Batch:600-42327					
LCS 600-42327/1	Lab Control Sample	T	Water	8260B	
MB 600-42327/2	Method Blank	T	Water	8260B	
600-30569-1	20101020-HOUCB-TB	T	Water	8260B	
600-30569-3	20101020 MW-CB-37D V53.0@N	T	Water	8260B	
600-30569-4	20101020 MW-CB-37S V45.0@N	T	Water	8260B	
600-30569-4MS	Matrix Spike	T	Water	8260B	
600-30569-4MSD	Matrix Spike Duplicate	T	Water	8260B	
600-30569-5	20101020 MW-CB-31A V28.5@N	T	Water	8260B	
600-30569-6	20101020 MW-CB-33A V28.0@N	T	Water	8260B	
600-30569-7	20101020 MW-CB-33A V28.0@D	T	Water	8260B	
600-30569-8	20101020 MW-CB-34A V29.0@N	T	Water	8260B	
600-30569-9	20101020 MW-CB-29A V28@N	T	Water	8260B	
600-30569-10	20101020 MW-CB-35A V29.0@N	T	Water	8260B	
600-30569-13	20101020 TRW-CB-3V@N	T	Water	8260B	
600-30569-14	20101020 TRW-CB-4V@N	T	Water	8260B	
600-30569-15	20101020 MW-CB-15AS V29.8@N	T	Water	8260B	
600-30569-16	20101020 MW-CB-15AS V29.8@D	T	Water	8260B	
600-30569-17	20101020 MW-CB-30A V28.0@N	T	Water	8260B	
600-30569-19	20101020 MW-CB-8AD V45.0@N	T	Water	8260B	
Analysis Batch:600-42395					
LCS 600-42395/1	Lab Control Sample	T	Water	8260B	
MB 600-42395/2	Method Blank	T	Water	8260B	
600-30569-18	20101020 TP-21 V44.5@N	T	Water	8260B	
600-30569-20	20101020 MW-CB-14AS V29.0@N	T	Water	8260B	
600-30569-20MS	Matrix Spike	T	Water	8260B	
600-30569-20MSD	Matrix Spike Duplicate	T	Water	8260B	
600-30569-22	20101020 MW-CB-13AS V27.8@N	T	Water	8260B	
600-30569-23	20101020 MW-CB-9AS V30.0@N	T	Water	8260B	
600-30569-24	20101020 MW-CB-10AD V50.0@N	T	Water	8260B	
600-30569-25	20101020 MW-CB-11AS V35.0@N	T	Water	8260B	
600-30569-26	20101020 MW-CB-24AS V30.0@N	T	Water	8260B	
600-30569-27	20101020 MW-CB-12AS V29.5@N	T	Water	8260B	
600-30569-28	20101020 MW-CB-12AS V29.5@D	T	Water	8260B	

Client: Groundwater Services, Inc. Job Number: 600-30569-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:600-42489					
LCS 600-42489/1	Lab Control Sample	T	Water	8260B	
MB 600-42489/2	Method Blank	T	Water	8260B	
600-30569-21	20101020 MW-CB-16AS V29.3@N	T	Water	8260B	
600-30569-21MS	Matrix Spike	T	Water	8260B	
600-30569-21MSD	Matrix Spike Duplicate	T	Water	8260B	

Report Basis
T = Total

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
600-30569-1	20101020-HOUCB-TB	83	87	109	66
600-30569-2	20101020 MW-CB-19AS V28.5@N	84	76	117	56
600-30569-3	20101020 MW-CB-37D V53.0@N	86	84	107	65
600-30569-4	20101020 MW-CB-37S V45.0@N	88	88	110	63
600-30569-5	20101020 MW-CB-31A V28.5@N	85	82	107	61
600-30569-6	20101020 MW-CB-33A V28.0@N	86	85	113	64
600-30569-7	20101020 MW-CB-33A V28.0@D	87	86	110	64
600-30569-8	20101020 MW-CB-34A V29.0@N	86	85	104	62
600-30569-9	20101020 MW-CB-29A V28@N	85	87	106	64
600-30569-10	20101020 MW-CB-35A V29.0@N	88	94	112	69
600-30569-13	20101020 TRW-CB-3V@N	82	85	108	64
600-30569-14	20101020 TRW-CB-4V@N	86	87	110	65
600-30569-15	20101020 MW-CB-15AS V29.8@N	86	87	107	65
600-30569-16	20101020 MW-CB-15AS V29.8@D	86	85	106	65

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
600-30569-17	20101020 MW-CB-30A V28.0@N	86	90	107	68
600-30569-18	20101020 TP-21 V44.5@N	86	89	109	62
600-30569-19	20101020 MW-CB-8AD V45.0@N	83	82	106	62
600-30569-20	20101020 MW-CB-14AS V29.0@N	87	85	108	60
600-30569-21	20101020 MW-CB-16AS V29.3@N	83	78	102	55
600-30569-22	20101020 MW-CB-13AS V27.8@N	89	90	112	68
600-30569-23	20101020 MW-CB-9AS V30.0@N	88	85	110	62
600-30569-24	20101020 MW-CB-10AD V50.0@N	86	88	108	67
600-30569-25	20101020 MW-CB-11AS V35.0@N	91	89	113	64
600-30569-26	20101020 MW-CB-24AS V30.0@N	81	92	105	68
600-30569-27	20101020 MW-CB-12AS V29.5@N	87	84	108	60
600-30569-28	20101020 MW-CB-12AS V29.5@D	84	93	111	65

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	DBFM %Rec	BFB %Rec	DCA %Rec
600-30569-11	20101020 TRW-CB-2V@N	108	80	82	59
600-30569-12	20101020 TRW-CB-1V@N	105	79	83	58
MB 600-42187/3		106	82	82	61
MB 600-42327/2		110	83	85	63
MB 600-42395/2		110	91	83	67
MB 600-42489/2		101	73	81	55
LCS 600-42187/1		130	103	96	76
LCS 600-42187/2		111	87	85	65
LCS 600-42327/1		123	111	100	81
LCS 600-42395/1		124	115	99	86
LCS 600-42489/1		101	90	87	66
600-30569-4 MS	20101020 MW-CB-37S V45.0@N MS	110	100	94	72
600-30569-20 MS	20101020 MW-CB-14AS V29.0@N MS	113	95	94	67
600-30569-21 MS	20101020 MW-CB-16AS V29.3@N MS	107	86	89	63
600-30569-4 MSD	20101020 MW-CB-37S V45.0@N MSD	111	99	92	73
600-30569-20 MSD	20101020 MW-CB-14AS V29.0@N MSD	120	99	89	70
600-30569-21 MSD	20101020 MW-CB-16AS V29.3@N MSD	106	87	88	62

Surrogate	Acceptance Limits
TOL = Toluene-d8 (Surr)	70-130
DBFM = Dibromofluoromethane	62-130
BFB = 4-Bromofluorobenzene	67-139
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Method Blank - Batch: 600-42187

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42187/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1206
Date Prepared: 10/22/2010 1206

Analysis Batch: 600-42187
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS07
Lab File ID: A29506.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Acetone	2.0	U	2.0	5.0
Benzene	0.13	U	0.13	1.0
Chlorobromomethane	0.17	U	0.17	1.0
Bromoform	0.12	U	0.12	1.0
Bromomethane	0.22	U	0.22	2.0
2-Butanone (MEK)	0.76	U	0.76	2.0
Carbon disulfide	0.120	J	0.070	2.0
Carbon tetrachloride	0.13	U	0.13	1.0
Dibromochloromethane	0.45	U	0.45	1.0
Chlorobenzene	0.11	U	0.11	1.0
Chloroethane	0.19	U	0.19	2.0
Chloroform	0.12	U	0.12	1.0
Chloromethane	0.15	U	0.15	2.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,1-Dichloroethene	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	0.12	U	0.12	1.0
1,2-Dichloropropane	0.16	U	0.16	1.0
cis-1,3-Dichloropropene	0.11	U	0.11	1.0
trans-1,3-Dichloropropene	0.11	U	0.11	1.0
Ethylbenzene	0.13	U	0.13	1.0
2-Hexanone	0.31	U	0.31	2.0
Methylene Chloride	0.555	J	0.42	5.0
4-Methyl-2-pentanone (MIBK)	0.31	U	0.31	2.0
Styrene	0.10	U	0.10	1.0
1,1,2,2-Tetrachloroethane	0.16	U	0.16	1.0
Tetrachloroethene	0.080	U	0.080	1.0
Toluene	0.14	U	0.14	1.0
1,1,1-Trichloroethane	0.12	U	0.12	1.0
1,1,2-Trichloroethane	0.18	U	0.18	1.0
Trichloroethene	0.13	U	0.13	1.0
Vinyl acetate	0.17	U	0.17	2.0
Vinyl chloride	0.13	U	0.13	2.0
o-Xylene	0.12	U	0.12	1.0
m-Xylene & p-Xylene	0.25	U	0.25	1.0
Xylenes, Total	0.32	U	0.32	1.0
cis-1,2-Dichloroethene	0.16	U	0.16	1.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	106	70 - 130
Dibromofluoromethane	82	62 - 130
4-Bromofluorobenzene	82	67 - 139

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	61	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Lab Control Sample - Batch: 600-42187

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42187/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1035
Date Prepared: 10/22/2010 1035

Analysis Batch: 600-42187
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS07
Lab File ID: A29503.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	16.5	83	28 - 152	
Benzene	10.0	10.1	101	69 - 131	
Chlorobromomethane	10.0	9.41	94	60 - 141	
Bromoform	10.0	8.33	83	39 - 149	
Bromomethane	10.0	8.43	84	52 - 146	
2-Butanone (MEK)	20.0	18.2	91	59 - 133	
Carbon disulfide	10.0	9.62	96	32 - 177	
Carbon tetrachloride	10.0	11.4	114	59 - 147	
Dibromochloromethane	10.0	10.8	108	58 - 132	
Chlorobenzene	10.0	10.7	107	60 - 136	
Chloroethane	10.0	9.28	93	56 - 144	
Chloroform	10.0	12.3	123	69 - 128	
Chloromethane	10.0	7.64	76	32 - 151	
1,1-Dichloroethane	10.0	10.4	104	66 - 126	
1,2-Dichloroethane	10.0	10.1	101	66 - 140	
1,1-Dichloroethene	10.0	8.56	86	59 - 145	
trans-1,2-Dichloroethene	10.0	9.16	92	70 - 132	
1,2-Dichloropropane	10.0	9.67	97	72 - 125	
cis-1,3-Dichloropropene	10.0	11.0	110	60 - 135	
trans-1,3-Dichloropropene	10.0	11.9	119	63 - 133	
Ethylbenzene	10.0	11.2	112	68 - 128	
2-Hexanone	20.0	19.0	95	51 - 130	
Methylene Chloride	10.0	9.83	98	62 - 134	
4-Methyl-2-pentanone (MIBK)	20.0	20.2	101	56 - 142	
Styrene	10.0	11.0	110	68 - 133	
1,1,2,2-Tetrachloroethane	10.0	7.84	78	68 - 134	
Tetrachloroethene	10.0	12.8	128	61 - 142	
Toluene	10.0	11.3	113	67 - 130	
1,1,1-Trichloroethane	10.0	9.98	100	65 - 142	
1,1,2-Trichloroethane	10.0	9.32	93	68 - 130	
Trichloroethene	10.0	11.3	113	68 - 130	
Vinyl acetate	10.0	9.64	96	58 - 175	
Vinyl chloride	10.0	8.67	87	47 - 146	
o-Xylene	10.0	11.6	116	68 - 134	
m-Xylene & p-Xylene	20.0	22.8	114	67 - 132	
Xylenes, Total	30.0	34.4	115	68 - 132	
cis-1,2-Dichloroethene	10.0	9.63	96	69 - 129	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	130	70 - 130
Dibromofluoromethane	103	62 - 130
4-Bromofluorobenzene	96	67 - 139
1,2-Dichloroethane-d4 (Surr)	76	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	111	70 - 130
Dibromofluoromethane	87	62 - 130
4-Bromofluorobenzene	85	67 - 139
1,2-Dichloroethane-d4 (Surr)	65	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Method Blank - Batch: 600-42327

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42327/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/25/2010 1227
Date Prepared: 10/25/2010 1227

Analysis Batch: 600-42327
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A29804.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	110	70 - 130
Dibromofluoromethane	83	62 - 130
4-Bromofluorobenzene	85	67 - 139
1,2-Dichloroethane-d4 (Surr)	63	50 - 134

Lab Control Sample - Batch: 600-42327

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42327/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/25/2010 1126
Date Prepared: 10/25/2010 1126

Analysis Batch: 600-42327
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A29802.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0107	107	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	123	70 - 130
Dibromofluoromethane	111	62 - 130
4-Bromofluorobenzene	100	67 - 139
1,2-Dichloroethane-d4 (Surr)	81	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42327

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30569-4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/25/2010 1429
Date Prepared: 10/25/2010 1429

Analysis Batch: 600-42327
Prep Batch: N/A

Instrument ID: VOAMS07
Lab File ID: A29808.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30569-4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/25/2010 1500
Date Prepared: 10/25/2010 1500

Analysis Batch: 600-42327
Prep Batch: N/A

Instrument ID: VOAMS07
Lab File ID: A29809.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,2-Dichloroethane	93	102	60 - 140	6	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	110	111	70 - 130
Dibromofluoromethane	100	99	62 - 130
4-Bromofluorobenzene	94	92	67 - 139
1,2-Dichloroethane-d4 (Surr)	72	73	50 - 134

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42327

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30569-4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/25/2010 1429
Date Prepared: 10/25/2010 1429

Units: mg/L

MSD Lab Sample ID: 600-30569-4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/25/2010 1500
Date Prepared: 10/25/2010 1500

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,2-Dichloroethane	0.0041	0.0100	0.0100	0.0133	0.0142

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Method Blank - Batch: 600-42395

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42395/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1207
Date Prepared: 10/26/2010 1207

Analysis Batch: 600-42395
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A29904.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	110	70 - 130
Dibromofluoromethane	91	62 - 130
4-Bromofluorobenzene	83	67 - 139
1,2-Dichloroethane-d4 (Surr)	67	50 - 134

Lab Control Sample - Batch: 600-42395

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42395/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1106
Date Prepared: 10/26/2010 1106

Analysis Batch: 600-42395
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A29902.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0112	112	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	124	70 - 130
Dibromofluoromethane	115	62 - 130
4-Bromofluorobenzene	99	67 - 139
1,2-Dichloroethane-d4 (Surr)	86	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42395

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30569-20
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1409
Date Prepared: 10/26/2010 1409

Analysis Batch: 600-42395
Prep Batch: N/A

Instrument ID: VOAMS07
Lab File ID: A29908.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30569-20
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1440
Date Prepared: 10/26/2010 1440

Analysis Batch: 600-42395
Prep Batch: N/A

Instrument ID: VOAMS07
Lab File ID: A29909.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,2-Dichloroethane	102	103	60 - 140	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	113	120	70 - 130
Dibromofluoromethane	95	99	62 - 130
4-Bromofluorobenzene	94	89	67 - 139
1,2-Dichloroethane-d4 (Surr)	67	70	50 - 134

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42395

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30569-20
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1409
Date Prepared: 10/26/2010 1409

Units: mg/L

MSD Lab Sample ID: 600-30569-20
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1440
Date Prepared: 10/26/2010 1440

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,2-Dichloroethane	0.0040	0.0100	0.0100	0.0142	0.0143

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Method Blank - Batch: 600-42489

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42489/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/27/2010 1157
Date Prepared: 10/27/2010 1157

Analysis Batch: 600-42489
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A30005.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	101	70 - 130
Dibromofluoromethane	73	62 - 130
4-Bromofluorobenzene	81	67 - 139
1,2-Dichloroethane-d4 (Surr)	55	50 - 134

Lab Control Sample - Batch: 600-42489

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42489/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/27/2010 1055
Date Prepared: 10/27/2010 1055

Analysis Batch: 600-42489
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A30003.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.00877	88	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	101	70 - 130
Dibromofluoromethane	90	62 - 130
4-Bromofluorobenzene	87	67 - 139
1,2-Dichloroethane-d4 (Surr)	66	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42489

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30569-21
Client Matrix: Water
Dilution: 5.0
Date Analyzed: 10/27/2010 1328
Date Prepared: 10/27/2010 1328

Analysis Batch: 600-42489
Prep Batch: N/A

Instrument ID: VOAMS07
Lab File ID: A30008.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30569-21
Client Matrix: Water
Dilution: 5.0
Date Analyzed: 10/27/2010 1359
Date Prepared: 10/27/2010 1359

Analysis Batch: 600-42489
Prep Batch: N/A

Instrument ID: VOAMS07
Lab File ID: A30009.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,2-Dichloroethane	85	85	60 - 140	0	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	107	106	70 - 130
Dibromofluoromethane	86	87	62 - 130
4-Bromofluorobenzene	89	88	67 - 139
1,2-Dichloroethane-d4 (Surr)	63	62	50 - 134

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42489

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30569-21
Client Matrix: Water
Dilution: 5.0
Date Analyzed: 10/27/2010 1328
Date Prepared: 10/27/2010 1328

Units: mg/L

MSD Lab Sample ID: 600-30569-21
Client Matrix: Water
Dilution: 5.0
Date Analyzed: 10/27/2010 1359
Date Prepared: 10/27/2010 1359

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,2-Dichloroethane	0.047	0.0500	0.0500	0.0891	0.0892

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
30569
#1
600-30569-A-1

Client Information

Client Contact: Jim McDade
Company: GSI Environmental, Inc. (INVOICE TO ED TOKARSKI @ DOW)
Address: 2211 Norfolk , Suite 1000
City: Houston
State, Zip: TX 77098
Phone:
Email: jmmcdade@gsi-net.com
Project Name: Dow- Charlie Burch
Site: TX

Sampler: KCH, NM, BJB, BTM
Phone: 713-522-6300
Lab PM: Kudchadkar, Sachin G
E-Mail: sachin.kudchadkar@testamericainc.com
Carrier Tracking No(s):
COC No:
Page: Page 1 of
Job #:

Due Date Requested:
TAT Requested (days): 2 WK (10 DAY)
PO #: 4510577845 Item 1
WO #:
Project #: 60000256
SSOW#:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	8260B_VOC (FULL LIST)	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	A	N	A		X	
20101020_HOUCB_TB	10/20/10	—	G	Water			✓					
20101020 MW-CB-19ASV28.5GN		905		Water			✓					
20101020 MW-CB-37DV53.0GN		935		Water			✓					
20101020 MW-CB-37SV45.0GN		940		Water			✓					
20101020 MW-CB-31AV28.5GN		1020		Water			✓					
20101020 MW-CB-33AV28.0GN		1020		Water			✓					
20101020 MW-CB-33AV28.0GD		1020		Water			✓					
20101020 MW-CB-34AV29.0GN		1100		Water			✓					
20101020 MW-CB-29AV28GN		1110		Water			✓					
20101020 MW-CB-35AV29.0GN		1120		Water			✓					
20101020 TRW-CB-2VGN		1140		Water			✓			✓		

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Special Instructions/QC Requirements: TRRP, INVOICE to ED TOKARSKI @ DOW

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Method of Shipment:

	Date:	Time:	Company
Empty Kit Relinquished by:			
Relinquished by:	10/21/10	7:30	GSI
Relinquished by:	10-21-10	1529	TAL
Relinquished by:			

	Date/Time:	Company
Received by:	10-21-10 1115	TAL
Received by:	10-21-10 1529	TAL
Received by:		

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Page 60 of 63
10/29/2010

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information

Client Contact: Jim McDade
Company: GSI Environmental, Inc.
Address: 2211 Norfolk , Suite 1000
City: Houston
State, Zip: TX 77098
Phone:
Email: jimmcdade@gsi-net.com
Project Name: Dow- Charlie Burch
Site: TX

Sampler: KCH, NM, BJB, BTM
Phone: 713.522-6300
Lab PM: Kudchadkar, Sachin G
E-Mail: sachin.kudchadkar@testamericainc.com
Carrier Tracking No(s):

COC No:
Page: Page 2 of 3
Job #: 396

(INVOICE to EDTOKARSKI G (DOW)

Due Date Requested:
TAT Requested (days): 10 DAY (2 WK)
PO #: 4510577845 Item 1
WO #:
Project #: 60000256
SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	8260B VOCs (FULL LIST)	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	N	A			
20101020 TRW-CB-1 V GN	10/20/10	1140	G	Water						✓		
20101020 TRW-CB-3 V GN		1155		Water			✓					
20101020 TRW-CB-4 V GN		1155		Water			✓					
20101020 MW-CB-1SAS V29.8 GN		1205		Water			✓					
20101020 MW-CB-1SAS V29.8 GD		1205		Water			✓					
20101020 MW-CB-30A V28.0 GN		1355		Water			✓					
20101020 TP-21 V44.5 GN		1355		Water			✓					
20101020 MW-CB-8AD V45.0 GN		1420		Water			✓					
20101020 MW-CB-14AS V29.0 GN		1435		Water			✓					
20101020 MW-CB-16AS V29.3 GN		1450		Water			✓					
20101020 MW-CB-13AS V27.8 GN		1515		Water			✓					

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 10/21/10 730	Company: GSI	Received by:	Date/Time: 10-21-10 1115	Company: TAR		
Relinquished by:	Date/Time: 10-21-10 1929	Company: TAR	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Page 61 of 63
10/29/2010

