REPORT

# 2009 AREA-WIDE GROUNDWATER EVALUATION

## CALDWELL TRUCKING SUPERFUND SITE

## FAIRFIELD, NEW JERSEY

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# Table of Contents


1.0 INTRODUCTION ..... 1
2.0 2009 AREA-WIDE SAMPLING ..... 2
2.1 Overview ..... 2
2.2 Groundwater Level Measurements ..... 3
2.3 Groundwater Sample Collection ..... 3
2.4 Residential Well Sample Collection ..... 5
2.5 Analytical Program and Data Evaluation ..... 5
3.0 PLUME STATUS EVALUATION ..... 7
3.1 Overview ..... 7
3.2 Groundwater Flow Evaluation ..... 8
3.3 Trichloroethene Distribution ..... 8
3.3.1 TCE Concentration Distribution ..... 8
3.3.2 TCE Mass Distribution ..... 11
3.4 COC Concentration Distributions ..... 12
3.4.1 B-Zone ..... 13
3.4.2 C-Zone ..... 15
3.4.3 A-Zone ..... 17
3.5 Time Trend Analyses ..... 17
3.6 Natural Attenuation Parameter Distribution ..... 20
3.7 Residential Well Data ..... 23
4.0 AREA WIDE GROUNDWATER MONITORING PLAN ..... 24
5.0 SUMMARY ..... 26
6.0 REFERENCES ..... 28


## List of Tables


Table 1 Monitoring Well Construction Information and Synoptic Water Level Evaluations
Table 2 Groundwater Field Parameter Summary
Table 3 Area-Wide Monitoring Wells: Contaminants of Concern and Light Hydrocarbons
Table 4 Area-Wide Monitoring Wells: Additional Volatile Organics
Table 5 Area-Wide Monitoring Wells: Natural Attenuation Parameters
Table 6 AISB Pilot and O'Connor Drive Area Wells: Contaminants of Concern and Light Hydrocarbons
Table 7 AISB Pilot and O'Connor Drive Area Wells: Additional Volatile Organics
Table 8 AISB Pilot and O'Connor Drive Area Wells: Natural Attenuation Parameters
Table 9 Residential Wells: Contaminants of Concern and Light Hydrocarbons
Table 10 Residential Wells: Additional Volatile Organics
Table 11 Estimates of TCE Mass Contained in Plume, 1988-2009
Table 12 Summary of Mann-Kendall and Linear Regression Analyses
Table 13 Proposed Offsite Groundwater Monitoring Program

## List of Figures


| | |
|---|---|
| Figure 1 | Site Location Map |
| Figure 2 | Monitoring Well Location Map |
| Figure 3 | Groundwater Equipotentials in the B-Zone |
| Figure 4 | Groundwater Equipotentials in the C-Zone |
| Figure 5 | Interpreted TCE Isoconcentration Contours in the B-Zone, 1988 to 2008 |
| Figure 6 | B-Zone TCE Concentration Contours: November-December 2009 |
| Figure 7 | Interpreted TCE Isoconcentration Contours in the C-Zone, 1988 to 2008 |
| Figure 8 | C-Zone TCE Concentration Contours: November-December 2009 |
| Figure