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: RCH, NM, BJB, BTM	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone: 713.522.6300	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 3 of 3
Company: GSI Environmental, Inc. (INVOICE TO ED TOKARSKI GDOW)		Analysis Requested		Job #: 3576
Address: 2211 Norfolk , Suite 1000	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days): 10 DAY, 2WK			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX 77098				
Phone:	PO #: 4510577845 Item 1			Other:
Email: jmmcdade@gsi-net.com	WO #:			
Project Name: Dow- Charlie Burch	Project #: 60000256			
Site: TX	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A		
20101020 MW-CB-9AS V30.0GN	10/20/10	1515	G	Water			✓				
20101020 MW-CB-10AD V50.0GN		1613		Water			✓				
20101020 MW-CB-11AS V35.0GN		1615		Water			✓				
20101020 MW-CB-24AS V36.0GN		1640		Water			✓				
20101020 MW-CB-12AS V29.5GN		1647		Water			✓				
20101020 MW-CB-12AS V29.5GD		1647		Water			✓				
				Water							
				Water							
				Water							
				Water							
				Water							

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kate Hamel	10/21/10 7:30	GSI		10/21/10 15	TAL
	10-21-10 1529	TAL			

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

10/29/2010

Login Sample Receipt Check List

Client: Groundwater Services, Inc. Job Number: 600-30569-1

Login Number: 30569 **List Source: TestAmerica Houston**
Creator: Roberts, Kenneth
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-30589-1

Job Description: Rohm and Haas

For:
Groundwater Services, Inc.
2211 Norfolk, Suite 1000
Houston, TX 77098-4044

Attention: Jim McDade

Approved for release.
Lance C Tigrett
Data Review Analyst I
10/29/2010 4:57 PM

Designee for
Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
10/29/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

TestAmerica Laboratories, Inc.
TestAmerica Houston 6310 Rothway Street, Houston, TX 77040
Tel (713) 690-4444 Fax (713) 690-5646 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

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Appendix A - Laboratory Data Package Cover Page

This data package is for Job No. 600-30589 and consists of:

- ☒ This signature page, the laboratory review checklists, and the following reportable data:
- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC Chapter 5,
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist and for each analyte, matrix and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all methods, analytes and matrices reported in the data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory Exception Reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC 25.6 and was last inspected by [] TCEQ or [] _____ on _____. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Chris Schepcoff		Laboratory Director	10/29/10
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30589
Reviewer Name: YX	Prep Batch Number: 600-42236, 42395, 42397, and 42488-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				2
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30589
Reviewer Name: YX	Prep Batch Number: 600-42236, 42395, 42397, and 42488-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30589
Reviewer Name: YX	Prep Batch Number: 600-42236, 42395, 42397, and 42488-VOA

ER #[1]	DESCRIPTION
1	The Dibromofluoromethane surrogate recovery in sample 600-30589-10 MSD was above the acceptance limit. This high surrogate recovery will not affect the quality of reported results.
2	The 1,2-Dichloroethane SDLs for samples 600-30589-10 and 12 were elevated due to the dilutions necessary for analyses.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30589
Reviewer Name: KA	Prep Batch Number(s): 600-42426-SV

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?				X	1
		Were MS/MSD RPDs within laboratory QC limits?				X	1
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

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Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30589
Reviewer Name: KA	Prep Batch Number(s): 600-42426-SV

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30589
Reviewer Name: KA	Prep Batch Number(s): 600-42426-SV

ER #[1]	DESCRIPTION
1	The laboratory selected a sample from another group to perform as the MS/MSD.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Quality Control Report

Detection Check Standard

Matrix:	Water - Low Level
Method:	8260B
Preparation:	5030
Date Analyzed:	7/28/2010
Date Prepared:	7/28/2010
Lab Sample ID:	VSTD001
File #:	VOA_VII.i\072810.b\A20903.D
Units:	ug/L

Analyte	MDL	DCS Spike	DCS Result	MQL
Dichlorodifluoromethane	0.14	1	1.05	1
Chloromethane	0.15	1	1.18	2
Vinyl Chloride	0.13	1	0.787	2
Bromomethane	0.22	1	0.752	2
Chloroethane	0.19	1	0.983	2
Trichlorofluoromethane	0.08	1	0.787	1
Allyl Chloride		2	1.98	
Acrolein	1.41	5	5.71	1
1,1-Dichloroethene	0.13	1	0.787	1
Trichlorotrifluoroethene		1	1.07	
Acetone	2	2	4.32	2
Methyl Iodide		2	1.6	
2-Propanol		10	22.59	
Carbon Disulfide	0.07	2	2.36	1
Acetonitrile	0.66	2	2.07	1
Methylene Chloride	0.42	1	1.14	1
Acrylonitrile	1.09	5	6.31	1
trans-1,2-Dichloroethene	0.12	1	0.783	1
Methyl tert-butyl ether	0.15	1	0.796	1
1,2-Dichloroethene (total)	0.3	2	1.59	1
1,1-Dichloroethane	0.13	1	0.796	1
Vinyl Acetate	0.17	2	2.2	1
Chloroprene		2	1.6	
cis-1,2-Dichloroethene	0.16	1	0.803	1
2,2-Dichloropropane		1	0.764	
2-Butanone (MEK)	0.76	2	2.5	2
Propionitrile		2	2.7	
Methacrylonitrile		2	2.47	1
Bromochloromethane	0.17	1	0.815	
Chloroform	0.12	5	5.43	
1,1,1-Trichloroethane	0.12	1	0.762	
1,1-Dichloropropene	0.13	1	0.854	
Carbon Tetrachloride	0.13	1	0.86	
Isobutyl Alcohol	4.1	10	24.38	
Benzene	0.13	1	0.864	
1,2-Dichloroethane	0.13	1	0.882	
Trichloroethene	0.13	1	0.86	
1,2-Dichloropropane	0.16	1	0.747	
Methyl methacrylate	0.33	2	2.18	

Methylene Bromide		1	0.783
1,4-Dioxane	26.97	50	153.5
Bromodichloromethane	0.14	1	1.05
2-Chloroethyl vinyl ether	0.17	2	2.14
cis-1,3-Dichloropropene	0.11	1	1.13
4-Methyl-2-pentanone	0.31	2	2.21
Toluene	0.14	1	0.874
trans-1,3-Dichloropropene	0.11	1	1.18
Ethyl methacrylate	0.33	2	0.899
1,1,2-Trichloroethane	0.18	1	0.791
1,3-Dichloropropane	0.12	1	8.46
Tetrachloroethene	0.08	1	0.828
2-Hexanone	0.31	2	2.31
Dibromochloromethane	0.45	1	1.15
1,2-Dibromoethane (EDB)	0.36	1	1.05
Chlorobenzene	0.11	1	0.831
1,1,1,2-Tetrachloroethane	0.09	1	1.01
Ethylbenzene	0.13	1	0.833
m,p-Xylene	0.25	2	1.77
o-Xylene	0.12	1	0.827
Xylenes (total)	0.32	3	2.59
Styrene	0.1	1	0.768
Bromoform	0.12	1	2.62
Isopropylbenzene	0.06	1	1.01
1,1,2,2-Tetrachloroethane	0.16	1	1.14
trans-1,4-Dichloro-2-buter	0.86	2	0.669
Bromobenzene	0.14	1	1.08
n-Propylbenzene	0.25	1	0.955
2-Chlorotoluene	0.17	1	0.759
4-Chlorotoluene	0.18	1	0.938
1,3,5-Trimethylbenzene	0.08	1	0.822
tert-Butylbenzene	0.16	1	0.956
1,2,4-Trimethylbenzene	0.1	1	0.913
sec-Butylbenzene	0.14	1	0.767
1,3-Dichlorobenzene	0.13	1	0.762
1,4-Dichlorobenzene	0.05	1	0.847
1,2-Dichlorobenzene	0.1	1	1.08
p-Isopropyltoluene	0.1	1	0.783
n-Butylbenzene	0.09	1	0.877
1,2,3-Trichloropropane	0.13	1	0.798
1,2-Dibromo-3-chloroprop	0.39	1	1.01
1,2,4-Trichlorobenzene	0.2	1	0.976
Hexachlorobutadiene	0.17	1	0.539
1,2,3-Trichlorobenzene	0.28	1	1.02
Naphthalene	0.47	1	1.13

Quality Control Report

Detection Check Standard

Matrix:	Water
Method:	8270
Preparation:	3510
Date Analyzed:	4/6/2010
Date Prepared:	4/6/2010
Lab Sample ID:	DCS-W 10PPM
File #:	MSD1526.i/040510A.b/04051019.D
Units:	ug/L

Analyte	MDL	DCS Spike	DCS Result	MQL
Pyridine	1.04	10	2.13	10
N-Nitrosodimethylamine	1.93	10	4.26	10
Aniline	1.62	10	4.99	10
Phenol	0.95	10	2.63	10
bis(2-Chloroethyl)ether	1.19	10	8.55	10
2-Chlorophenol	0.67	10	7.69	10
1,3-Dichlorobenzene	1.15	10	8.93	10
1,4-Dichlorobenzene	1.26	10	9.04	10
1,2-Dichlorobenzene	1.09	10	7.74	10
bis(2-Chloroisopropyl)ether		10	8.88	
Benzyl alcohol	2.51	10	6.28	10
2-Methylphenol	1.01	10	5.92	10
m&p-Cresols		10	5.89	
N-Nitroso-di-n-propylamine	0.66	10	9.2	10
Hexachloroethane	1.16	10	9.13	10
Nitrobenzene	1.18	10	8.65	10
Isophorone	0.73	10	8.02	10
2-Nitrophenol	0.63	10	8.28	10
2,4-Dimethylphenol	1.34	10	4.11	10
bis(2-Chloroethoxy)methane	1.24	10	8.73	10
Benzoic acid	2.51	10	0.649	10
2,4-Dichlorophenol	1.54	10	8.16	10
1,2,4-Trichlorobenzene	1.14	10	8.71	10
Naphthalene	0.51	10	9.04	10
4-Chloroaniline	0.98	10	7.54	10
Hexachlorobutadiene	1.11	10	9.37	10
4-Chloro-3-methylphenol	0.82	10	7.21	10
2-Methylnaphthalene	1.1	10	9.6	10
1-Methylnaphthalene	0.53	10	10.99	10
Hexachlorocyclopentadiene	0.58	10	5.21	10
2,4,6-Trichlorophenol	0.92	10	8.23	10
2,4,5-Trichlorophenol	1.26	10	7.85	10
2-Chloronaphthalene	1	10	8.71	10
2-Nitroaniline	1.13	10	7.83	50
Dimethylphthalate	0.52	10	5.46	10
Acenaphthylene	0.9	10	9.24	10
2,6-Dinitrotoluene	0.64	10	8.59	10
3-Nitroaniline	0.51	10	7.45	50
Acenaphthene	0.53	10	9.09	10

2,4-Dinitrophenol	0.89	10	7.97	50
Dibenzofuran	0.99	10	9.02	10
2,4-Dinitrotoluene	0.95	10	8.44	10
4-Nitrophenol	0.99	10	1.08	50
2,3,4,6-Tetrachlorophenol	0.83	10	7.4	10
Diethylphthalate	1.14	10	5.99	10
Fluorene	1.42	10	9.15	10
4-Chlorophenyl-phenylether	0.79	10	9.4	10
4-Nitroaniline	1.01	10	7.72	50
4,6-Dinitro-2-methylphenol	1.88	10	6.97	50
N-Nitrosodiphenylamine	1.03	10	8.31	10
Diphenylamine	1.13	10	4.61	10
1,2-Diphenylhydrazine	0.9	10	8.62	10
Azobenzene		10	8.62	10
4-Bromophenyl-phenylether	0.68	10	8.85	10
Hexachlorobenzene	0.9	10	9.22	10
Pentachlorophenol	0.89	10	9.31	50
Phenanthrene	0.79	10	8.89	10
Anthracene	0.67	10	9.15	10
Carbazole	1.14	10	9.49	10
Di-n-butylphthalate	1.04	10	9.36	10
Fluoranthene	0.52	10	9.56	10
Pyrene	1.12	10	9.07	10
Butylbenzylphthalate	0.61	10	7.99	10
Benzo(a)anthracene	0.58	10	8.05	10
Chrysene	0.6	10	8.3	10
3,3'-Dichlorobenzidine	0.58	10	9.03	20
bis(2-Ethylhexl)phthalate	0.52	10	8.05	10
Di-n-octylphthalate	0.69	10	7.46	10
Benzo(b)fluoranthene	1.05	10	7.77	10
Benzo(k)fluoranthene	0.93	10	9.16	10
Benzo(a)pyrene	0.57	10	7.86	10
Indeno(1,2,3-cd)pyrene	0.67	10	7.35	10
Dibebz(a,h)anthracene	0.72	10	8.23	10
Benzo(g,h,i)perylene	0.83	10	7.89	10

METHOD SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL HOU	SW846 8260B	
Purge and Trap	TAL HOU		SW846 5030B
Semivolatile Organic Compounds by GCMS - Low Levels	TAL HOU	SW846 8270C LL	
Liquid-Liquid Extraction (Separatory Funnel)	TAL HOU		SW846 3510C

Lab References:

TAL HOU = TestAmerica Houston

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Method	Analyst	Analyst ID
SW846 8260B	Shen, Wei	WS
SW846 8260B	Vela, Kenneth L	KLV
SW846 8260B	Xie, Yali	YX
SW846 8270C LL	Patel, Kanisha	KP

SAMPLE SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-30589-1	20101022_HOUCB-TB	Water	10/22/2010 0000	10/22/2010 1137
600-30589-2	20101022_HOUCB-EB1	Water	10/22/2010 1015	10/22/2010 1137
600-30589-3	20101022_HOUCB-EB2	Water	10/22/2010 1020	10/22/2010 1137
600-30589-4	20101022_HOUCB-FB	Water	10/22/2010 1040	10/22/2010 1137
600-30589-5	20101022_RW-CB-1V47.8 @N	Water	10/22/2010 0815	10/22/2010 1137
600-30589-6	20101022MW-CB-5BV97.3 @N	Water	10/22/2010 0820	10/22/2010 1137
600-30589-7	20101022RW-CB-2V51.6 @N	Water	10/22/2010 0845	10/22/2010 1137
600-30589-8	20101022RW-CB-2V51.6 @D	Water	10/22/2010 0845	10/22/2010 1137
600-30589-9	20101022MW-CB-5AV63.0 @N	Water	10/22/2010 0845	10/22/2010 1137
600-30589-10	20101022RW-CB-3V51.3 @N	Water	10/22/2010 0915	10/22/2010 1137
600-30589-11	20101022RW-CB-3DV86.2 @N	Water	10/22/2010 0930	10/22/2010 1137
600-30589-12	20101022RW-CB-4V52.3 @N	Water	10/22/2010 0940	10/22/2010 1137
600-30589-13	20101022MW-CB-7BV92.5 @N	Water	10/22/2010 0940	10/22/2010 1137
600-30589-14	20101022RW-CB-5V51.1 @N	Water	10/22/2010 0950	10/22/2010 1137
600-30589-15	20101022MW-CB-4V52.3 @N	Water	10/22/2010 1035	10/22/2010 1137

SAMPLE RESULTS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022_HOUCB-TB

Lab Sample ID: 600-30589-1
Client Matrix: Water

Date Sampled: 10/22/2010 00:00
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 18:43		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 18:43	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/26/2010 18:43	1	WS
4-Bromofluorobenzene	460-00-4		0.0086	0.0100	86	67-139		VOAMS07		10/26/2010 18:43	1	WS
Dibromofluoromethane	1868-53-7		0.0085	0.0100	85	62-130		VOAMS07		10/26/2010 18:43	1	WS
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	103	70-130		VOAMS07		10/26/2010 18:43	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022_HOUCB-EB1

Lab Sample ID: 600-30589-2
Client Matrix: Water

Date Sampled: 10/22/2010 10:15
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 19:14		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 19:14	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0068	0.0100	68	50-134		VOAMS07		10/26/2010 19:14	1	WS
4-Bromofluorobenzene	460-00-4		0.0084	0.0100	84	67-139		VOAMS07		10/26/2010 19:14	1	WS
Dibromofluoromethane	1868-53-7		0.0089	0.0100	89	62-130		VOAMS07		10/26/2010 19:14	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	106	70-130		VOAMS07		10/26/2010 19:14	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022_HOUCB-EB2

Lab Sample ID: 600-30589-3
Client Matrix: Water

Date Sampled: 10/22/2010 10:20
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 19:44		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 19:44	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0066	0.0100	66	50-134		VOAMS07		10/26/2010 19:44	1	WS
4-Bromofluorobenzene	460-00-4		0.0087	0.0100	87	67-139		VOAMS07		10/26/2010 19:44	1	WS
Dibromofluoromethane	1868-53-7		0.0090	0.0100	90	62-130		VOAMS07		10/26/2010 19:44	1	WS
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	101	70-130		VOAMS07		10/26/2010 19:44	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022_HOUCB-FB

Lab Sample ID: 600-30589-4
Client Matrix: Water

Date Sampled: 10/22/2010 10:40
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 20:15		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 20:15	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0065	0.0100	65	50-134		VOAMS07		10/26/2010 20:15	1	WS
4-Bromofluorobenzene	460-00-4		0.0089	0.0100	89	67-139		VOAMS07		10/26/2010 20:15	1	WS
Dibromofluoromethane	1868-53-7		0.0089	0.0100	89	62-130		VOAMS07		10/26/2010 20:15	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	115	70-130		VOAMS07		10/26/2010 20:15	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022_RW-CB-1V47.8@N

Lab Sample ID: 600-30589-5
Client Matrix: Water

Date Sampled: 10/22/2010 08:15
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 3510C,Water												
Liquid-Liquid Extraction (Separatory Funnel)		Complete							42426	10/27/2010 14:12		SMB
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 20:45		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 20:45	1	WS
Benzene	71-43-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 20:45	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/26/2010 20:45	1	WS
4-Bromofluorobenzene	460-00-4		0.0085	0.0100	85	67-139		VOAMS07		10/26/2010 20:45	1	WS
Dibromofluoromethane	1868-53-7		0.0087	0.0100	87	62-130		VOAMS07		10/26/2010 20:45	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	109	70-130		VOAMS07		10/26/2010 20:45	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022_RW-CB-1V47.8@N

Lab Sample ID: 600-30589-5
Client Matrix: Water

Date Sampled: 10/22/2010 08:15
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 8270C LL,Water												
2,4-Dimethylphenol	105-67-9	0.00031	U		0.00031	0.00050	0.00031	mg/L	42546	10/28/2010 17:37	1	KP
2-Methylphenol	95-48-7	0.00012	U		0.00012	0.00050	0.00012	mg/L	42546	10/28/2010 17:37	1	KP
Aniline	62-53-3	0.000079	U		0.000080	0.00050	0.000079	mg/L	42546	10/28/2010 17:37	1	KP

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
2,4,6-Tribromophenol	118-79-6		0.0040	0.00494	80	10-123		SVMS08	42426	10/28/2010 17:37	1	KP
2-Fluorobiphenyl	321-60-8		0.0038	0.00494	77	43-116		SVMS08	42426	10/28/2010 17:37	1	KP
2-Fluorophenol	367-12-4		0.0020	0.00494	40	21-100		SVMS08	42426	10/28/2010 17:37	1	KP
Nitrobenzene-d5	4165-60-0		0.0044	0.00494	89	35-114		SVMS08	42426	10/28/2010 17:37	1	KP
Phenol-d6	13127-88-3		1.2	4.94	24	10-94		SVMS08	42426	10/28/2010 17:37	1	KP
Terphenyl-d14	1718-51-0		0.0046	0.00494	93	33-141		SVMS08	42426	10/28/2010 17:37	1	KP

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022MW-CB-5BV97.3@N

Lab Sample ID: 600-30589-6
Client Matrix: Water

Date Sampled: 10/22/2010 08:20
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 21:15		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42395	10/26/2010 21:15	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0064	0.0100	64	50-134		VOAMS07		10/26/2010 21:15	1	WS
4-Bromofluorobenzene	460-00-4		0.0087	0.0100	87	67-139		VOAMS07		10/26/2010 21:15	1	WS
Dibromofluoromethane	1868-53-7		0.0087	0.0100	87	62-130		VOAMS07		10/26/2010 21:15	1	WS
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	109	70-130		VOAMS07		10/26/2010 21:15	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-2V51.6@N

Lab Sample ID: 600-30589-7
Client Matrix: Water

Date Sampled: 10/22/2010 08:45
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 3510C,Water												
Liquid-Liquid Extraction (Separatory Funnel)		Complete							42426	10/27/2010 14:12		SMB
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 17:39		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.019			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 17:39	1	KLV
Benzene	71-43-2	0.00023	J		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 17:39	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0093	0.0100	93	50-134		VOAMS09		10/26/2010 17:39	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	110	67-139		VOAMS09		10/26/2010 17:39	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	105	62-130		VOAMS09		10/26/2010 17:39	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS09		10/26/2010 17:39	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-2V51.6@N

Lab Sample ID: 600-30589-7
Client Matrix: Water

Date Sampled: 10/22/2010 08:45
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 8270C LL,Water												
2,4-Dimethylphenol	105-67-9	0.00031	U		0.00031	0.00050	0.00031	mg/L	42546	10/28/2010 15:11	1	KP
2-Methylphenol	95-48-7	0.00012	U		0.00012	0.00050	0.00012	mg/L	42546	10/28/2010 15:11	1	KP
Aniline	62-53-3	0.000079	U		0.000080	0.00050	0.000079	mg/L	42546	10/28/2010 15:11	1	KP

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
2,4,6-Tribromophenol	118-79-6		0.0037	0.00494	75	10-123		SVMS08	42426	10/28/2010 15:11	1	KP
2-Fluorobiphenyl	321-60-8		0.0035	0.00494	71	43-116		SVMS08	42426	10/28/2010 15:11	1	KP
2-Fluorophenol	367-12-4		0.0019	0.00494	38	21-100		SVMS08	42426	10/28/2010 15:11	1	KP
Nitrobenzene-d5	4165-60-0		0.0038	0.00494	77	35-114		SVMS08	42426	10/28/2010 15:11	1	KP
Phenol-d6	13127-88-3		1.1	4.94	23	10-94		SVMS08	42426	10/28/2010 15:11	1	KP
Terphenyl-d14	1718-51-0		0.0044	0.00494	89	33-141		SVMS08	42426	10/28/2010 15:11	1	KP

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-2V51.6@D

Lab Sample ID: 600-30589-8
Client Matrix: Water

Date Sampled: 10/22/2010 08:45
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 3510C,Water												
Liquid-Liquid Extraction (Separatory Funnel)		Complete							42426	10/27/2010 14:12		SMB
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 18:02		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.019			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 18:02	1	KLV
Benzene	71-43-2	0.00024	J		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 18:02	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0094	0.0100	94	50-134		VOAMS09		10/26/2010 18:02	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	110	67-139		VOAMS09		10/26/2010 18:02	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	103	62-130		VOAMS09		10/26/2010 18:02	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS09		10/26/2010 18:02	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-2V51.6@D

Lab Sample ID: 600-30589-8
Client Matrix: Water

Date Sampled: 10/22/2010 08:45
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 8270C LL,Water												
2,4-Dimethylphenol	105-67-9	0.00031	U		0.00031	0.00050	0.00031	mg/L	42546	10/28/2010 18:02	1	KP
2-Methylphenol	95-48-7	0.00012	U		0.00012	0.00050	0.00012	mg/L	42546	10/28/2010 18:02	1	KP
Aniline	62-53-3	0.000079	U		0.000080	0.00050	0.000079	mg/L	42546	10/28/2010 18:02	1	KP

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
2,4,6-Tribromophenol	118-79-6		0.0049	0.00494	99	10-123		SVMS08	42426	10/28/2010 18:02	1	KP
2-Fluorobiphenyl	321-60-8		0.0043	0.00494	86	43-116		SVMS08	42426	10/28/2010 18:02	1	KP
2-Fluorophenol	367-12-4		0.0021	0.00494	43	21-100		SVMS08	42426	10/28/2010 18:02	1	KP
Nitrobenzene-d5	4165-60-0		0.0046	0.00494	93	35-114		SVMS08	42426	10/28/2010 18:02	1	KP
Phenol-d6	13127-88-3		1.4	4.94	28	10-94		SVMS08	42426	10/28/2010 18:02	1	KP
Terphenyl-d14	1718-51-0		0.0051	0.00494	104	33-141		SVMS08	42426	10/28/2010 18:02	1	KP

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022MW-CB-5AV63.0@N

Lab Sample ID: 600-30589-9
Client Matrix: Water

Date Sampled: 10/22/2010 08:45
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 19:10		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 19:10	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0093	0.0100	93	50-134		VOAMS09		10/26/2010 19:10	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	109	67-139		VOAMS09		10/26/2010 19:10	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	102	62-130		VOAMS09		10/26/2010 19:10	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	102	70-130		VOAMS09		10/26/2010 19:10	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-3V51.3@N

Lab Sample ID: 600-30589-10
Client Matrix: Water

Date Sampled: 10/22/2010 09:15
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 3510C,Water												
Liquid-Liquid Extraction (Separatory Funnel)		Complete							42426	10/27/2010 14:12		SMB
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 19:32		
Method: SW846 8260B,Water												
Benzene	71-43-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 19:32	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0092	0.0100	92	50-134		VOAMS09		10/26/2010 19:32	1	KLV
4-Bromofluorobenzene	460-00-4		0.010	0.0100	101	67-139		VOAMS09		10/26/2010 19:32	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	102	62-130		VOAMS09		10/26/2010 19:32	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.0094	0.0100	94	70-130		VOAMS09		10/26/2010 19:32	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-3V51.3@N

Lab Sample ID: 600-30589-10
Client Matrix: Water

Date Sampled: 10/22/2010 09:15
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 8270C LL,Water												
2,4-Dimethylphenol	105-67-9	0.00031	U		0.00031	0.00050	0.00031	mg/L	42546	10/28/2010 18:27	1	KP
2-Methylphenol	95-48-7	0.00012	U		0.00012	0.00050	0.00012	mg/L	42546	10/28/2010 18:27	1	KP
Aniline	62-53-3	0.000079	U		0.000080	0.00050	0.000079	mg/L	42546	10/28/2010 18:27	1	KP

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
2,4,6-Tribromophenol	118-79-6		0.0033	0.00494	67	10-123		SVMS08	42426	10/28/2010 18:27	1	KP
2-Fluorobiphenyl	321-60-8		0.0030	0.00494	61	43-116		SVMS08	42426	10/28/2010 18:27	1	KP
2-Fluorophenol	367-12-4		0.0015	0.00494	30	21-100		SVMS08	42426	10/28/2010 18:27	1	KP
Nitrobenzene-d5	4165-60-0		0.0035	0.00494	71	35-114		SVMS08	42426	10/28/2010 18:27	1	KP
Phenol-d6	13127-88-3		1.0	4.94	21	10-94		SVMS08	42426	10/28/2010 18:27	1	KP
Terphenyl-d14	1718-51-0		0.0038	0.00494	77	33-141		SVMS08	42426	10/28/2010 18:27	1	KP

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-3V51.3@N

Lab Sample ID: 600-30589-10 DL
Client Matrix: Water

Date Sampled: 10/22/2010 09:15
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 13:42		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.080			0.00013	0.0010	0.0013	mg/L	42488	10/27/2010 13:42	10	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.12	0.100	119	50-134		VOAMS09		10/27/2010 13:42	10	YX
4-Bromofluorobenzene	460-00-4		0.12	0.100	116	67-139		VOAMS09		10/27/2010 13:42	10	YX
Dibromofluoromethane	1868-53-7		0.13	0.100	128	62-130		VOAMS09		10/27/2010 13:42	10	YX
Toluene-d8 (Surr)	2037-26-5		0.12	0.100	125	70-130		VOAMS09		10/27/2010 13:42	10	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-3DV86.2@N

Lab Sample ID: 600-30589-11
Client Matrix: Water

Date Sampled: 10/22/2010 09:30
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 3510C,Water												
Liquid-Liquid Extraction (Separatory Funnel)		Complete							42426	10/27/2010 14:12		SMB
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 19:55		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.033			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 19:55	1	KLV
Benzene	71-43-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 19:55	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.010	0.0100	100	50-134		VOAMS09		10/26/2010 19:55	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	116	67-139		VOAMS09		10/26/2010 19:55	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	109	62-130		VOAMS09		10/26/2010 19:55	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	108	70-130		VOAMS09		10/26/2010 19:55	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-3DV86.2@N

Lab Sample ID: 600-30589-11
Client Matrix: Water

Date Sampled: 10/22/2010 09:30
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 8270C LL,Water												
2,4-Dimethylphenol	105-67-9	0.00031	U		0.00031	0.00050	0.00031	mg/L	42546	10/28/2010 18:51	1	KP
2-Methylphenol	95-48-7	0.00012	U		0.00012	0.00050	0.00012	mg/L	42546	10/28/2010 18:51	1	KP
Aniline	62-53-3	0.000079	U		0.000080	0.00050	0.000079	mg/L	42546	10/28/2010 18:51	1	KP

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
2,4,6-Tribromophenol	118-79-6		0.0032	0.00494	64	10-123		SVMS08	42426	10/28/2010 18:51	1	KP
2-Fluorobiphenyl	321-60-8		0.0030	0.00494	61	43-116		SVMS08	42426	10/28/2010 18:51	1	KP
2-Fluorophenol	367-12-4		0.0015	0.00494	30	21-100		SVMS08	42426	10/28/2010 18:51	1	KP
Nitrobenzene-d5	4165-60-0		0.0033	0.00494	67	35-114		SVMS08	42426	10/28/2010 18:51	1	KP
Phenol-d6	13127-88-3		0.95	4.94	19	10-94		SVMS08	42426	10/28/2010 18:51	1	KP
Terphenyl-d14	1718-51-0		0.0040	0.00494	81	33-141		SVMS08	42426	10/28/2010 18:51	1	KP

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-4V52.3@N

Lab Sample ID: 600-30589-12
Client Matrix: Water

Date Sampled: 10/22/2010 09:40
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 3510C,Water												
Liquid-Liquid Extraction (Separatory Funnel)		Complete							42426	10/27/2010 14:12		SMB
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 20:18		
Method: SW846 8260B,Water												
Benzene	71-43-2	0.00022	J		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 20:18	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0099	0.0100	99	50-134		VOAMS09		10/26/2010 20:18	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	111	67-139		VOAMS09		10/26/2010 20:18	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	111	62-130		VOAMS09		10/26/2010 20:18	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	105	70-130		VOAMS09		10/26/2010 20:18	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-4V52.3@N

Lab Sample ID: 600-30589-12
Client Matrix: Water

Date Sampled: 10/22/2010 09:40
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 8270C LL,Water												
2,4-Dimethylphenol	105-67-9	0.00031	U		0.00031	0.00050	0.00031	mg/L	42546	10/28/2010 19:15	1	KP
2-Methylphenol	95-48-7	0.00012	U		0.00012	0.00050	0.00012	mg/L	42546	10/28/2010 19:15	1	KP
Aniline	62-53-3	0.00064			0.000080	0.00050	0.000079	mg/L	42546	10/28/2010 19:15	1	KP

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
2,4,6-Tribromophenol	118-79-6		0.0039	0.00494	80	10-123		SVMS08	42426	10/28/2010 19:15	1	KP
2-Fluorobiphenyl	321-60-8		0.0036	0.00494	72	43-116		SVMS08	42426	10/28/2010 19:15	1	KP
2-Fluorophenol	367-12-4		0.0018	0.00494	36	21-100		SVMS08	42426	10/28/2010 19:15	1	KP
Nitrobenzene-d5	4165-60-0		0.0039	0.00494	79	35-114		SVMS08	42426	10/28/2010 19:15	1	KP
Phenol-d6	13127-88-3		1.2	4.94	23	10-94		SVMS08	42426	10/28/2010 19:15	1	KP
Terphenyl-d14	1718-51-0		0.0042	0.00494	86	33-141		SVMS08	42426	10/28/2010 19:15	1	KP

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-4V52.3@N

Lab Sample ID: 600-30589-12 DL
Client Matrix: Water

Date Sampled: 10/22/2010 09:40
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 14:05		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.087			0.00013	0.0010	0.0013	mg/L	42488	10/27/2010 14:05	10	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.12	0.100	121	50-134		VOAMS09		10/27/2010 14:05	10	YX
4-Bromofluorobenzene	460-00-4		0.11	0.100	113	67-139		VOAMS09		10/27/2010 14:05	10	YX
Dibromofluoromethane	1868-53-7		0.13	0.100	127	62-130		VOAMS09		10/27/2010 14:05	10	YX
Toluene-d8 (Surr)	2037-26-5		0.12	0.100	122	70-130		VOAMS09		10/27/2010 14:05	10	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022MW-CB-7BV92.5@N

Lab Sample ID: 600-30589-13
Client Matrix: Water

Date Sampled: 10/22/2010 09:40
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 20:40		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 20:40	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.010	0.0100	102	50-134		VOAMS09		10/26/2010 20:40	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	120	67-139		VOAMS09		10/26/2010 20:40	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	112	62-130		VOAMS09		10/26/2010 20:40	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	112	70-130		VOAMS09		10/26/2010 20:40	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-5V51.1@N

Lab Sample ID: 600-30589-14
Client Matrix: Water

Date Sampled: 10/22/2010 09:50
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 3510C,Water												
Liquid-Liquid Extraction (Separatory Funnel)		Complete							42426	10/27/2010 14:12		SMB
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 21:03		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.041			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 21:03	1	KLV
Benzene	71-43-2	0.00036	J		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 21:03	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0099	0.0100	99	50-134		VOAMS09		10/26/2010 21:03	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	120	67-139		VOAMS09		10/26/2010 21:03	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	112	62-130		VOAMS09		10/26/2010 21:03	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	112	70-130		VOAMS09		10/26/2010 21:03	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022RW-CB-5V51.1@N

Lab Sample ID: 600-30589-14
Client Matrix: Water

Date Sampled: 10/22/2010 09:50
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 8270C LL,Water												
2,4-Dimethylphenol	105-67-9	0.00031	U		0.00031	0.00050	0.00031	mg/L	42546	10/28/2010 19:40	1	KP
2-Methylphenol	95-48-7	0.00012	U		0.00012	0.00050	0.00012	mg/L	42546	10/28/2010 19:40	1	KP
Aniline	62-53-3	0.000079	U		0.000080	0.00050	0.000079	mg/L	42546	10/28/2010 19:40	1	KP

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
2,4,6-Tribromophenol	118-79-6		0.0032	0.00494	66	10-123		SVMS08	42426	10/28/2010 19:40	1	KP
2-Fluorobiphenyl	321-60-8		0.0030	0.00494	61	43-116		SVMS08	42426	10/28/2010 19:40	1	KP
2-Fluorophenol	367-12-4		0.0017	0.00494	33	21-100		SVMS08	42426	10/28/2010 19:40	1	KP
Nitrobenzene-d5	4165-60-0		0.0035	0.00494	71	35-114		SVMS08	42426	10/28/2010 19:40	1	KP
Phenol-d6	13127-88-3		1.0	4.94	20	10-94		SVMS08	42426	10/28/2010 19:40	1	KP
Terphenyl-d14	1718-51-0		0.0039	0.00494	80	33-141		SVMS08	42426	10/28/2010 19:40	1	KP

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30589-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101022MW-CB-4V52.3@N

Lab Sample ID: 600-30589-15
Client Matrix: Water

Date Sampled: 10/22/2010 10:35
Date Received: 10/22/2010 11:37

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/22/2010 20:35		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0018			0.00013	0.0010	0.00013	mg/L	42236	10/22/2010 20:35	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0089	0.0100	89	50-134		VOAMS09		10/22/2010 20:35	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	115	67-139		VOAMS09		10/22/2010 20:35	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	103	62-130		VOAMS09		10/22/2010 20:35	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	112	70-130		VOAMS09		10/22/2010 20:35	1	KLV

DATA REPORTING QUALIFIERS

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.

QUALITY CONTROL RESULTS

Client: Groundwater Services, Inc. Job Number: 600-30589-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:600-42236					
LCS 600-42236/1	Lab Control Sample	T	Water	8260B	
MB 600-42236/2	Method Blank	T	Water	8260B	
600-30589-15	20101022MW-CB-4V52.3@N	T	Water	8260B	
Analysis Batch:600-42395					
LCS 600-42395/1	Lab Control Sample	T	Water	8260B	
MB 600-42395/2	Method Blank	T	Water	8260B	
600-30589-1	20101022_HOUCB-TB	T	Water	8260B	
600-30589-2	20101022_HOUCB-EB1	T	Water	8260B	
600-30589-3	20101022_HOUCB-EB2	T	Water	8260B	
600-30589-4	20101022_HOUCB-FB	T	Water	8260B	
600-30589-5	20101022_RW-CB-1V47.8@N	T	Water	8260B	
600-30589-6	20101022MW-CB-5BV97.3@N	T	Water	8260B	
Analysis Batch:600-42397					
LCS 600-42397/1	Lab Control Sample	T	Water	8260B	
MB 600-42397/2	Method Blank	T	Water	8260B	
600-30589-7	20101022RW-CB-2V51.6@N	T	Water	8260B	
600-30589-7MS	Matrix Spike	T	Water	8260B	
600-30589-7MSD	Matrix Spike Duplicate	T	Water	8260B	
600-30589-8	20101022RW-CB-2V51.6@D	T	Water	8260B	
600-30589-9	20101022MW-CB-5AV63.0@N	T	Water	8260B	
600-30589-10	20101022RW-CB-3V51.3@N	T	Water	8260B	
600-30589-11	20101022RW-CB-3DV86.2@N	T	Water	8260B	
600-30589-12	20101022RW-CB-4V52.3@N	T	Water	8260B	
600-30589-13	20101022MW-CB-7BV92.5@N	T	Water	8260B	
600-30589-14	20101022RW-CB-5V51.1@N	T	Water	8260B	
Analysis Batch:600-42488					
LCS 600-42488/1	Lab Control Sample	T	Water	8260B	
MB 600-42488/2	Method Blank	T	Water	8260B	
600-30589-10DL	20101022RW-CB-3V51.3@N	T	Water	8260B	
600-30589-10MSDL	Matrix Spike	T	Water	8260B	
600-30589-10MSDDL	Matrix Spike Duplicate	T	Water	8260B	
600-30589-12DL	20101022RW-CB-4V52.3@N	T	Water	8260B	

Report Basis
T = Total

Client: Groundwater Services, Inc. Job Number: 600-30589-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 600-42426					
LCS 600-42426/2-A	Lab Control Sample	T	Water	3510C	
MB 600-42426/1-A	Method Blank	T	Water	3510C	
600-30589-5	20101022_RW-CB-1V47.8@N	T	Water	3510C	
600-30589-7	20101022RW-CB-2V51.6@N	T	Water	3510C	
600-30589-8	20101022RW-CB-2V51.6@D	T	Water	3510C	
600-30589-10	20101022RW-CB-3V51.3@N	T	Water	3510C	
600-30589-11	20101022RW-CB-3DV86.2@N	T	Water	3510C	
600-30589-12	20101022RW-CB-4V52.3@N	T	Water	3510C	
600-30589-14	20101022RW-CB-5V51.1@N	T	Water	3510C	
Analysis Batch:600-42546					
LCS 600-42426/2-A	Lab Control Sample	T	Water	8270C LL	600-42426
MB 600-42426/1-A	Method Blank	T	Water	8270C LL	600-42426
600-30589-5	20101022_RW-CB-1V47.8@N	T	Water	8270C LL	600-42426
600-30589-7	20101022RW-CB-2V51.6@N	T	Water	8270C LL	600-42426
600-30589-8	20101022RW-CB-2V51.6@D	T	Water	8270C LL	600-42426
600-30589-10	20101022RW-CB-3V51.3@N	T	Water	8270C LL	600-42426
600-30589-11	20101022RW-CB-3DV86.2@N	T	Water	8270C LL	600-42426
600-30589-12	20101022RW-CB-4V52.3@N	T	Water	8270C LL	600-42426
600-30589-14	20101022RW-CB-5V51.1@N	T	Water	8270C LL	600-42426

Report Basis
T = Total

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
600-30589-1	20101022_HOUCB-TB	86	85	103	64
600-30589-2	20101022_HOUCB-EB1	84	89	106	68
600-30589-3	20101022_HOUCB-EB2	87	90	101	66
600-30589-4	20101022_HOUCB-FB	89	89	115	65
600-30589-5	20101022_RW-CB-1V47.8@N	85	87	109	64
600-30589-6	20101022MW-CB-5BV97.3@N	87	87	109	64
600-30589-7	20101022RW-CB-2V51.6@N	110	105	107	93
600-30589-8	20101022RW-CB-2V51.6@D	110	103	107	94
600-30589-9	20101022MW-CB-5AV63.0@N	109	102	102	93
600-30589-10	20101022RW-CB-3V51.3@N	101	102	94	92
600-30589-10 DL	20101022RW-CB-3V51.3@N DL	116	128	125	119
600-30589-11	20101022RW-CB-3DV86.2@N	116	109	108	100
600-30589-12	20101022RW-CB-4V52.3@N	111	111	105	99
600-30589-12 DL	20101022RW-CB-4V52.3@N DL	113	127	122	121
600-30589-13	20101022MW-CB-7BV92.5@N	120	112	112	102
600-30589-14	20101022RW-CB-5V51.1@N	120	112	112	99
600-30589-15	20101022MW-CB-4V52.3@N	115	103	112	89
MB 600-42236/2		115	105	113	95
MB 600-42395/2		83	91	110	67

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
MB 600-42397/2		117	106	109	96
MB 600-42488/2		121	129	128	121
LCS 600-42236/1		124	108	122	96
LCS 600-42395/1		99	115	124	86
LCS 600-42397/1		103	105	100	96
LCS 600-42488/1		119	129	127	120
600-30589-7 MS	20101022RW-CB-2V 51.6@N MS	105	105	102	95
600-30589-10 MS DL	20101022RW-CB-3V 51.3@N MS DL	114	128	124	121
600-30589-7 MSD	20101022RW-CB-2V 51.6@N MSD	106	105	102	96
600-30589-10 MSD DL	20101022RW-CB-3V 51.3@N MSD DL	121	139X	128	133

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Surrogate Recovery Report

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Client Matrix: Water

Lab Sample ID	Client Sample ID	PHL %Rec	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	TPH %Rec
600-30589-5	20101022_RW-CB-1V47.8@N	24	80	77	40	89	93
600-30589-7	20101022RW-CB-2V51.6@N	23	75	71	38	77	89
600-30589-8	20101022RW-CB-2V51.6@D	28	99	86	43	93	104
600-30589-10	20101022RW-CB-3V51.3@N	21	67	61	30	71	77
600-30589-11	20101022RW-CB-3DV86.2@N	19	64	61	30	67	81
600-30589-12	20101022RW-CB-4V52.3@N	23	80	72	36	79	86
600-30589-14	20101022RW-CB-5V51.1@N	20	66	61	33	71	80
MB 600-42426/1-A		28	74	92	45	99	106
LCS 600-42426/2-A		30	94	85	46	93	102

Surrogate	Acceptance Limits
PHL = Phenol-d6	10-94
TBP = 2,4,6-Tribromophenol	10-123
FBP = 2-Fluorobiphenyl	43-116
2FP = 2-Fluorophenol	21-100
NBZ = Nitrobenzene-d5	35-114
TPH = Terphenyl-d14	33-141

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Method Blank - Batch: 600-42236

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42236/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1213
Date Prepared: 10/22/2010 1213

Analysis Batch: 600-42236
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29504.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	115	67 - 139
Dibromofluoromethane	105	62 - 130
Toluene-d8 (Surr)	113	70 - 130
1,2-Dichloroethane-d4 (Surr)	95	50 - 134

Lab Control Sample - Batch: 600-42236

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42236/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1127
Date Prepared: 10/22/2010 1127

Analysis Batch: 600-42236
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29502.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0111	111	66 - 140	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	124	67 - 139
Dibromofluoromethane	108	62 - 130
Toluene-d8 (Surr)	122	70 - 130
1,2-Dichloroethane-d4 (Surr)	96	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Method Blank - Batch: 600-42395

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42395/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1207
Date Prepared: 10/26/2010 1207

Analysis Batch: 600-42395
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A29904.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Benzene	0.00013	U	0.00013	0.0010
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	83	67 - 139
Dibromofluoromethane	91	62 - 130
Toluene-d8 (Surr)	110	70 - 130
1,2-Dichloroethane-d4 (Surr)	67	50 - 134

Lab Control Sample - Batch: 600-42395

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42395/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1106
Date Prepared: 10/26/2010 1106

Analysis Batch: 600-42395
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS07
Lab File ID: A29902.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	0.0100	0.0107	107	69 - 131	
1,2-Dichloroethane	0.0100	0.0112	112	66 - 140	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	99	67 - 139
Dibromofluoromethane	115	62 - 130
Toluene-d8 (Surr)	124	70 - 130
1,2-Dichloroethane-d4 (Surr)	86	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Method Blank - Batch: 600-42397

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42397/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1716
Date Prepared: 10/26/2010 1716

Analysis Batch: 600-42397
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29904.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Benzene	0.00013	U	0.00013	0.0010
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	117	67 - 139
Dibromofluoromethane	106	62 - 130
Toluene-d8 (Surr)	109	70 - 130
1,2-Dichloroethane-d4 (Surr)	96	50 - 134

Lab Control Sample - Batch: 600-42397

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42397/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1654
Date Prepared: 10/26/2010 1654

Analysis Batch: 600-42397
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29902.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	0.0100	0.00887	89	69 - 131	
1,2-Dichloroethane	0.0100	0.00989	99	66 - 140	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	103	67 - 139
Dibromofluoromethane	105	62 - 130
Toluene-d8 (Surr)	100	70 - 130
1,2-Dichloroethane-d4 (Surr)	96	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42397

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30589-7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1825
Date Prepared: 10/26/2010 1825

Analysis Batch: 600-42397
Prep Batch: N/A

Instrument ID: VOAMS09
Lab File ID: K29907.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30589-7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1848
Date Prepared: 10/26/2010 1848

Analysis Batch: 600-42397
Prep Batch: N/A

Instrument ID: VOAMS09
Lab File ID: K29908.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	96	102	65 - 125	6	30		
1,2-Dichloroethane	89	98	60 - 140	3	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	105	106	67 - 139
Dibromofluoromethane	105	105	62 - 130
Toluene-d8 (Surr)	102	102	70 - 130
1,2-Dichloroethane-d4 (Surr)	95	96	50 - 134

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42397

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30589-7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1825
Date Prepared: 10/26/2010 1825

Units: mg/L

MSD Lab Sample ID: 600-30589-7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1848
Date Prepared: 10/26/2010 1848

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.00023 J	0.0100	0.0100	0.00984	0.0105
1,2-Dichloroethane	0.019	0.0100	0.0100	0.0282	0.0290

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Method Blank - Batch: 600-42488

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42488/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/27/2010 1149
Date Prepared: 10/27/2010 1149

Analysis Batch: 600-42488
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K30004.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	121	67 - 139
Dibromofluoromethane	129	62 - 130
Toluene-d8 (Surr)	128	70 - 130
1,2-Dichloroethane-d4 (Surr)	121	50 - 134

Lab Control Sample - Batch: 600-42488

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42488/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/27/2010 1104
Date Prepared: 10/27/2010 1104

Analysis Batch: 600-42488
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K30002.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.0103	103	66 - 140	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	119	67 - 139
Dibromofluoromethane	129	62 - 130
Toluene-d8 (Surr)	127	70 - 130
1,2-Dichloroethane-d4 (Surr)	120	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42488

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30589-10DL
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/27/2010 1257
Date Prepared: 10/27/2010 1257

Analysis Batch: 600-42488
Prep Batch: N/A
Run Type: DL

Instrument ID: VOAMS09
Lab File ID: K30007.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30589-10DL
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/27/2010 1320
Date Prepared: 10/27/2010 1320

Analysis Batch: 600-42488
Prep Batch: N/A
Run Type: DL

Instrument ID: VOAMS09
Lab File ID: K30008.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,2-Dichloroethane	94	110	60 - 140	9	30		

Surrogate	MS % Rec	MSD % Rec		Acceptance Limits
4-Bromofluorobenzene	114	121		67 - 139
Dibromofluoromethane	128	139	X	62 - 130
Toluene-d8 (Surr)	124	128		70 - 130
1,2-Dichloroethane-d4 (Surr)	121	133		50 - 134

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42488

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30589-10DL
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/27/2010 1257
Date Prepared: 10/27/2010 1257

Run Type: DL

Units: mg/L

MSD Lab Sample ID: 600-30589-10DL
Client Matrix: Water
Dilution: 10
Date Analyzed: 10/27/2010 1320
Date Prepared: 10/27/2010 1320

Run Type: DL

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,2-Dichloroethane	0.080	0.100	0.100	0.174	0.190

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Method Blank - Batch: 600-42426

Method: 8270C LL
Preparation: 3510C

Lab Sample ID: MB 600-42426/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/28/2010 1333
Date Prepared: 10/27/2010 1412

Analysis Batch: 600-42546
Prep Batch: 600-42426
Units: mg/L

Instrument ID: SVMS08
Lab File ID: 10281006.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1.00 mL
Injection Volume: 1 uL

Analyte	Result	Qual	MDL	MQL
Aniline	0.000080	U	0.000080	0.00050
2-Methylphenol	0.00012	U	0.00012	0.00050
2,4-Dimethylphenol	0.00031	U	0.00031	0.00050

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	74	10 - 123
2-Fluorobiphenyl	92	43 - 116
2-Fluorophenol	45	21 - 100
Nitrobenzene-d5	99	35 - 114
Terphenyl-d14	106	33 - 141

Surrogate	% Rec	Acceptance Limits
Phenol-d6	28	10 - 94

Lab Control Sample - Batch: 600-42426

Method: 8270C LL
Preparation: 3510C

Lab Sample ID: LCS 600-42426/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/28/2010 1357
Date Prepared: 10/27/2010 1412

Analysis Batch: 600-42546
Prep Batch: 600-42426
Units: mg/L

Instrument ID: SVMS08
Lab File ID: 10281007.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1.00 mL
Injection Volume: 1 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aniline	0.0100	0.00558	56	13 - 100	
2-Methylphenol	0.0100	0.00737	74	34 - 109	
2,4-Dimethylphenol	0.0100	0.00805	81	36 - 109	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	94	10 - 123
2-Fluorobiphenyl	85	43 - 116
2-Fluorophenol	46	21 - 100
Nitrobenzene-d5	93	35 - 114
Terphenyl-d14	102	33 - 141

Surrogate	% Rec	Acceptance Limits
Phenol-d6	30	10 - 94

America Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
30589
#10
600-30589-D-10

Client Information	Sampler: RCH, BTM, BJB, NVM	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone: 713.522.6300	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 7
Company: GSI Environmental, Inc. (Invoice to Ed Tokarski & DOW)				Job #: 3516
Address: 2211 Norfolk , Suite 1000	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Houston	TAT Requested (days): 2WK (10 DAY)			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
State, Zip: TX 77098				
Phone:	PO #: 4510577845 Item 1			Other:
Email: jimmcdade@gsi-net.com	WO #:			
Project Name: Dow- Charlie Burch	Project #: 60000256			
Site: TX	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	8260B Benzene	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A			
20101022_HOUCB_TB	10/22/10	—	G	Water			✓					
20101022_HOUCB_EB1	10/22/10	~~1020~~ 1015	G	Water			✓					sampled @ 1015
20101022_HOUCB_EB2		1020		Water			✓					
20101022_HOUCB_FB		1040		Water			✓					
20101022_RW-CB-1V47.86N		815		Water			✓	✓		✓		
20101022_MW-CB-5BV97.36N		820		Water			✓					
20101022_RW-CB-2V51.66N		845		Water			✓	✓		✓		
20101022_RW-CB-2V57.66D		845		Water			✓	✓		✓		
20101022_MW-CB-5AV63.06N		845		Water			✓					
20101022_RW-CB-3V51.36N		915		Water			✓	✓		✓		
20101022_RW-CB-3DV86.26N		930		Water			✓	✓		✓		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Katherine	10/22/10 / 1137	TAL		10-22-10 1137	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				10/22/10 1137	L
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

10/29/2010

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: KCH, NM, BJB, BTM	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone: 713-522-6300	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 2 of 2
Company: GSI Environmental, Inc. (Invoice to Ed Tokarski @ Dow)				Job #: 3576
Address: 2211 Norfolk, Suite 1000	Due Date Requested:			
City: Houston	TAT Requested (days): 10 DAY, 2 WK			
State, Zip: TX 77098				
Phone:	PO #: 4510577845 Item 1			
Email: jmmcdade@gsi-net.com	WO #:			
Project Name: Dow- Charlie Burch	Project #: 60000256			
Site: TX	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, ~~2-Methylphenol~~ Cresol	8260_LL- Target Compound List	8260B Benzene	Total Number of containers	Special Instructions/Note:
				Preservation Code:			A	N	A			
20101022 RW-CB-4V52.3GN	10/22/10	940	G	Water			✓	✓		✓		
20101022 MW-CB-7BV92.5GN	|	940	|	Water			✓					
20101022 RW-CB-5V51.1GN	|	950	|	Water			✓	✓		✓		
~~[illegible]~~		~~1015~~ KH		~~Water~~								
20101022 MW-CB-4V52.3GN	10/22/10	1035	G	Water			✓					
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 10/22/10 1137	Company: GSI	Received by: [signature]	Date/Time: 10-22-10 1157	Company: TAH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

10/29/2010

Login Sample Receipt Check List

Client: Groundwater Services, Inc. Job Number: 600-30589-1

Login Number: 30589 **List Source: TestAmerica Houston**
Creator: Trenery, Michael J
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3 3.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-30603-1

Job Description: Rohm and Haas

For:
Groundwater Services, Inc.
2211 Norfolk, Suite 1000
Houston, TX 77098-4044

Attention: Jim McDade

C. Lance Tigrett

Approved for release.
Lance C Tigrett
Data Review Analyst I
10/29/2010 4:33 PM

Designee for
Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
10/29/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

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Appendix A - Laboratory Data Package Cover Page

This data package is for Job No. 600-30603 and consists of:

- ☒ This signature page, the laboratory review checklists, and the following reportable data:
- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC Chapter 5,
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist and for each analyte, matrix and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all methods, analytes and matrices reported in the data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory Exception Reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC 25.6 and was last inspected by [] TCEQ or [] _____ on _____. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Chris Schepcoff		Laboratory Director	10/29/10
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30603
Reviewer Name: YX	Prep Batch Number: 600-42397, 42488, and 42562-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		X			1
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Were MS/MSD RPDs within laboratory QC limits?		X			4
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				5
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30603
Reviewer Name: YX	Prep Batch Number: 600-42397, 42488, and 42562-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 10/29/10
Project Name: Rohm and Haas	Laboratory Job Number: 600-30603
Reviewer Name: YX	Prep Batch Number: 600-42397, 42488, and 42562-VOA

ER #[1]	DESCRIPTION
1	2-Hexanone was not detected in secondary dilutions; therefore, this analyte was reported as an "E" value above the upper calibration range in the original 1X analysis.
2	The Dibromofluoromethane surrogate recovery in sample 600-30603-21 (1X) was above the acceptance limit due to suspected matrix interference.
3	The Chloromethane and Vinyl chloride recoveries in sample 600-30603-21 MSD and the Acetone and Carbon disulfide recoveries in samples 600-30603-21 MS and 21 MSD were below acceptance limits. Method performance is demonstrated by acceptable LCS recoveries.
4	The Chloromethane RPD between samples 600-30603-21 MS and 21 MSD was above the acceptance limit. This analyte was not detected in any client samples; therefore, this high RPD will not affect the quality of reported results.
5	The 1,2-Dichloroethane SDLs for samples 600-30603-2 and 16 and the 2-Butanone (MEK), 4-Methyl-2-pentanone (MIBK), and Acetone SDLs for samples 600-603-18, 21, and 22 were elevated due to the dilutions necessary for analyses.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Quality Control Report

Detection Check Standard

Matrix:	Water - Low Level
Method:	8260B
Preparation:	5030
Date Analyzed:	7/28/2010
Date Prepared:	7/28/2010
Lab Sample ID:	VSTD001
File #:	VOA_VII.i\072810.b\A20903.D
Units:	ug/L

Analyte	MDL	DCS Spike	DCS Result	MQL
Dichlorodifluoromethane	0.14	1	1.05	1
Chloromethane	0.15	1	1.18	2
Vinyl Chloride	0.13	1	0.787	2
Bromomethane	0.22	1	0.752	2
Chloroethane	0.19	1	0.983	2
Trichlorofluoromethane	0.08	1	0.787	1
Allyl Chloride		2	1.98	
Acrolein	1.41	5	5.71	1
1,1-Dichloroethene	0.13	1	0.787	1
Trichlorotrifluoroethene		1	1.07	
Acetone	2	2	4.32	2
Methyl Iodide		2	1.6	
2-Propanol		10	22.59	
Carbon Disulfide	0.07	2	2.36	1
Acetonitrile	0.66	2	2.07	1
Methylene Chloride	0.42	1	1.14	1
Acrylonitrile	1.09	5	6.31	1
trans-1,2-Dichloroethene	0.12	1	0.783	1
Methyl tert-butyl ether	0.15	1	0.796	1
1,2-Dichloroethene (total)	0.3	2	1.59	1
1,1-Dichloroethane	0.13	1	0.796	1
Vinyl Acetate	0.17	2	2.2	1
Chloroprene		2	1.6	
cis-1,2-Dichloroethene	0.16	1	0.803	1
2,2-Dichloropropane		1	0.764	
2-Butanone (MEK)	0.76	2	2.5	2
Propionitrile		2	2.7	
Methacrylonitrile		2	2.47	1
Bromochloromethane	0.17	1	0.815	
Chloroform	0.12	5	5.43	
1,1,1-Trichloroethane	0.12	1	0.762	
1,1-Dichloropropene	0.13	1	0.854	
Carbon Tetrachloride	0.13	1	0.86	
Isobutyl Alcohol	4.1	10	24.38	
Benzene	0.13	1	0.864	
1,2-Dichloroethane	0.13	1	0.882	
Trichloroethene	0.13	1	0.86	
1,2-Dichloropropane	0.16	1	0.747	
Methyl methacrylate	0.33	2	2.18	

Methylene Bromide		1	0.783
1,4-Dioxane	26.97	50	153.5
Bromodichloromethane	0.14	1	1.05
2-Chloroethyl vinyl ether	0.17	2	2.14
cis-1,3-Dichloropropene	0.11	1	1.13
4-Methyl-2-pentanone	0.31	2	2.21
Toluene	0.14	1	0.874
trans-1,3-Dichloropropene	0.11	1	1.18
Ethyl methacrylate	0.33	2	0.899
1,1,2-Trichloroethane	0.18	1	0.791
1,3-Dichloropropane	0.12	1	8.46
Tetrachloroethene	0.08	1	0.828
2-Hexanone	0.31	2	2.31
Dibromochloromethane	0.45	1	1.15
1,2-Dibromoethane (EDB)	0.36	1	1.05
Chlorobenzene	0.11	1	0.831
1,1,1,2-Tetrachloroethane	0.09	1	1.01
Ethylbenzene	0.13	1	0.833
m,p-Xylene	0.25	2	1.77
o-Xylene	0.12	1	0.827
Xylenes (total)	0.32	3	2.59
Styrene	0.1	1	0.768
Bromoform	0.12	1	2.62
Isopropylbenzene	0.06	1	1.01
1,1,2,2-Tetrachloroethane	0.16	1	1.14
trans-1,4-Dichloro-2-buter	0.86	2	0.669
Bromobenzene	0.14	1	1.08
n-Propylbenzene	0.25	1	0.955
2-Chlorotoluene	0.17	1	0.759
4-Chlorotoluene	0.18	1	0.938
1,3,5-Trimethylbenzene	0.08	1	0.822
tert-Butylbenzene	0.16	1	0.956
1,2,4-Trimethylbenzene	0.1	1	0.913
sec-Butylbenzene	0.14	1	0.767
1,3-Dichlorobenzene	0.13	1	0.762
1,4-Dichlorobenzene	0.05	1	0.847
1,2-Dichlorobenzene	0.1	1	1.08
p-Isopropyltoluene	0.1	1	0.783
n-Butylbenzene	0.09	1	0.877
1,2,3-Trichloropropane	0.13	1	0.798
1,2-Dibromo-3-chloroprop	0.39	1	1.01
1,2,4-Trichlorobenzene	0.2	1	0.976
Hexachlorobutadiene	0.17	1	0.539
1,2,3-Trichlorobenzene	0.28	1	1.02
Naphthalene	0.47	1	1.13

METHOD SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL HOU	SW846 8260B	
Purge and Trap	TAL HOU		SW846 5030B

Lab References:

TAL HOU = TestAmerica Houston

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Method	Analyst	Analyst ID
SW846 8260B	Vela, Kenneth L	KLV
SW846 8260B	Xie, Yali	YX

SAMPLE SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-30603-1	20101021_HOUCB_TB	Water	10/21/2010 0000	10/22/2010 1400
600-30603-2	20101021EAB-MW-3V35.0@N	Water	10/21/2010 0837	10/22/2010 1400
600-30603-3	20101021EAB-MW-02V35.7@N	Water	10/21/2010 0900	10/22/2010 1400
600-30603-4	20101021MW-CB-25AV30.0@N	Water	10/21/2010 0945	10/22/2010 1400
600-30603-5	20101021MW-CB-25AV30.0@D	Water	10/21/2010 0945	10/22/2010 1400
600-30603-6	20101021MW-CB-26AV30.0@N	Water	10/21/2010 0905	10/22/2010 1400
600-30603-7	20101021MW-CB-6BSV77.5@N	Water	10/21/2010 1020	10/22/2010 1400
600-30603-8	20101021MW-CB-27AV@30.06N	Water	10/21/2010 1045	10/22/2010 1400
600-30603-9	20101021 WERTWWV@N	Water	10/21/2010 1100	10/22/2010 1400
600-30603-10	20101021 RUMMELWWV@N	Water	10/21/2010 1105	10/22/2010 1400
600-30603-11	20101021MW-CB-28AV30.0@N	Water	10/21/2010 1125	10/22/2010 1400
600-30603-12	20101021MW-CB-6BV94.3@N	Water	10/21/2010 1155	10/22/2010 1400
600-30603-13	20101021TP-15V37.3@N	Water	10/21/2010 1320	10/22/2010 1400
600-30603-14	20101021OW-1V24.3@N	Water	10/21/2010 1345	10/22/2010 1400
600-30603-15	20101021MW-CB-2BV91.5@N	Water	10/21/2010 1355	10/22/2010 1400
600-30603-16	20101021MW-CB-2AV57.3@N	Water	10/21/2010 1400	10/22/2010 1400
600-30603-17	20101021OW-2V29.2@N	Water	10/21/2010 1405	10/22/2010 1400
600-30603-18	20101021EAB-INJ-02V35.81@N	Water	10/21/2010 1440	10/22/2010 1400
600-30603-19	20101021EAB-MW-01V35.98@N	Water	10/21/2010 1505	10/22/2010 1400
600-30603-20	20101021MW-CB-3V63.3@N	Water	10/21/2010 1505	10/22/2010 1400
600-30603-21	20101021EAB-INJ-01V35.81@N	Water	10/21/2010 1455	10/22/2010 1400
600-30603-22	20101021EAB-INJ-03V35.47@N	Water	10/21/2010 1515	10/22/2010 1400
600-30603-23	20101021MW-CB-1BSV77.5@N	Water	10/21/2010 1630	10/22/2010 1400
600-30603-24	20101021MW-CB-1BV97.3@N	Water	10/21/2010 1630	10/22/2010 1400
600-30603-25	20101021MW-CB-1AV56.3@B	Water	10/21/2010 1640	10/22/2010 1400
600-30603-26	20101021MW-1AV56.3@D	Water	10/21/2010 1640	10/22/2010 1400

SAMPLE RESULTS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021_HOUCB_TB

Lab Sample ID: 600-30603-1
Client Matrix: Water

Date Sampled: 10/21/2010 00:00
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 21:26		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 21:26	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0099	0.0100	99	50-134		VOAMS09		10/26/2010 21:26	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	120	67-139		VOAMS09		10/26/2010 21:26	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	110	62-130		VOAMS09		10/26/2010 21:26	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	111	70-130		VOAMS09		10/26/2010 21:26	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-MW-3V35.0@N

Lab Sample ID: 600-30603-2
Client Matrix: Water

Date Sampled: 10/21/2010 08:37
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 21:49		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 21:49	1	KLV
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 21:49	1	KLV
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42397	10/26/2010 21:49	1	KLV
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 21:49	1	KLV
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 21:49	1	KLV
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 21:49	1	KLV
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42397	10/26/2010 21:49	1	KLV
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42397	10/26/2010 21:49	1	KLV
4-Methyl-2-pentanone (MIBK)	108-10-1	0.31	U		0.31	2.0	0.31	ug/L	42397	10/26/2010 21:49	1	KLV
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42397	10/26/2010 21:49	1	KLV
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 21:49	1	KLV
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 21:49	1	KLV
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42397	10/26/2010 21:49	1	KLV
Carbon disulfide	75-15-0	0.62	J		0.070	2.0	0.070	ug/L	42397	10/26/2010 21:49	1	KLV
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 21:49	1	KLV
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42397	10/26/2010 21:49	1	KLV
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42397	10/26/2010 21:49	1	KLV
Chloroethane	75-00-3	2.5			0.19	2.0	0.19	ug/L	42397	10/26/2010 21:49	1	KLV
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 21:49	1	KLV
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42397	10/26/2010 21:49	1	KLV
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 21:49	1	KLV
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42397	10/26/2010 21:49	1	KLV
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42397	10/26/2010 21:49	1	KLV
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 21:49	1	KLV
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42397	10/26/2010 21:49	1	KLV
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42397	10/26/2010 21:49	1	KLV
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 21:49	1	KLV
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42397	10/26/2010 21:49	1	KLV
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42397	10/26/2010 21:49	1	KLV
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42397	10/26/2010 21:49	1	KLV
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 21:49	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-MW-3V35.0@N

Lab Sample ID: 600-30603-2
Client Matrix: Water

Date Sampled: 10/21/2010 08:37
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42397	10/26/2010 21:49	1	KLV
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 21:49	1	KLV
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42397	10/26/2010 21:49	1	KLV
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42397	10/26/2010 21:49	1	KLV
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42397	10/26/2010 21:49	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		10	10.0	102	50-134		VOAMS09		10/26/2010 21:49	1	KLV
4-Bromofluorobenzene	460-00-4		11	10.0	115	67-139		VOAMS09		10/26/2010 21:49	1	KLV
Dibromofluoromethane	1868-53-7		11	10.0	109	62-130		VOAMS09		10/26/2010 21:49	1	KLV
Toluene-d8 (Surr)	2037-26-5		11	10.0	109	70-130		VOAMS09		10/26/2010 21:49	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-MW-3V35.0@N

Lab Sample ID: 600-30603-2 DL
Client Matrix: Water

Date Sampled: 10/21/2010 08:37
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 14:27		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	150			0.13	1.0	1.3	ug/L	42488	10/27/2010 14:27	10	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		120	100	123	50-134		VOAMS09		10/27/2010 14:27	10	YX
4-Bromofluorobenzene	460-00-4		120	100	115	67-139		VOAMS09		10/27/2010 14:27	10	YX
Dibromofluoromethane	1868-53-7		130	100	130	62-130		VOAMS09		10/27/2010 14:27	10	YX
Toluene-d8 (Surr)	2037-26-5		120	100	124	70-130		VOAMS09		10/27/2010 14:27	10	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-MW-02V35.7@N

Lab Sample ID: 600-30603-3
Client Matrix: Water

Date Sampled: 10/21/2010 09:00
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 22:11		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 22:11	1	KLV
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 22:11	1	KLV
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42397	10/26/2010 22:11	1	KLV
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 22:11	1	KLV
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 22:11	1	KLV
1,2-Dichloroethane	107-06-2	5.1			0.13	1.0	0.13	ug/L	42397	10/26/2010 22:11	1	KLV
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 22:11	1	KLV
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42397	10/26/2010 22:11	1	KLV
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42397	10/26/2010 22:11	1	KLV
4-Methyl-2-pentanone (MIBK)	108-10-1	3.7			0.31	2.0	0.31	ug/L	42397	10/26/2010 22:11	1	KLV
Acetone	67-64-1	2.0	U		2.0	5.0	2.0	ug/L	42397	10/26/2010 22:11	1	KLV
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 22:11	1	KLV
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 22:11	1	KLV
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42397	10/26/2010 22:11	1	KLV
Carbon disulfide	75-15-0	1.8	J		0.070	2.0	0.070	ug/L	42397	10/26/2010 22:11	1	KLV
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 22:11	1	KLV
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42397	10/26/2010 22:11	1	KLV
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42397	10/26/2010 22:11	1	KLV
Chloroethane	75-00-3	0.60	J		0.19	2.0	0.19	ug/L	42397	10/26/2010 22:11	1	KLV
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 22:11	1	KLV
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42397	10/26/2010 22:11	1	KLV
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42397	10/26/2010 22:11	1	KLV
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42397	10/26/2010 22:11	1	KLV
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42397	10/26/2010 22:11	1	KLV
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 22:11	1	KLV
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42397	10/26/2010 22:11	1	KLV
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42397	10/26/2010 22:11	1	KLV
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 22:11	1	KLV
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42397	10/26/2010 22:11	1	KLV
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42397	10/26/2010 22:11	1	KLV
Toluene	108-88-3	0.27	J		0.14	1.0	0.14	ug/L	42397	10/26/2010 22:11	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-MW-02V35.7@N

Lab Sample ID: 600-30603-3
Client Matrix: Water

Date Sampled: 10/21/2010 09:00
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42397	10/26/2010 22:11	1	KLV
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42397	10/26/2010 22:11	1	KLV
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42397	10/26/2010 22:11	1	KLV
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42397	10/26/2010 22:11	1	KLV
Vinyl chloride	75-01-4	4.2			0.13	2.0	0.13	ug/L	42397	10/26/2010 22:11	1	KLV
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42397	10/26/2010 22:11	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		9.6	10.0	96	50-134		VOAMS09		10/26/2010 22:11	1	KLV
4-Bromofluorobenzene	460-00-4		11	10.0	111	67-139		VOAMS09		10/26/2010 22:11	1	KLV
Dibromofluoromethane	1868-53-7		11	10.0	109	62-130		VOAMS09		10/26/2010 22:11	1	KLV
Toluene-d8 (Surr)	2037-26-5		10	10.0	105	70-130		VOAMS09		10/26/2010 22:11	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-25AV30.0@N

Lab Sample ID: 600-30603-4
Client Matrix: Water

Date Sampled: 10/21/2010 09:45
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 22:34		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.017			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 22:34	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0095	0.0100	95	50-134		VOAMS09		10/26/2010 22:34	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	113	67-139		VOAMS09		10/26/2010 22:34	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	106	62-130		VOAMS09		10/26/2010 22:34	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	105	70-130		VOAMS09		10/26/2010 22:34	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-25AV30.0@D

Lab Sample ID: 600-30603-5
Client Matrix: Water

Date Sampled: 10/21/2010 09:45
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 22:56		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.017			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 22:56	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0094	0.0100	94	50-134		VOAMS09		10/26/2010 22:56	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	112	67-139		VOAMS09		10/26/2010 22:56	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	104	62-130		VOAMS09		10/26/2010 22:56	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	104	70-130		VOAMS09		10/26/2010 22:56	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-26AV30.0@N

Lab Sample ID: 600-30603-6
Client Matrix: Water

Date Sampled: 10/21/2010 09:05
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 23:19		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0070			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 23:19	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0097	0.0100	97	50-134		VOAMS09		10/26/2010 23:19	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	119	67-139		VOAMS09		10/26/2010 23:19	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	109	62-130		VOAMS09		10/26/2010 23:19	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	105	70-130		VOAMS09		10/26/2010 23:19	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-6BSV77.5@N

Lab Sample ID: 600-30603-7
Client Matrix: Water

Date Sampled: 10/21/2010 10:20
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/26/2010 23:42		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0011			0.00013	0.0010	0.00013	mg/L	42397	10/26/2010 23:42	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0094	0.0100	94	50-134		VOAMS09		10/26/2010 23:42	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	119	67-139		VOAMS09		10/26/2010 23:42	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	105	62-130		VOAMS09		10/26/2010 23:42	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	107	70-130		VOAMS09		10/26/2010 23:42	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-27AV@30.06N

Lab Sample ID: 600-30603-8
Client Matrix: Water

Date Sampled: 10/21/2010 10:45
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 00:05		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.031			0.00013	0.0010	0.00013	mg/L	42397	10/27/2010 00:05	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0091	0.0100	91	50-134		VOAMS09		10/27/2010 00:05	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	116	67-139		VOAMS09		10/27/2010 00:05	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	103	62-130		VOAMS09		10/27/2010 00:05	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.010	0.0100	103	70-130		VOAMS09		10/27/2010 00:05	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021 WERTWWV@N

Lab Sample ID: 600-30603-9
Client Matrix: Water

Date Sampled: 10/21/2010 11:00
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 00:27		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/27/2010 00:27	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0097	0.0100	97	50-134		VOAMS09		10/27/2010 00:27	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	120	67-139		VOAMS09		10/27/2010 00:27	1	KLV
Dibromofluoromethane	1868-53-7		0.011	0.0100	110	62-130		VOAMS09		10/27/2010 00:27	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	106	70-130		VOAMS09		10/27/2010 00:27	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021 RUMMELWWV@N

Lab Sample ID: 600-30603-10
Client Matrix: Water

Date Sampled: 10/21/2010 11:05
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 00:50		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/27/2010 00:50	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0092	0.0100	92	50-134		VOAMS09		10/27/2010 00:50	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	117	67-139		VOAMS09		10/27/2010 00:50	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	105	62-130		VOAMS09		10/27/2010 00:50	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	105	70-130		VOAMS09		10/27/2010 00:50	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-28AV30.0@N

Lab Sample ID: 600-30603-11
Client Matrix: Water

Date Sampled: 10/21/2010 11:25
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 01:12		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0058			0.00013	0.0010	0.00013	mg/L	42397	10/27/2010 01:12	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0089	0.0100	89	50-134		VOAMS09		10/27/2010 01:12	1	KLV
4-Bromofluorobenzene	460-00-4		0.011	0.0100	114	67-139		VOAMS09		10/27/2010 01:12	1	KLV
Dibromofluoromethane	1868-53-7		0.010	0.0100	101	62-130		VOAMS09		10/27/2010 01:12	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	105	70-130		VOAMS09		10/27/2010 01:12	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-6BV94.3@N

Lab Sample ID: 600-30603-12
Client Matrix: Water

Date Sampled: 10/21/2010 11:55
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 01:35		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42397	10/27/2010 01:35	1	KLV

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.0090	0.0100	90	50-134		VOAMS09		10/27/2010 01:35	1	KLV
4-Bromofluorobenzene	460-00-4		0.012	0.0100	116	67-139		VOAMS09		10/27/2010 01:35	1	KLV
Dibromofluoromethane	1868-53-7		0.0099	0.0100	99	62-130		VOAMS09		10/27/2010 01:35	1	KLV
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	106	70-130		VOAMS09		10/27/2010 01:35	1	KLV

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021TP-15V37.3@N

Lab Sample ID: 600-30603-13
Client Matrix: Water

Date Sampled: 10/21/2010 13:20
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 14:50		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 14:50	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.012	0.0100	117	50-134		VOAMS09		10/27/2010 14:50	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	110	67-139		VOAMS09		10/27/2010 14:50	1	YX
Dibromofluoromethane	1868-53-7		0.012	0.0100	121	62-130		VOAMS09		10/27/2010 14:50	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	120	70-130		VOAMS09		10/27/2010 14:50	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021OW-1V24.3@N

Lab Sample ID: 600-30603-14
Client Matrix: Water

Date Sampled: 10/21/2010 13:45
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 15:12		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 15:12	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.012	0.0100	119	50-134		VOAMS09		10/27/2010 15:12	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	111	67-139		VOAMS09		10/27/2010 15:12	1	YX
Dibromofluoromethane	1868-53-7		0.013	0.0100	126	62-130		VOAMS09		10/27/2010 15:12	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	118	70-130		VOAMS09		10/27/2010 15:12	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-2BV91.5@N

Lab Sample ID: 600-30603-15
Client Matrix: Water

Date Sampled: 10/21/2010 13:55
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 15:35		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 15:35	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.012	0.0100	117	50-134		VOAMS09		10/27/2010 15:35	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	110	67-139		VOAMS09		10/27/2010 15:35	1	YX
Dibromofluoromethane	1868-53-7		0.012	0.0100	123	62-130		VOAMS09		10/27/2010 15:35	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	120	70-130		VOAMS09		10/27/2010 15:35	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-2AV57.3@N

Lab Sample ID: 600-30603-16
Client Matrix: Water

Date Sampled: 10/21/2010 14:00
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 20:06		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.059			0.00013	0.0010	0.00065	mg/L	42488	10/27/2010 20:06	5	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.058	0.0500	115	50-134		VOAMS09		10/27/2010 20:06	5	YX
4-Bromofluorobenzene	460-00-4		0.053	0.0500	106	67-139		VOAMS09		10/27/2010 20:06	5	YX
Dibromofluoromethane	1868-53-7		0.060	0.0500	119	62-130		VOAMS09		10/27/2010 20:06	5	YX
Toluene-d8 (Surr)	2037-26-5		0.058	0.0500	116	70-130		VOAMS09		10/27/2010 20:06	5	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021OW-2V29.2@N

Lab Sample ID: 600-30603-17
Client Matrix: Water

Date Sampled: 10/21/2010 14:05
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 16:20		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.0025			0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 16:20	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.012	0.0100	115	50-134		VOAMS09		10/27/2010 16:20	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	108	67-139		VOAMS09		10/27/2010 16:20	1	YX
Dibromofluoromethane	1868-53-7		0.012	0.0100	120	62-130		VOAMS09		10/27/2010 16:20	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	118	70-130		VOAMS09		10/27/2010 16:20	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-02V35.81@N

Lab Sample ID: 600-30603-18
Client Matrix: Water

Date Sampled: 10/21/2010 14:40
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 16:43		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 16:43	1	YX
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 16:43	1	YX
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42488	10/27/2010 16:43	1	YX
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 16:43	1	YX
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 16:43	1	YX
1,2-Dichloroethane	107-06-2	1.9			0.13	1.0	0.13	ug/L	42488	10/27/2010 16:43	1	YX
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 16:43	1	YX
2-Hexanone	591-78-6	70		E	0.31	2.0	0.31	ug/L	42488	10/27/2010 16:43	1	YX
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 16:43	1	YX
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 16:43	1	YX
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42488	10/27/2010 16:43	1	YX
Carbon disulfide	75-15-0	3.2			0.070	2.0	0.070	ug/L	42488	10/27/2010 16:43	1	YX
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 16:43	1	YX
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 16:43	1	YX
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42488	10/27/2010 16:43	1	YX
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42488	10/27/2010 16:43	1	YX
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 16:43	1	YX
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42488	10/27/2010 16:43	1	YX
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 16:43	1	YX
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 16:43	1	YX
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42488	10/27/2010 16:43	1	YX
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 16:43	1	YX
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42488	10/27/2010 16:43	1	YX
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42488	10/27/2010 16:43	1	YX
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 16:43	1	YX
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42488	10/27/2010 16:43	1	YX
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42488	10/27/2010 16:43	1	YX
Toluene	108-88-3	0.24	J		0.14	1.0	0.14	ug/L	42488	10/27/2010 16:43	1	YX
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 16:43	1	YX
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 16:43	1	YX
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 16:43	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-02V35.81@N

Lab Sample ID: 600-30603-18
Client Matrix: Water

Date Sampled: 10/21/2010 14:40
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42488	10/27/2010 16:43	1	YX
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42488	10/27/2010 16:43	1	YX
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42488	10/27/2010 16:43	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		13	10.0	127	50-134		VOAMS09		10/27/2010 16:43	1	YX
4-Bromofluorobenzene	460-00-4		9.8	10.0	98	67-139		VOAMS09		10/27/2010 16:43	1	YX
Dibromofluoromethane	1868-53-7		13	10.0	128	62-130		VOAMS09		10/27/2010 16:43	1	YX
Toluene-d8 (Surr)	2037-26-5		11	10.0	108	70-130		VOAMS09		10/27/2010 16:43	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-02V35.81@N

Lab Sample ID: 600-30603-18 DL
Client Matrix: Water

Date Sampled: 10/21/2010 14:40
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/28/2010 16:02		
Method: SW846 8260B,Water												
2-Butanone (MEK)	78-93-3	670			0.76	2.0	76	ug/L	42562	10/28/2010 16:02	100	YX
4-Methyl-2-pentanone (MIBK)	108-10-1	1700			0.31	2.0	31	ug/L	42562	10/28/2010 16:02	100	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		1200	1000	118	50-134		VOAMS09		10/28/2010 16:02	100	YX
4-Bromofluorobenzene	460-00-4		1100	1000	110	67-139		VOAMS09		10/28/2010 16:02	100	YX
Dibromofluoromethane	1868-53-7		1200	1000	121	62-130		VOAMS09		10/28/2010 16:02	100	YX
Toluene-d8 (Surr)	2037-26-5		1200	1000	120	70-130		VOAMS09		10/28/2010 16:02	100	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-02V35.81@N

Lab Sample ID: 600-30603-18 DL2
Client Matrix: Water

Date Sampled: 10/21/2010 14:40
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/28/2010 16:55		
Method: SW846 8260B,Water												
Acetone	67-64-1	37000			2.0	5.0	2000	ug/L	42562	10/28/2010 16:55	1000	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		11000	10000	115	50-134		VOAMS09		10/28/2010 16:55	1000	YX
4-Bromofluorobenzene	460-00-4		11000	10000	110	67-139		VOAMS09		10/28/2010 16:55	1000	YX
Dibromofluoromethane	1868-53-7		12000	10000	118	62-130		VOAMS09		10/28/2010 16:55	1000	YX
Toluene-d8 (Surr)	2037-26-5		12000	10000	124	70-130		VOAMS09		10/28/2010 16:55	1000	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-MW-01V35.98@N

Lab Sample ID: 600-30603-19
Client Matrix: Water

Date Sampled: 10/21/2010 15:05
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/28/2010 13:46		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42562	10/28/2010 13:46	1	YX
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42562	10/28/2010 13:46	1	YX
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42562	10/28/2010 13:46	1	YX
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42562	10/28/2010 13:46	1	YX
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42562	10/28/2010 13:46	1	YX
1,2-Dichloroethane	107-06-2	9.2			0.13	1.0	0.13	ug/L	42562	10/28/2010 13:46	1	YX
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42562	10/28/2010 13:46	1	YX
2-Butanone (MEK)	78-93-3	0.76	U		0.76	2.0	0.76	ug/L	42562	10/28/2010 13:46	1	YX
2-Hexanone	591-78-6	0.31	U		0.31	2.0	0.31	ug/L	42562	10/28/2010 13:46	1	YX
4-Methyl-2-pentanone (MIBK)	108-10-1	0.95	J		0.31	2.0	0.31	ug/L	42562	10/28/2010 13:46	1	YX
Acetone	67-64-1	7.0			2.0	5.0	2.0	ug/L	42562	10/28/2010 13:46	1	YX
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42562	10/28/2010 13:46	1	YX
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42562	10/28/2010 13:46	1	YX
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42562	10/28/2010 13:46	1	YX
Carbon disulfide	75-15-0	0.74	J		0.070	2.0	0.070	ug/L	42562	10/28/2010 13:46	1	YX
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42562	10/28/2010 13:46	1	YX
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42562	10/28/2010 13:46	1	YX
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42562	10/28/2010 13:46	1	YX
Chloroethane	75-00-3	4.3			0.19	2.0	0.19	ug/L	42562	10/28/2010 13:46	1	YX
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42562	10/28/2010 13:46	1	YX
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42562	10/28/2010 13:46	1	YX
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42562	10/28/2010 13:46	1	YX
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42562	10/28/2010 13:46	1	YX
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42562	10/28/2010 13:46	1	YX
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42562	10/28/2010 13:46	1	YX
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42562	10/28/2010 13:46	1	YX
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42562	10/28/2010 13:46	1	YX
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42562	10/28/2010 13:46	1	YX
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42562	10/28/2010 13:46	1	YX
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42562	10/28/2010 13:46	1	YX
Toluene	108-88-3	0.14	U		0.14	1.0	0.14	ug/L	42562	10/28/2010 13:46	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-MW-01V35.98@N

Lab Sample ID: 600-30603-19
Client Matrix: Water

Date Sampled: 10/21/2010 15:05
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42562	10/28/2010 13:46	1	YX
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42562	10/28/2010 13:46	1	YX
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42562	10/28/2010 13:46	1	YX
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42562	10/28/2010 13:46	1	YX
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42562	10/28/2010 13:46	1	YX
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42562	10/28/2010 13:46	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		11	10.0	115	50-134		VOAMS09		10/28/2010 13:46	1	YX
4-Bromofluorobenzene	460-00-4		10	10.0	103	67-139		VOAMS09		10/28/2010 13:46	1	YX
Dibromofluoromethane	1868-53-7		12	10.0	119	62-130		VOAMS09		10/28/2010 13:46	1	YX
Toluene-d8 (Surr)	2037-26-5		11	10.0	114	70-130		VOAMS09		10/28/2010 13:46	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-3V63.3@N

Lab Sample ID: 600-30603-20
Client Matrix: Water

Date Sampled: 10/21/2010 15:05
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 17:28		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.00013	U		0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 17:28	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.012	0.0100	118	50-134		VOAMS09		10/27/2010 17:28	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	112	67-139		VOAMS09		10/27/2010 17:28	1	YX
Dibromofluoromethane	1868-53-7		0.013	0.0100	126	62-130		VOAMS09		10/27/2010 17:28	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	121	70-130		VOAMS09		10/27/2010 17:28	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-01V35.81@N

Lab Sample ID: 600-30603-21
Client Matrix: Water

Date Sampled: 10/21/2010 14:55
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 17:51		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 17:51	1	YX
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 17:51	1	YX
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42488	10/27/2010 17:51	1	YX
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 17:51	1	YX
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 17:51	1	YX
1,2-Dichloroethane	107-06-2	0.69	J		0.13	1.0	0.13	ug/L	42488	10/27/2010 17:51	1	YX
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 17:51	1	YX
2-Hexanone	591-78-6	50			0.31	2.0	0.31	ug/L	42488	10/27/2010 17:51	1	YX
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 17:51	1	YX
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 17:51	1	YX
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42488	10/27/2010 17:51	1	YX
Carbon disulfide	75-15-0	1.9	J		0.070	2.0	0.070	ug/L	42488	10/27/2010 17:51	1	YX
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 17:51	1	YX
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 17:51	1	YX
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42488	10/27/2010 17:51	1	YX
Chloroethane	75-00-3	0.19	U		0.19	2.0	0.19	ug/L	42488	10/27/2010 17:51	1	YX
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 17:51	1	YX
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42488	10/27/2010 17:51	1	YX
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 17:51	1	YX
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 17:51	1	YX
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42488	10/27/2010 17:51	1	YX
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 17:51	1	YX
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42488	10/27/2010 17:51	1	YX
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42488	10/27/2010 17:51	1	YX
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 17:51	1	YX
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42488	10/27/2010 17:51	1	YX
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42488	10/27/2010 17:51	1	YX
Toluene	108-88-3	0.18	J		0.14	1.0	0.14	ug/L	42488	10/27/2010 17:51	1	YX
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 17:51	1	YX
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 17:51	1	YX
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 17:51	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-01V35.81@N

Lab Sample ID: 600-30603-21
Client Matrix: Water

Date Sampled: 10/21/2010 14:55
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42488	10/27/2010 17:51	1	YX
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42488	10/27/2010 17:51	1	YX
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42488	10/27/2010 17:51	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		13	10.0	130	50-134		VOAMS09		10/27/2010 17:51	1	YX
4-Bromofluorobenzene	460-00-4		11	10.0	108	67-139		VOAMS09		10/27/2010 17:51	1	YX
Dibromofluoromethane	1868-53-7		13	10.0	134	62-130	X	VOAMS09		10/27/2010 17:51	1	YX
Toluene-d8 (Surr)	2037-26-5		12	10.0	118	70-130		VOAMS09		10/27/2010 17:51	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-01V35.81@N

Lab Sample ID: 600-30603-21 DL
Client Matrix: Water

Date Sampled: 10/21/2010 14:55
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/28/2010 14:09		
Method: SW846 8260B,Water												
2-Butanone (MEK)	78-93-3	250			0.76	2.0	15	ug/L	42562	10/28/2010 14:09	20	YX
4-Methyl-2-pentanone (MIBK)	108-10-1	1100			0.31	2.0	6.2	ug/L	42562	10/28/2010 14:09	20	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		220	200	112	50-134		VOAMS09		10/28/2010 14:09	20	YX
4-Bromofluorobenzene	460-00-4		220	200	111	67-139		VOAMS09		10/28/2010 14:09	20	YX
Dibromofluoromethane	1868-53-7		240	200	119	62-130		VOAMS09		10/28/2010 14:09	20	YX
Toluene-d8 (Surr)	2037-26-5		250	200	123	70-130		VOAMS09		10/28/2010 14:09	20	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-01V35.81@N

Lab Sample ID: 600-30603-21 DL2
Client Matrix: Water

Date Sampled: 10/21/2010 14:55
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/28/2010 15:17		
Method: SW846 8260B,Water												
Acetone	67-64-1	3500			2.0	5.0	200	ug/L	42562	10/28/2010 15:17	100	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		1200	1000	118	50-134		VOAMS09		10/28/2010 15:17	100	YX
4-Bromofluorobenzene	460-00-4		1100	1000	107	67-139		VOAMS09		10/28/2010 15:17	100	YX
Dibromofluoromethane	1868-53-7		1200	1000	123	62-130		VOAMS09		10/28/2010 15:17	100	YX
Toluene-d8 (Surr)	2037-26-5		1200	1000	120	70-130		VOAMS09		10/28/2010 15:17	100	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-03V35.47@N

Lab Sample ID: 600-30603-22
Client Matrix: Water

Date Sampled: 10/21/2010 15:15
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 18:13		
Method: SW846 8260B,Water												
1,1,1-Trichloroethane	71-55-6	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 18:13	1	YX
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 18:13	1	YX
1,1,2-Trichloroethane	79-00-5	0.18	U		0.18	1.0	0.18	ug/L	42488	10/27/2010 18:13	1	YX
1,1-Dichloroethane	75-34-3	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 18:13	1	YX
1,1-Dichloroethene	75-35-4	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 18:13	1	YX
1,2-Dichloroethane	107-06-2	3.5			0.13	1.0	0.13	ug/L	42488	10/27/2010 18:13	1	YX
1,2-Dichloropropane	78-87-5	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 18:13	1	YX
2-Hexanone	591-78-6	96		E	0.31	2.0	0.31	ug/L	42488	10/27/2010 18:13	1	YX
Benzene	71-43-2	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 18:13	1	YX
Bromoform	75-25-2	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 18:13	1	YX
Bromomethane	74-83-9	0.22	U		0.22	2.0	0.22	ug/L	42488	10/27/2010 18:13	1	YX
Carbon disulfide	75-15-0	1.0	J		0.070	2.0	0.070	ug/L	42488	10/27/2010 18:13	1	YX
Carbon tetrachloride	56-23-5	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 18:13	1	YX
Chlorobenzene	108-90-7	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 18:13	1	YX
Chlorobromomethane	74-97-5	0.17	U		0.17	1.0	0.17	ug/L	42488	10/27/2010 18:13	1	YX
Chloroethane	75-00-3	0.88	J		0.19	2.0	0.19	ug/L	42488	10/27/2010 18:13	1	YX
Chloroform	67-66-3	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 18:13	1	YX
Chloromethane	74-87-3	0.15	U		0.15	2.0	0.15	ug/L	42488	10/27/2010 18:13	1	YX
cis-1,2-Dichloroethene	156-59-2	0.16	U		0.16	1.0	0.16	ug/L	42488	10/27/2010 18:13	1	YX
cis-1,3-Dichloropropene	10061-01-5	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 18:13	1	YX
Dibromochloromethane	124-48-1	0.45	U		0.45	1.0	0.45	ug/L	42488	10/27/2010 18:13	1	YX
Ethylbenzene	100-41-4	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 18:13	1	YX
m-Xylene & p-Xylene	179601-23-1	0.25	U		0.25	1.0	0.25	ug/L	42488	10/27/2010 18:13	1	YX
Methylene Chloride	75-09-2	0.42	U		0.42	5.0	0.42	ug/L	42488	10/27/2010 18:13	1	YX
o-Xylene	95-47-6	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 18:13	1	YX
Styrene	100-42-5	0.10	U		0.10	1.0	0.10	ug/L	42488	10/27/2010 18:13	1	YX
Tetrachloroethene	127-18-4	0.080	U		0.080	1.0	0.080	ug/L	42488	10/27/2010 18:13	1	YX
Toluene	108-88-3	0.18	J		0.14	1.0	0.14	ug/L	42488	10/27/2010 18:13	1	YX
trans-1,2-Dichloroethene	156-60-5	0.12	U		0.12	1.0	0.12	ug/L	42488	10/27/2010 18:13	1	YX
trans-1,3-Dichloropropene	10061-02-6	0.11	U		0.11	1.0	0.11	ug/L	42488	10/27/2010 18:13	1	YX
Trichloroethene	79-01-6	0.13	U		0.13	1.0	0.13	ug/L	42488	10/27/2010 18:13	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-03V35.47@N

Lab Sample ID: 600-30603-22
Client Matrix: Water

Date Sampled: 10/21/2010 15:15
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Vinyl acetate	108-05-4	0.17	U		0.17	2.0	0.17	ug/L	42488	10/27/2010 18:13	1	YX
Vinyl chloride	75-01-4	0.13	U		0.13	2.0	0.13	ug/L	42488	10/27/2010 18:13	1	YX
Xylenes, Total	1330-20-7	0.32	U		0.32	1.0	0.32	ug/L	42488	10/27/2010 18:13	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		13	10.0	129	50-134		VOAMS09		10/27/2010 18:13	1	YX
4-Bromofluorobenzene	460-00-4		10	10.0	100	67-139		VOAMS09		10/27/2010 18:13	1	YX
Dibromofluoromethane	1868-53-7		13	10.0	128	62-130		VOAMS09		10/27/2010 18:13	1	YX
Toluene-d8 (Surr)	2037-26-5		11	10.0	110	70-130		VOAMS09		10/27/2010 18:13	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-03V35.47@N

Lab Sample ID: 600-30603-22 DL
Client Matrix: Water

Date Sampled: 10/21/2010 15:15
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/28/2010 15:39		
Method: SW846 8260B,Water												
2-Butanone (MEK)	78-93-3	830			0.76	2.0	76	ug/L	42562	10/28/2010 15:39	100	YX
4-Methyl-2-pentanone (MIBK)	108-10-1	1700			0.31	2.0	31	ug/L	42562	10/28/2010 15:39	100	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		1200	1000	117	50-134		VOAMS09		10/28/2010 15:39	100	YX
4-Bromofluorobenzene	460-00-4		1100	1000	110	67-139		VOAMS09		10/28/2010 15:39	100	YX
Dibromofluoromethane	1868-53-7		1200	1000	120	62-130		VOAMS09		10/28/2010 15:39	100	YX
Toluene-d8 (Surr)	2037-26-5		1200	1000	121	70-130		VOAMS09		10/28/2010 15:39	100	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021EAB-INJ-03V35.47@N

Lab Sample ID: 600-30603-22 DL2
Client Matrix: Water

Date Sampled: 10/21/2010 15:15
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/28/2010 16:32		
Method: SW846 8260B,Water												
Acetone	67-64-1	35000			2.0	5.0	2000	ug/L	42562	10/28/2010 16:32	1000	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		11000	10000	111	50-134		VOAMS09		10/28/2010 16:32	1000	YX
4-Bromofluorobenzene	460-00-4		11000	10000	111	67-139		VOAMS09		10/28/2010 16:32	1000	YX
Dibromofluoromethane	1868-53-7		12000	10000	117	62-130		VOAMS09		10/28/2010 16:32	1000	YX
Toluene-d8 (Surr)	2037-26-5		12000	10000	123	70-130		VOAMS09		10/28/2010 16:32	1000	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-1BSV77.5@N

Lab Sample ID: 600-30603-23
Client Matrix: Water

Date Sampled: 10/21/2010 16:30
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 18:35		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.020			0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 18:35	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.012	0.0100	119	50-134		VOAMS09		10/27/2010 18:35	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	111	67-139		VOAMS09		10/27/2010 18:35	1	YX
Dibromofluoromethane	1868-53-7		0.012	0.0100	124	62-130		VOAMS09		10/27/2010 18:35	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	117	70-130		VOAMS09		10/27/2010 18:35	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-1BV97.3@N

Lab Sample ID: 600-30603-24
Client Matrix: Water

Date Sampled: 10/21/2010 16:30
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 18:58		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.050			0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 18:58	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.012	0.0100	117	50-134		VOAMS09		10/27/2010 18:58	1	YX
4-Bromofluorobenzene	460-00-4		0.012	0.0100	118	67-139		VOAMS09		10/27/2010 18:58	1	YX
Dibromofluoromethane	1868-53-7		0.012	0.0100	124	62-130		VOAMS09		10/27/2010 18:58	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	124	70-130		VOAMS09		10/27/2010 18:58	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-CB-1AV56.3@B

Lab Sample ID: 600-30603-25
Client Matrix: Water

Date Sampled: 10/21/2010 16:40
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 19:21		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.034			0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 19:21	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.011	0.0100	114	50-134		VOAMS09		10/27/2010 19:21	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	107	67-139		VOAMS09		10/27/2010 19:21	1	YX
Dibromofluoromethane	1868-53-7		0.012	0.0100	120	62-130		VOAMS09		10/27/2010 19:21	1	YX
Toluene-d8 (Surr)	2037-26-5		0.011	0.0100	114	70-130		VOAMS09		10/27/2010 19:21	1	YX

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-30603-1
Project: Rohm and Haas
SDG Number: Rohm and Haas

Client Sample ID: 20101021MW-1AV56.3@D

Lab Sample ID: 600-30603-26
Client Matrix: Water

Date Sampled: 10/21/2010 16:40
Date Received: 10/22/2010 14:00

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								10/27/2010 19:44		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	0.034			0.00013	0.0010	0.00013	mg/L	42488	10/27/2010 19:44	1	YX

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		0.011	0.0100	111	50-134		VOAMS09		10/27/2010 19:44	1	YX
4-Bromofluorobenzene	460-00-4		0.011	0.0100	107	67-139		VOAMS09		10/27/2010 19:44	1	YX
Dibromofluoromethane	1868-53-7		0.012	0.0100	119	62-130		VOAMS09		10/27/2010 19:44	1	YX
Toluene-d8 (Surr)	2037-26-5		0.012	0.0100	117	70-130		VOAMS09		10/27/2010 19:44	1	YX

DATA REPORTING QUALIFIERS

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits
	X	Surrogate is outside control limits

QUALITY CONTROL RESULTS

Client: Groundwater Services, Inc. Job Number: 600-30603-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:600-42397					
LCS 600-42397/1	Lab Control Sample	T	Water	8260B	
MB 600-42397/2	Method Blank	T	Water	8260B	
600-30603-1	20101021_HOUCB_TB	T	Water	8260B	
600-30603-2	20101021EAB-MW-3V35.0@N	T	Water	8260B	
600-30603-3	20101021EAB-MW-02V35.7@N	T	Water	8260B	
600-30603-4	20101021MW-CB-25AV30.0@N	T	Water	8260B	
600-30603-5	20101021MW-CB-25AV30.0@D	T	Water	8260B	
600-30603-6	20101021MW-CB-26AV30.0@N	T	Water	8260B	
600-30603-7	20101021MW-CB-6BSV77.5@N	T	Water	8260B	
600-30603-8	20101021MW-CB-27AV@30.06N	T	Water	8260B	
600-30603-9	20101021 WERTWWV@N	T	Water	8260B	
600-30603-10	20101021 RUMMELWWV@N	T	Water	8260B	
600-30603-11	20101021MW-CB-28AV30.0@N	T	Water	8260B	
600-30603-12	20101021MW-CB-6BV94.3@N	T	Water	8260B	
Analysis Batch:600-42488					
LCS 600-42488/1	Lab Control Sample	T	Water	8260B	
MB 600-42488/2	Method Blank	T	Water	8260B	
600-30603-2DL	20101021EAB-MW-3V35.0@N	T	Water	8260B	
600-30603-13	20101021TP-15V37.3@N	T	Water	8260B	
600-30603-14	20101021OW-1V24.3@N	T	Water	8260B	
600-30603-15	20101021MW-CB-2BV91.5@N	T	Water	8260B	
600-30603-16	20101021MW-CB-2AV57.3@N	T	Water	8260B	
600-30603-17	20101021OW-2V29.2@N	T	Water	8260B	
600-30603-18	20101021EAB-INJ-02V35.81@N	T	Water	8260B	
600-30603-20	20101021MW-CB-3V63.3@N	T	Water	8260B	
600-30603-21	20101021EAB-INJ-01V35.81@N	T	Water	8260B	
600-30603-22	20101021EAB-INJ-03V35.47@N	T	Water	8260B	
600-30603-23	20101021MW-CB-1BSV77.5@N	T	Water	8260B	
600-30603-24	20101021MW-CB-1BV97.3@N	T	Water	8260B	
600-30603-25	20101021MW-CB-1AV56.3@B	T	Water	8260B	
600-30603-26	20101021MW-1AV56.3@D	T	Water	8260B	
Analysis Batch:600-42562					
LCS 600-42562/1	Lab Control Sample	T	Water	8260B	
MB 600-42562/2	Method Blank	T	Water	8260B	
600-30603-18DL	20101021EAB-INJ-02V35.81@N	T	Water	8260B	
600-30603-18DL2	20101021EAB-INJ-02V35.81@N	T	Water	8260B	
600-30603-19	20101021EAB-MW-01V35.98@N	T	Water	8260B	
600-30603-21DL	20101021EAB-INJ-01V35.81@N	T	Water	8260B	
600-30603-21DL2	20101021EAB-INJ-01V35.81@N	T	Water	8260B	
600-30603-21MSDL	Matrix Spike	T	Water	8260B	
600-30603-21MSDDL	Matrix Spike Duplicate	T	Water	8260B	
600-30603-22DL	20101021EAB-INJ-03V35.47@N	T	Water	8260B	
600-30603-22DL2	20101021EAB-INJ-03V35.47@N	T	Water	8260B	

Client: Groundwater Services, Inc. Job Number: 600-30603-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
600-30603-1	20101021_HOUCB_TB	120	110	111	99
600-30603-4	20101021MW-CB-25AV30.0@N	113	106	105	95
600-30603-5	20101021MW-CB-25AV30.0@D	112	104	104	94
600-30603-6	20101021MW-CB-26AV30.0@N	119	109	105	97
600-30603-7	20101021MW-CB-6BSV77.5@N	119	105	107	94
600-30603-8	20101021MW-CB-27AV@30.06N	116	103	103	91
600-30603-9	20101021WERTWWV@N	120	110	106	97
600-30603-10	20101021RUMMELWWV@N	117	105	105	92
600-30603-11	20101021MW-CB-28AV30.0@N	114	101	105	89
600-30603-12	20101021MW-CB-6BV94.3@N	116	99	106	90
600-30603-13	20101021TP-15V37.3@N	110	121	120	117
600-30603-14	20101021OW-1V24.3@N	111	126	118	119
600-30603-15	20101021MW-CB-2BV91.5@N	110	123	120	117
600-30603-16	20101021MW-CB-2AV57.3@N	106	119	116	115
600-30603-17	20101021OW-2V29.2@N	108	120	118	115
600-30603-20	20101021MW-CB-3V63.3@N	112	126	121	118
600-30603-23	20101021MW-CB-1BSV77.5@N	111	124	117	119
600-30603-24	20101021MW-CB-1BV97.3@N	118	124	124	117

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec	DCA %Rec
600-30603-25	20101021MW-CB-1AV56.3@B	107	120	114	114
600-30603-26	20101021MW-1AV56.3@D	107	119	117	111

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-139
DBFM = Dibromofluoromethane	62-130
TOL = Toluene-d8 (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	DBFM %Rec	BFB %Rec	DCA %Rec
600-30603-2	20101021EAB-MW-3 V35.0@N	109	109	115	102
600-30603-2 DL	20101021EAB-MW-3 V35.0@N DL	124	130	115	123
600-30603-3	20101021EAB-MW-0 2V35.7@N	105	109	111	96
600-30603-18	20101021EAB-INJ-02 V35.81@N	108	128	98	127
600-30603-18 DL	20101021EAB-INJ-02 V35.81@N DL	120	121	110	118
600-30603-18 DL2	20101021EAB-INJ-02 V35.81@N DL2	124	118	110	115
600-30603-19	20101021EAB-MW-0 1V35.98@N	114	119	103	115
600-30603-21	20101021EAB-INJ-01 V35.81@N	118	134X	108	130
600-30603-21 DL	20101021EAB-INJ-01 V35.81@N DL	123	119	111	112
600-30603-21 DL2	20101021EAB-INJ-01 V35.81@N DL2	120	123	107	118
600-30603-22	20101021EAB-INJ-03 V35.47@N	110	128	100	129
600-30603-22 DL	20101021EAB-INJ-03 V35.47@N DL	121	120	110	117
600-30603-22 DL2	20101021EAB-INJ-03 V35.47@N DL2	123	117	111	111
MB 600-42397/2		109	106	117	96
MB 600-42488/2		128	129	121	121
MB 600-42562/2		123	124	107	118
LCS 600-42397/1		100	105	103	96
LCS 600-42488/1		127	129	119	120
LCS 600-42562/1		116	118	103	110
600-30603-21 MS DL	20101021EAB-INJ-01 V35.81@N MS DL	113	115	97	107
600-30603-21 MSD DL	20101021EAB-INJ-01 V35.81@N MSD DL	113	117	101	114

Surrogate	Acceptance Limits
TOL = Toluene-d8 (Surr)	70-130
DBFM = Dibromofluoromethane	62-130
BFB = 4-Bromofluorobenzene	67-139
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Method Blank - Batch: 600-42397

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42397/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1716
Date Prepared: 10/26/2010 1716

Analysis Batch: 600-42397
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29904.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
1,2-Dichloroethane	0.00013	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	109	70 - 130
Dibromofluoromethane	106	62 - 130
4-Bromofluorobenzene	117	67 - 139
1,2-Dichloroethane-d4 (Surr)	96	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Method Blank - Batch: 600-42397

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42397/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1716
Date Prepared: 10/26/2010 1716

Analysis Batch: 600-42397
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29904.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Acetone	2.0	U	2.0	2.0
Benzene	0.13	U	0.13	1.0
Chlorobromomethane	0.17	U	0.17	1.0
Bromoform	0.12	U	0.12	1.0
Bromomethane	0.22	U	0.22	2.0
2-Butanone (MEK)	0.76	U	0.76	2.0
Carbon disulfide	0.070	U	0.070	1.0
Carbon tetrachloride	0.13	U	0.13	1.0
Dibromochloromethane	0.45	U	0.45	1.0
Chlorobenzene	0.11	U	0.11	1.0
Chloroethane	0.19	U	0.19	2.0
Chloroform	0.12	U	0.12	1.0
Chloromethane	0.15	U	0.15	2.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	0.12	U	0.12	1.0
1,2-Dichloropropane	0.16	U	0.16	1.0
cis-1,3-Dichloropropene	0.11	U	0.11	1.0
trans-1,3-Dichloropropene	0.11	U	0.11	1.0
Ethylbenzene	0.13	U	0.13	1.0
2-Hexanone	0.31	U	0.31	1.0
Methylene Chloride	0.42	U	0.42	1.0
4-Methyl-2-pentanone (MIBK)	0.31	U	0.31	2.0
Styrene	0.10	U	0.10	1.0
1,1,2,2-Tetrachloroethane	0.16	U	0.16	1.0
Tetrachloroethene	0.080	U	0.080	1.0
Toluene	0.14	U	0.14	1.0
1,1,1-Trichloroethane	0.12	U	0.12	1.0
1,1,2-Trichloroethane	0.18	U	0.18	1.0
Trichloroethene	0.13	U	0.13	1.0
Vinyl acetate	0.17	U	0.17	1.0
Vinyl chloride	0.13	U	0.13	2.0
o-Xylene	0.12	U	0.12	1.0
m-Xylene & p-Xylene	0.25	U	0.25	2.0
Xylenes, Total	0.32	U	0.32	3.0
cis-1,2-Dichloroethene	0.16	U	0.16	1.0

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Lab Control Sample - Batch: 600-42397

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42397/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1654
Date Prepared: 10/26/2010 1654

Analysis Batch: 600-42397
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS09
Lab File ID: K29902.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	0.0100	0.00989	99	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	100	70 - 130
Dibromofluoromethane	105	62 - 130
4-Bromofluorobenzene	103	67 - 139
1,2-Dichloroethane-d4 (Surr)	96	50 - 134

Lab Control Sample - Batch: 600-42397

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42397/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1654
Date Prepared: 10/26/2010 1654

Analysis Batch: 600-42397
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29902.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	17.8	89	28 - 152	
Benzene	10.0	8.87	89	69 - 131	
Chlorobromomethane	10.0	8.96	90	60 - 141	
Bromoform	10.0	7.34	73	39 - 149	
Bromomethane	10.0	7.10	71	52 - 146	
2-Butanone (MEK)	20.0	19.7	99	59 - 133	
Carbon disulfide	10.0	4.98	50	32 - 177	
Carbon tetrachloride	10.0	8.29	83	59 - 147	
Dibromochloromethane	10.0	8.26	83	58 - 132	
Chlorobenzene	10.0	9.00	90	60 - 136	
Chloroethane	10.0	7.64	76	56 - 144	
Chloroform	10.0	9.66	97	69 - 128	
Chloromethane	10.0	5.99	60	32 - 151	
1,1-Dichloroethane	10.0	9.11	91	66 - 126	
1,1-Dichloroethene	10.0	6.85	69	59 - 145	
trans-1,2-Dichloroethene	10.0	8.08	81	70 - 132	
1,2-Dichloropropane	10.0	8.93	89	72 - 125	
cis-1,3-Dichloropropene	10.0	8.62	86	60 - 135	
trans-1,3-Dichloropropene	10.0	9.65	97	63 - 133	
Ethylbenzene	10.0	8.22	82	68 - 128	
2-Hexanone	20.0	18.9	94	51 - 130	
Methylene Chloride	10.0	7.66	77	62 - 134	

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Lab Control Sample - Batch: 600-42397

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42397/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/26/2010 1654
Date Prepared: 10/26/2010 1654

Analysis Batch: 600-42397
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K29902.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4-Methyl-2-pentanone (MIBK)	20.0	19.0	95	56 - 142	
Styrene	10.0	8.38	84	68 - 133	
1,1,2,2-Tetrachloroethane	10.0	9.18	92	68 - 134	
Tetrachloroethene	10.0	8.74	87	61 - 142	
Toluene	10.0	8.57	86	67 - 130	
1,1,1-Trichloroethane	10.0	8.93	89	65 - 142	
1,1,2-Trichloroethane	10.0	9.29	93	68 - 130	
Trichloroethene	10.0	8.57	86	68 - 130	
Vinyl acetate	10.0	10.2	102	58 - 175	
Vinyl chloride	10.0	6.06	61	47 - 146	
o-Xylene	10.0	8.43	84	68 - 134	
m-Xylene & p-Xylene	20.0	16.5	83	67 - 132	
Xylenes, Total	30.0	24.9	83	68 - 132	
cis-1,2-Dichloroethene	10.0	9.19	92	69 - 129	

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Method Blank - Batch: 600-42488

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42488/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/27/2010 1149
Date Prepared: 10/27/2010 1149

Analysis Batch: 600-42488
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K30004.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Acetone	2.0	U	2.0	5.0
Benzene	0.13	U	0.13	1.0
Chlorobromomethane	0.17	U	0.17	1.0
Bromoform	0.12	U	0.12	1.0
Bromomethane	0.22	U	0.22	2.0
2-Butanone (MEK)	0.76	U	0.76	2.0
Carbon disulfide	0.070	U	0.070	2.0
Carbon tetrachloride	0.13	U	0.13	1.0
Dibromochloromethane	0.45	U	0.45	1.0
Chlorobenzene	0.11	U	0.11	1.0
Chloroethane	0.19	U	0.19	2.0
Chloroform	0.12	U	0.12	1.0
Chloromethane	0.15	U	0.15	2.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,1-Dichloroethene	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	0.12	U	0.12	1.0
1,2-Dichloropropane	0.16	U	0.16	1.0
cis-1,3-Dichloropropene	0.11	U	0.11	1.0
trans-1,3-Dichloropropene	0.11	U	0.11	1.0
Ethylbenzene	0.13	U	0.13	1.0
2-Hexanone	0.31	U	0.31	2.0
Methylene Chloride	0.42	U	0.42	5.0
4-Methyl-2-pentanone (MIBK)	0.31	U	0.31	2.0
Styrene	0.10	U	0.10	1.0
1,1,2,2-Tetrachloroethane	0.16	U	0.16	1.0
Tetrachloroethene	0.080	U	0.080	1.0
Toluene	0.14	U	0.14	1.0
1,1,1-Trichloroethane	0.12	U	0.12	1.0
1,1,2-Trichloroethane	0.18	U	0.18	1.0
Trichloroethene	0.13	U	0.13	1.0
Vinyl acetate	0.17	U	0.17	2.0
Vinyl chloride	0.13	U	0.13	2.0
o-Xylene	0.12	U	0.12	1.0
m-Xylene & p-Xylene	0.25	U	0.25	1.0
Xylenes, Total	0.32	U	0.32	1.0
cis-1,2-Dichloroethene	0.16	U	0.16	1.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	128	70 - 130
Dibromofluoromethane	129	62 - 130
4-Bromofluorobenzene	121	67 - 139

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	121	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Lab Control Sample - Batch: 600-42488

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42488/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/27/2010 1104
Date Prepared: 10/27/2010 1104

Analysis Batch: 600-42488
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K30002.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	18.0	90	28 - 152	
Benzene	10.0	9.80	98	69 - 131	
Chlorobromomethane	10.0	9.72	97	60 - 141	
Bromoform	10.0	7.60	76	39 - 149	
Bromomethane	10.0	8.93	89	52 - 146	
2-Butanone (MEK)	20.0	19.4	97	59 - 133	
Carbon disulfide	10.0	5.64	56	32 - 177	
Carbon tetrachloride	10.0	9.30	93	59 - 147	
Dibromochloromethane	10.0	8.83	88	58 - 132	
Chlorobenzene	10.0	9.82	98	60 - 136	
Chloroethane	10.0	9.36	94	56 - 144	
Chloroform	10.0	10.2	102	69 - 128	
Chloromethane	10.0	7.54	75	32 - 151	
1,1-Dichloroethane	10.0	9.67	97	66 - 126	
1,2-Dichloroethane	10.0	10.3	103	66 - 140	
1,1-Dichloroethene	10.0	7.42	74	59 - 145	
trans-1,2-Dichloroethene	10.0	8.67	87	70 - 132	
1,2-Dichloropropane	10.0	9.54	95	72 - 125	
cis-1,3-Dichloropropene	10.0	9.01	90	60 - 135	
trans-1,3-Dichloropropene	10.0	9.83	98	63 - 133	
Ethylbenzene	10.0	9.28	93	68 - 128	
2-Hexanone	20.0	18.8	94	51 - 130	
Methylene Chloride	10.0	7.96	80	62 - 134	
4-Methyl-2-pentanone (MIBK)	20.0	18.9	94	56 - 142	
Styrene	10.0	9.23	92	68 - 133	
1,1,2,2-Tetrachloroethane	10.0	9.35	94	68 - 134	
Tetrachloroethene	10.0	10.8	108	61 - 142	
Toluene	10.0	9.59	96	67 - 130	
1,1,1-Trichloroethane	10.0	10.1	101	65 - 142	
1,1,2-Trichloroethane	10.0	9.57	96	68 - 130	
Trichloroethene	10.0	9.55	95	68 - 130	
Vinyl acetate	10.0	9.69	97	58 - 175	
Vinyl chloride	10.0	7.76	78	47 - 146	
o-Xylene	10.0	9.38	94	68 - 134	
m-Xylene & p-Xylene	20.0	18.7	94	67 - 132	
Xylenes, Total	30.0	28.1	94	68 - 132	
cis-1,2-Dichloroethene	10.0	9.77	98	69 - 129	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	127	70 - 130
Dibromofluoromethane	129	62 - 130
4-Bromofluorobenzene	119	67 - 139
1,2-Dichloroethane-d4 (Surr)	120	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Method Blank - Batch: 600-42562

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-42562/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/28/2010 1301
Date Prepared: 10/28/2010 1301

Analysis Batch: 600-42562
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K30104.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	MDL	MQL
Acetone	2.0	U	2.0	5.0
Benzene	0.13	U	0.13	1.0
Chlorobromomethane	0.17	U	0.17	1.0
Bromoform	0.12	U	0.12	1.0
Bromomethane	0.22	U	0.22	2.0
2-Butanone (MEK)	0.76	U	0.76	2.0
Carbon disulfide	0.070	U	0.070	2.0
Carbon tetrachloride	0.13	U	0.13	1.0
Dibromochloromethane	0.45	U	0.45	1.0
Chlorobenzene	0.11	U	0.11	1.0
Chloroethane	0.19	U	0.19	2.0
Chloroform	0.12	U	0.12	1.0
Chloromethane	0.15	U	0.15	2.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,1-Dichloroethene	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	0.12	U	0.12	1.0
1,2-Dichloropropane	0.16	U	0.16	1.0
cis-1,3-Dichloropropene	0.11	U	0.11	1.0
trans-1,3-Dichloropropene	0.11	U	0.11	1.0
Ethylbenzene	0.13	U	0.13	1.0
2-Hexanone	0.31	U	0.31	2.0
Methylene Chloride	0.42	U	0.42	5.0
4-Methyl-2-pentanone (MIBK)	0.31	U	0.31	2.0
Styrene	0.10	U	0.10	1.0
1,1,2,2-Tetrachloroethane	0.16	U	0.16	1.0
Tetrachloroethene	0.080	U	0.080	1.0
Toluene	0.14	U	0.14	1.0
1,1,1-Trichloroethane	0.12	U	0.12	1.0
1,1,2-Trichloroethane	0.18	U	0.18	1.0
Trichloroethene	0.13	U	0.13	1.0
Vinyl acetate	0.17	U	0.17	2.0
Vinyl chloride	0.13	U	0.13	2.0
o-Xylene	0.12	U	0.12	1.0
m-Xylene & p-Xylene	0.25	U	0.25	1.0
Xylenes, Total	0.32	U	0.32	1.0
cis-1,2-Dichloroethene	0.16	U	0.16	1.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	123	70 - 130
Dibromofluoromethane	124	62 - 130
4-Bromofluorobenzene	107	67 - 139

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	118	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Lab Control Sample - Batch: 600-42562

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-42562/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/28/2010 1323
Date Prepared: 10/28/2010 1323

Analysis Batch: 600-42562
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS09
Lab File ID: K30102.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	20.0	19.4	97	28 - 152	
Benzene	10.0	9.91	99	69 - 131	
Chlorobromomethane	10.0	9.99	100	60 - 141	
Bromoform	10.0	8.07	81	39 - 149	
Bromomethane	10.0	7.24	72	52 - 146	
2-Butanone (MEK)	20.0	21.2	106	59 - 133	
Carbon disulfide	10.0	5.59	56	32 - 177	
Carbon tetrachloride	10.0	9.28	93	59 - 147	
Dibromochloromethane	10.0	8.82	88	58 - 132	
Chlorobenzene	10.0	9.97	100	60 - 136	
Chloroethane	10.0	8.16	82	56 - 144	
Chloroform	10.0	10.7	107	69 - 128	
Chloromethane	10.0	5.53	55	32 - 151	
1,1-Dichloroethane	10.0	10.0	100	66 - 126	
1,2-Dichloroethane	10.0	10.7	107	66 - 140	
1,1-Dichloroethene	10.0	7.44	74	59 - 145	
trans-1,2-Dichloroethene	10.0	8.80	88	70 - 132	
1,2-Dichloropropane	10.0	9.77	98	72 - 125	
cis-1,3-Dichloropropene	10.0	9.40	94	60 - 135	
trans-1,3-Dichloropropene	10.0	10.3	103	63 - 133	
Ethylbenzene	10.0	9.51	95	68 - 128	
2-Hexanone	20.0	20.6	103	51 - 130	
Methylene Chloride	10.0	8.39	84	62 - 134	
4-Methyl-2-pentanone (MIBK)	20.0	20.3	101	56 - 142	
Styrene	10.0	9.55	96	68 - 133	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	68 - 134	
Tetrachloroethene	10.0	9.70	97	61 - 142	
Toluene	10.0	9.63	96	67 - 130	
1,1,1-Trichloroethane	10.0	10.0	100	65 - 142	
1,1,2-Trichloroethane	10.0	10.1	101	68 - 130	
Trichloroethene	10.0	9.62	96	68 - 130	
Vinyl acetate	10.0	10.7	107	58 - 175	
Vinyl chloride	10.0	6.12	61	47 - 146	
o-Xylene	10.0	9.57	96	68 - 134	
m-Xylene & p-Xylene	20.0	19.0	95	67 - 132	
Xylenes, Total	30.0	28.6	95	68 - 132	
cis-1,2-Dichloroethene	10.0	10.2	102	69 - 129	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	116	70 - 130
Dibromofluoromethane	118	62 - 130
4-Bromofluorobenzene	103	67 - 139
1,2-Dichloroethane-d4 (Surr)	110	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42562

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30603-21DL
Client Matrix: Water
Dilution: 100
Date Analyzed: 10/28/2010 1432
Date Prepared: 10/28/2010 1432

Analysis Batch: 600-42562
Prep Batch: N/A
Run Type: DL

Instrument ID: VOAMS09
Lab File ID: K30107.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30603-21DL
Client Matrix: Water
Dilution: 100
Date Analyzed: 10/28/2010 1455
Date Prepared: 10/28/2010 1455

Analysis Batch: 600-42562
Prep Batch: N/A
Run Type: DL

Instrument ID: VOAMS09
Lab File ID: K30108.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	39	58	60 - 140	8	30	F	F
Benzene	94	102	65 - 125	8	30		
Chlorobromomethane	93	102	60 - 140	9	30		
Bromoform	73	82	60 - 140	11	30		
Bromomethane	78	69	60 - 140	12	30		
2-Butanone (MEK)	100	127	60 - 140	24	30		
Carbon disulfide	51	56	60 - 140	9	30	F	F
Carbon tetrachloride	88	93	60 - 140	6	30		
Dibromochloromethane	83	93	60 - 140	11	30		
Chlorobenzene	93	101	72 - 122	8	30		
Chloroethane	87	76	60 - 140	13	30		
Chloroform	99	107	60 - 140	8	30		
Chloromethane	66	47	60 - 140	33	30		F
1,1-Dichloroethane	92	101	60 - 140	10	30		
1,2-Dichloroethane	102	109	60 - 140	7	30		
1,1-Dichloroethene	69	75	22 - 143	7	30		
trans-1,2-Dichloroethene	83	90	60 - 140	8	30		
1,2-Dichloropropane	92	98	60 - 140	7	30		
cis-1,3-Dichloropropene	86	94	60 - 140	9	30		
trans-1,3-Dichloropropene	95	106	60 - 140	11	30		
Ethylbenzene	88	93	60 - 140	5	30		
2-Hexanone	91	100	60 - 140	9	30		
Methylene Chloride	75	82	60 - 140	9	30		
4-Methyl-2-pentanone (MIBK)	82	91	60 - 140	7	30		
Styrene	89	95	60 - 140	6	30		
1,1,2,2-Tetrachloroethane	93	103	60 - 140	11	30		
Tetrachloroethene	94	97	60 - 140	4	30		
Toluene	91	96	76 - 125	6	30		
1,1,1-Trichloroethane	97	100	60 - 140	4	30		
1,1,2-Trichloroethane	93	102	60 - 140	9	30		
Trichloroethene	91	96	56 - 118	6	30		
Vinyl acetate	96	108	60 - 140	12	30		

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42562

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 600-30603-21DL
Client Matrix: Water
Dilution: 100
Date Analyzed: 10/28/2010 1432
Date Prepared: 10/28/2010 1432

Analysis Batch: 600-42562
Prep Batch: N/A
Run Type: DL

Instrument ID: VOAMS09
Lab File ID: K30107.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 600-30603-21DL
Client Matrix: Water
Dilution: 100
Date Analyzed: 10/28/2010 1455
Date Prepared: 10/28/2010 1455

Analysis Batch: 600-42562
Prep Batch: N/A
Run Type: DL

Instrument ID: VOAMS09
Lab File ID: K30108.D
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Vinyl chloride	69	52	60 - 140	28	30		F
o-Xylene	89	94	60 - 140	5	30		
m-Xylene & p-Xylene	88	93	60 - 140	6	30		
Xylenes, Total	88	94	60 - 140	6	30		
cis-1,2-Dichloroethene	93	102	60 - 140	9	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	113	113	70 - 130
Dibromofluoromethane	115	117	62 - 130
4-Bromofluorobenzene	97	101	67 - 139
1,2-Dichloroethane-d4 (Surr)	107	114	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-42562

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	600-30603-21DL	Units: ug/L	MSD Lab Sample ID:	600-30603-21DL	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	100		Dilution:	100	
Date Analyzed:	10/28/2010 1432		Date Analyzed:	10/28/2010 1455	
Date Prepared:	10/28/2010 1432		Date Prepared:	10/28/2010 1455	
Run Type:	DL		Run Type:	DL	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Acetone	3500		2000	2000	4260	F	4620	F
Benzene	13	U	1000	1000	937		1020	
Chlorobromomethane	17	U	1000	1000	931		1020	
Bromoform	12	U	1000	1000	730		816	
Bromomethane	22	U	1000	1000	778		687	
2-Butanone (MEK)	76	U	2000	2000	1990		2530	
Carbon disulfide	7.0	U	1000	1000	513	F	561	F
Carbon tetrachloride	13	U	1000	1000	881		931	
Dibromochloromethane	45	U	1000	1000	832		926	
Chlorobenzene	11	U	1000	1000	934		1010	
Chloroethane	19	U	1000	1000	868		759	
Chloroform	12	U	1000	1000	988		1070	
Chloromethane	15	U	1000	1000	658		471	F
1,1-Dichloroethane	16	U	1000	1000	921		1010	
1,2-Dichloroethane	13	U	1000	1000	1020		1090	
1,1-Dichloroethene	13	U	1000	1000	693		746	
trans-1,2-Dichloroethene	12	U	1000	1000	829		901	
1,2-Dichloropropane	16	U	1000	1000	917		982	
cis-1,3-Dichloropropene	11	U	1000	1000	858		940	
trans-1,3-Dichloropropene	11	U	1000	1000	948		1060	
Ethylbenzene	13	U	1000	1000	885		932	
2-Hexanone	31	U	2000	2000	1820		2000	
Methylene Chloride	42	U	1000	1000	751		818	
4-Methyl-2-pentanone (MIBK)	1000		2000	2000	2680		2870	
Styrene	10	U	1000	1000	891		946	
1,1,2,2-Tetrachloroethane	16	U	1000	1000	929		1030	
Tetrachloroethene	8.0	U	1000	1000	935		974	
Toluene	14	U	1000	1000	906		961	
1,1,1-Trichloroethane	12	U	1000	1000	968		1000	
1,1,2-Trichloroethane	18	U	1000	1000	928		1020	
Trichloroethene	13	U	1000	1000	910		962	
Vinyl acetate	17	U	1000	1000	964		1080	
Vinyl chloride	13	U	1000	1000	692		523	F
o-Xylene	12	U	1000	1000	891		941	
m-Xylene & p-Xylene	25	U	2000	2000	1760		1870	
Xylenes, Total	32	U	3000	3000	2650		2810	
cis-1,2-Dichloroethene	16	U	1000	1000	929		1020	

stAmerica Houston
0 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
30603
#1
600-30603-B-1

Client Information	Sampler: RCH, NM, BJD, BM	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):
Client Contact: Jim McDade	Phone: 713 522-6300	E-Mail: sachin.kudchadkar@testamericainc.com	Page: Page 1 of 3
Company: GSI Environmental, Inc. (INVOICE to EDTOKARSKI GDOW)			Job #: 357K
Address: 2211 Norfolk , Suite 1000	Due Date Requested:		
City: Houston	TAT Requested (days): 2WK (10 DAY)		
State, Zip: TX 77098			
Phone:	PO #: 4510577845 Item 1		
Email: jmmcdade@gsi-net.com	WO #:		
Project Name: Dow- Charlie Burch	Project #: 60000256		
Site: TX	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A		
20101021_HOUCB_TB	10/21/10	—	G	Water			✓				
20101021 EAB-MW-3V 35.0GN		837		Water		JMM	JMM		✓		Full list of VOC's
20101021 EAB-MW-02V 35.7GN		900		Water		JMM	JMM		✓		Full list of VOC's
20101021 MW-CB-25A V30.0GN		945		Water			✓				Sampled @ 9:45 KH
20101021 MW-CB-25A V30.0GD		945		Water			✓				Sampled @ 9:45 KH
20101021 MW-CB-26A V 30.0GN		905		Water			✓				Sampled @ 905 KH
20101021 MW-CB-6BS V77.5GN		1020		Water			✓				
20101021 MW-CB-27A V30.0GN		1045		Water			✓				
20101021 WERT WW VGN		1100		Water			✓				
20101021 RUMMELL WW VGN		1105		Water			✓				
20101021 MW-CB-28A V30.0GN		1125		Water			✓				

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: KATE HAMEL	Date/Time: 10/22/10 7:30	Company: GSI	Received by:	Date/Time: 10-22-10 1030	Company: TA
Relinquished by:	Date/Time: 10-22-10 1400	Company: TA	Received by:	Date/Time: 10/22/10 1400	Company: TA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

10/29/2010

TestAmerica Houston
3310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: KH, BJB, NM, BJM	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone: 713 522 6300	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 2 of 3
Company: GSI Environmental, Inc. (Invoice ED TOKARSKI @ Dow)		**Analysis Requested**		Job #: 3516
Address: 2211 Norfolk , Suite 1000	Due Date Requested:			
City: Houston	TAT Requested (days): 2 WK (10 DAY)			
State, Zip: TX 77098	PO #: 4510577845 Item 1			
Phone:	WO #:			
Email: jmmcdade@gsi-net.com	Project #: 60000256			
Project Name: Dow- Charlie Burch	SSOW#:			
Site: TX				

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A		
20101021 MW-CB-6B V 94.3 GN	10/21/10	1155	G	Water			✓				
20101021 TP-15 V 57.3 GN		1320		Water			✓				
20101021 OW-1 V 24.3 GN		1345		Water			✓				
20101021 MW-CB-2B V 91.5 GN		1355		Water			✓				
20101021 MW-CB-2A V 57.3 GN		1400		Water			✓				
20101021 OW-2 V 29.2 GN		1405		Water			✓				
20101021 EAB-INJ-02 V 35.8 GN		1440		Water	JMM		✓		✓		Full list of VOC's
20101021 EAB-MW-01 V 35.9 GN		1505		Water	JMM		✓		✓		Full list of VOC's
20101021 MW-CB-3 V 63.3 GN		1505		Water			✓				
20101021 EAB-INJ-01 V 35.8 GN		1455		Water	JMM		✓		✓		Full list of VOC's
20101021 EAB-INJ-03 V 35.4 GN		1515		Water	JMM		✓		✓		Full list of VOC's

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) DRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 10/22/10 7:30	Company: GSI	Received by: Date/Time: 10-22-10 1030 Company: TA
Relinquished by:	Date/Time: 10-22-10 1400	Company: TA	Received by: Date/Time: 10/22/10 1400 Company: TA
Relinquished by:	Date/Time:	Company:	Received by: Date/Time: Company:

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

10/29/2010

America Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: Kelly, MM, BJB, BTM	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No:
Client Contact: Jim McDade	Phone: 713-522-6300	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 2 of 3
Company: GSI Environmental, Inc. (INVOICE ED TOMARSKI GDW)				Job #:
Address: 2211 Norfolk , Suite 1000	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Houston	TAT Requested (days): 2 WK (10 DAY)			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX 77098	PO #: 4510577845 Item 1			
Phone:	WO #:			
Email: immcdade@gsi-net.com	Project #: 60000256			Other:
Project Name: Dow- Charlie Burch	SSOW#:			
Site: TX				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL -1,2-DCA	8270C- Aniline, 2,4 -Dimethylphenol, 2-Methylphenol	8260_LL- Target Compound List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A		
20101021 MW-CB-1BSV77.5GN	10/21/10	1630	G	Water			✓				
20101021 MW-CB-1BV 97.3GN	↓	1630	↓	Water			✓				
20101021 MW-CB-1A V56.3GN		1640		Water			✓				
20101021 MW-CB-1A V56.3GD		1640		Water			✓				
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) TRRP

Special Instructions/QC Requirements: TRRP

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/22/10 7:30	GSI		10-22-10 1030	TM
2		10-22-10 1400				
3						

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

10/29/2010

Login Sample Receipt Check List

Client: Groundwater Services, Inc. Job Number: 600-30603-1

Login Number: 30603 **List Source: TestAmerica Houston**
Creator: Trenery, Michael J
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-32129-1

Job Description: Dow Charlie Burch G-3516

For:
Groundwater Services, Inc.
2211 Norfolk, Suite 1000
Houston, TX 77098-4044

Attention: Jim McDade

C. Lance Tigrett

Approved for release.
Lance C Tigrett
Data Review Analyst I
12/2/2010 4:31 PM

Designee for
Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
12/02/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

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Appendix A - Laboratory Data Package Cover Page

This data package is for Job No. 600-32129 and consists of:

- ☒ This signature page, the laboratory review checklists, and the following reportable data:
- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC Chapter 5,
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist and for each analyte, matrix and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all methods, analytes and matrices reported in the data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory Exception Reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC 25.6 and was last inspected by [] TCEQ or [] _____ on _____. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Chris Schepcoff		Laboratory Director	12/2/10
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 12/02/10
Project Name: Dow Charlie Burch G-3516	Laboratory Job Number: 600-32129
Reviewer Name: YX	Prep Batch Number: 600-44723 and 44694-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?					
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				1
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 12/02/10
Project Name: Dow Charlie Burch G-3516	Laboratory Job Number: 600-32129
Reviewer Name: YX	Prep Batch Number: 600-44723 and 44694-VOA

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 12/02/10
Project Name: Dow Charlie Burch G-3516	Laboratory Job Number: 600-32129
Reviewer Name: YX	Prep Batch Number: 600-44723 and 44694-VOA

ER #[1]	DESCRIPTION
1	The 1,2-Dichloroethane SDL for sample 600-32129-3 was elevated due to the dilution necessary for analysis.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Quality Control Report

Detection Check Standard

Matrix:	Water - Low Level
Method:	8260B
Preparation:	5030
Date Analyzed:	7/28/2010
Date Prepared:	7/28/2010
Lab Sample ID:	VSTD001
File #:	VOA_VII.i\072810.b\A20903.D
Units:	ug/L

Analyte	MDL	DCS Spike	DCS Result	MQL
Dichlorodifluoromethane	0.14	1	1.05	1
Chloromethane	0.15	1	1.18	2
Vinyl Chloride	0.13	1	0.787	2
Bromomethane	0.22	1	0.752	2
Chloroethane	0.19	1	0.983	2
Trichlorofluoromethane	0.08	1	0.787	1
Allyl Chloride		2	1.98	
Acrolein	1.41	5	5.71	1
1,1-Dichloroethene	0.13	1	0.787	1
Trichlorotrifluoroethene		1	1.07	
Acetone	2	2	4.32	2
Methyl Iodide		2	1.6	
2-Propanol		10	22.59	
Carbon Disulfide	0.07	2	2.36	1
Acetonitrile	0.66	2	2.07	1
Methylene Chloride	0.42	1	1.14	1
Acrylonitrile	1.09	5	6.31	1
trans-1,2-Dichloroethene	0.12	1	0.783	1
Methyl tert-butyl ether	0.15	1	0.796	1
1,2-Dichloroethene (total)	0.3	2	1.59	1
1,1-Dichloroethane	0.13	1	0.796	1
Vinyl Acetate	0.17	2	2.2	1
Chloroprene		2	1.6	
cis-1,2-Dichloroethene	0.16	1	0.803	1
2,2-Dichloropropane		1	0.764	
2-Butanone (MEK)	0.76	2	2.5	2
Propionitrile		2	2.7	
Methacrylonitrile		2	2.47	1
Bromochloromethane	0.17	1	0.815	
Chloroform	0.12	5	5.43	
1,1,1-Trichloroethane	0.12	1	0.762	
1,1-Dichloropropene	0.13	1	0.854	
Carbon Tetrachloride	0.13	1	0.86	
Isobutyl Alcohol	4.1	10	24.38	
Benzene	0.13	1	0.864	
1,2-Dichloroethane	0.13	1	0.882	
Trichloroethene	0.13	1	0.86	
1,2-Dichloropropane	0.16	1	0.747	
Methyl methacrylate	0.33	2	2.18	

Methylene Bromide		1	0.783
1,4-Dioxane	26.97	50	153.5
Bromodichloromethane	0.14	1	1.05
2-Chloroethyl vinyl ether	0.17	2	2.14
cis-1,3-Dichloropropene	0.11	1	1.13
4-Methyl-2-pentanone	0.31	2	2.21
Toluene	0.14	1	0.874
trans-1,3-Dichloropropene	0.11	1	1.18
Ethyl methacrylate	0.33	2	0.899
1,1,2-Trichloroethane	0.18	1	0.791
1,3-Dichloropropane	0.12	1	8.46
Tetrachloroethene	0.08	1	0.828
2-Hexanone	0.31	2	2.31
Dibromochloromethane	0.45	1	1.15
1,2-Dibromoethane (EDB)	0.36	1	1.05
Chlorobenzene	0.11	1	0.831
1,1,1,2-Tetrachloroethane	0.09	1	1.01
Ethylbenzene	0.13	1	0.833
m,p-Xylene	0.25	2	1.77
o-Xylene	0.12	1	0.827
Xylenes (total)	0.32	3	2.59
Styrene	0.1	1	0.768
Bromoform	0.12	1	2.62
Isopropylbenzene	0.06	1	1.01
1,1,2,2-Tetrachloroethane	0.16	1	1.14
trans-1,4-Dichloro-2-buter	0.86	2	0.669
Bromobenzene	0.14	1	1.08
n-Propylbenzene	0.25	1	0.955
2-Chlorotoluene	0.17	1	0.759
4-Chlorotoluene	0.18	1	0.938
1,3,5-Trimethylbenzene	0.08	1	0.822
tert-Butylbenzene	0.16	1	0.956
1,2,4-Trimethylbenzene	0.1	1	0.913
sec-Butylbenzene	0.14	1	0.767
1,3-Dichlorobenzene	0.13	1	0.762
1,4-Dichlorobenzene	0.05	1	0.847
1,2-Dichlorobenzene	0.1	1	1.08
p-Isopropyltoluene	0.1	1	0.783
n-Butylbenzene	0.09	1	0.877
1,2,3-Trichloropropane	0.13	1	0.798
1,2-Dibromo-3-chloroprop	0.39	1	1.01
1,2,4-Trichlorobenzene	0.2	1	0.976
Hexachlorobutadiene	0.17	1	0.539
1,2,3-Trichlorobenzene	0.28	1	1.02
Naphthalene	0.47	1	1.13

METHOD SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL HOU	SW846 8260B	
Purge and Trap	TAL HOU		SW846 5030B

Lab References:

TAL HOU = TestAmerica Houston

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Method	Analyst	Analyst ID
SW846 8260B	Shen, Wei	WS

SAMPLE SUMMARY

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-32129-1	20101201 MW-CB-45V45.0@N	Water	12/01/2010 0915	12/01/2010 1249
600-32129-2	20101201 MW-CB-40V45.0@N	Water	12/01/2010 1005	12/01/2010 1249
600-32129-3	20101201 EAB-MW-03 V3SeN	Water	12/01/2010 1045	12/01/2010 1249

SAMPLE RESULTS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-32129-1
Project: Analytical
SDG Number: Dow Charlie Burch G-3516

Client Sample ID: 20101201 MW-CB-45V45.0@N

Lab Sample ID: 600-32129-1
Client Matrix: Water

Date Sampled: 12/01/2010 09:15
Date Received: 12/01/2010 12:49

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								12/01/2010 15:23		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	49.5			0.130	1.00	0.130	ug/L	44694	12/01/2010 15:23	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		7.79	12.5	62	50-134		VOAMS07		12/01/2010 15:23	1	WS
4-Bromofluorobenzene	460-00-4		12.1	12.5	97	67-139		VOAMS07		12/01/2010 15:23	1	WS
Dibromofluoromethane	1868-53-7		9.00	12.5	72	62-130		VOAMS07		12/01/2010 15:23	1	WS
Toluene-d8 (Surr)	2037-26-5		11.6	12.5	93	70-130		VOAMS07		12/01/2010 15:23	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-32129-1
Project: Analytical
SDG Number: Dow Charlie Burch G-3516

Client Sample ID: 20101201 MW-CB-40V45.0@N

Lab Sample ID: 600-32129-2
Client Matrix: Water

Date Sampled: 12/01/2010 10:05
Date Received: 12/01/2010 12:49

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								12/01/2010 15:51		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	6.08			0.130	1.00	0.130	ug/L	44694	12/01/2010 15:51	1	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		9.07	12.5	73	50-134		VOAMS07		12/01/2010 15:51	1	WS
4-Bromofluorobenzene	460-00-4		12.0	12.5	96	67-139		VOAMS07		12/01/2010 15:51	1	WS
Dibromofluoromethane	1868-53-7		9.70	12.5	78	62-130		VOAMS07		12/01/2010 15:51	1	WS
Toluene-d8 (Surr)	2037-26-5		11.8	12.5	95	70-130		VOAMS07		12/01/2010 15:51	1	WS

Groundwater Services, Inc.
ATTN: Jim McDade

Job Number: 600-32129-1
Project: Analytical
SDG Number: Dow Charlie Burch G-3516

Client Sample ID: 20101201 EAB-MW-03 V3SeN

Lab Sample ID: 600-32129-3 DL
Client Matrix: Water

Date Sampled: 12/01/2010 10:45
Date Received: 12/01/2010 12:49

Test Method	CAS Number	Result	Q	Flag	MDL	MQL	SDL	Unit	Batch	Analysis Date/Time	D.F.	Analyst
Method: SW846 5030B,Water												
Purge and Trap		Complete								12/02/2010 12:22		
Method: SW846 8260B,Water												
1,2-Dichloroethane	107-06-2	108			0.130	1.00	2.60	ug/L	44723	12/02/2010 12:22	20	WS

Surrogates

Test Method	CAS Number	QC Type	Result	True Value	% Rec.	QC Limits	Flag	Instrument	Prep Batch	Analysis Date/Time	D.F.	Analyst
1,2-Dichloroethane-d4 (Surr)	17060-07-0		181	250	73	50-134		VOAMS07		12/02/2010 12:22	20	WS
4-Bromofluorobenzene	460-00-4		236	250	95	67-139		VOAMS07		12/02/2010 12:22	20	WS
Dibromofluoromethane	1868-53-7		185	250	74	62-130		VOAMS07		12/02/2010 12:22	20	WS
Toluene-d8 (Surr)	2037-26-5		247	250	99	70-130		VOAMS07		12/02/2010 12:22	20	WS

DATA REPORTING QUALIFIERS

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyte was not detected at or above the SDL.

QUALITY CONTROL RESULTS

Client: Groundwater Services, Inc. Job Number: 600-32129-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:600-44694					
LCS 600-44694/5	Lab Control Sample	T	Water	8260B	
MB 600-44694/6	Method Blank	T	Water	8260B	
600-32129-1	20101201 MW-CB-45V45.0@N	T	Water	8260B	
600-32129-2	20101201 MW-CB-40V45.0@N	T	Water	8260B	
Analysis Batch:600-44723					
LCS 600-44723/3	Lab Control Sample	T	Water	8260B	
MB 600-44723/4	Method Blank	T	Water	8260B	
600-32129-3DL	20101201 EAB-MW-03 V3SeN	T	Water	8260B	
600-32129-3MSDL	Matrix Spike	T	Water	8260B	
600-32129-3MSDDL	Matrix Spike Duplicate	T	Water	8260B	

Report Basis
T = Total

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	DBFM %Rec	BFB %Rec	DCA %Rec
600-32129-1	20101201 MW-CB-45V45.0@N	93	72	97	62
600-32129-2	20101201 MW-CB-40V45.0@N	95	78	96	73
600-32129-3 DL	20101201 EAB-MW-03 V3SeN DL	99	74	95	73
MB 600-44694/6		88	80	95	75
MB 600-44723/4		90	77	98	74
LCS 600-44694/5		110	92	104	80
LCS 600-44723/3		100	86	95	80
600-32129-3 MS DL	20101201 EAB-MW-03 V3SeN MS DL	94	89	100	82
600-32129-3 MSD DL	20101201 EAB-MW-03 V3SeN MSD DL	98	86	100	78

Surrogate	Acceptance Limits
TOL = Toluene-d8 (Surr)	70-130
DBFM = Dibromofluoromethane	62-130
BFB = 4-Bromofluorobenzene	67-139
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Method Blank - Batch: 600-44694

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-44694/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/01/2010 1258
Date Prepared: 12/01/2010 1258

Analysis Batch: 600-44694
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS07
Lab File ID: A33506.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
1,2-Dichloroethane	0.130	U	0.130	1.00

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	88	70 - 130
Dibromofluoromethane	80	62 - 130
4-Bromofluorobenzene	95	67 - 139
1,2-Dichloroethane-d4 (Surr)	75	50 - 134

Lab Control Sample - Batch: 600-44694

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-44694/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/01/2010 1133
Date Prepared: 12/01/2010 1133

Analysis Batch: 600-44694
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS07
Lab File ID: A33504.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	10.0	11.05	111	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	110	70 - 130
Dibromofluoromethane	92	62 - 130
4-Bromofluorobenzene	104	67 - 139
1,2-Dichloroethane-d4 (Surr)	80	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Method Blank - Batch: 600-44723

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-44723/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/02/2010 1153
Date Prepared: 12/02/2010 1153

Analysis Batch: 600-44723
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS07
Lab File ID: A33606.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
1,2-Dichloroethane	0.130	U	0.130	1.00

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	90	70 - 130
Dibromofluoromethane	77	62 - 130
4-Bromofluorobenzene	98	67 - 139
1,2-Dichloroethane-d4 (Surr)	74	50 - 134

Lab Control Sample - Batch: 600-44723

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-44723/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/02/2010 1056
Date Prepared: 12/02/2010 1056

Analysis Batch: 600-44723
Prep Batch: N/A
Units: ug/L

Instrument ID: VOAMS07
Lab File ID: A33604.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2-Dichloroethane	10.0	10.52	105	66 - 140	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	100	70 - 130
Dibromofluoromethane	86	62 - 130
4-Bromofluorobenzene	95	67 - 139
1,2-Dichloroethane-d4 (Surr)	80	50 - 134

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-44723

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	600-32129-3DL	Analysis Batch:	600-44723	Instrument ID:	VOAMS07
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	A33609.D
Dilution:	20	Run Type:	DL	Initial Weight/Volume:	20 mL
Date Analyzed:	12/02/2010 1318			Final Weight/Volume:	20 mL
Date Prepared:	12/02/2010 1318				

MSD Lab Sample ID:	600-32129-3DL	Analysis Batch:	600-44723	Instrument ID:	VOAMS07
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	A33610.D
Dilution:	20	Run Type:	DL	Initial Weight/Volume:	20 mL
Date Analyzed:	12/02/2010 1347			Final Weight/Volume:	20 mL
Date Prepared:	12/02/2010 1347				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,2-Dichloroethane	109	99	60 - 140	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	94	98	70 - 130
Dibromofluoromethane	89	86	62 - 130
4-Bromofluorobenzene	100	100	67 - 139
1,2-Dichloroethane-d4 (Surr)	82	78	50 - 134

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-44723

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	600-32129-3DL	Units:	ug/L	MSD Lab Sample ID:	600-32129-3DL
Client Matrix:	Water			Client Matrix:	Water
Dilution:	20			Dilution:	20
Date Analyzed:	12/02/2010 1318			Date Analyzed:	12/02/2010 1347
Date Prepared:	12/02/2010 1318			Date Prepared:	12/02/2010 1347
Run Type:	DL			Run Type:	DL

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,2-Dichloroethane	108	200	200	326.5	305.1

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 600
32129
#1

TAL-4124 (1007)

Client: GSI ENVIRONMENTAL	Project Manager: JIM McDADE	Date: 1-DEC-10	Chain of C.. 157439
Address: 2211 NORFOLK STE#1000	Telephone Number (Area Code)/Fax Number: 713 522-6300 - 713 522-8016	Lab Number: 600-32129-A-1	Page 1 of 1
City: HOUSTON / State: TX / Zip Code: 77098	Site Contact	Lab Contact	
Project Name and Location (State): DOW CHARLES BURCH	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: G3516			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: 1,2-DCA 8260B	Special Instructions/ Conditions of Receipt
20101201 MW-CB-45V45.0EN	1-DEC-10	09:15		X						X		X	X	
20101201 MW-CB-40V45.0EN	1-DEC-10	10:05		X						X		X	X	
20101201 FIELD BLANK-03 V35EN	1-DEC-10	10:45		X						X		X	X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☒ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)
SEE LAB'S PM.

	Date	Time		Date	Time
1. Relinquished By	1-DEC-10	12:49	1. Received By	12-1-10	1249
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

12/02/2010

Login Sample Receipt Check List

Client: Groundwater Services, Inc. Job Number: 600-32129-1

Login Number: 32129 **List Source: TestAmerica Houston**
Creator: Clarke, Michael (Mike) C
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	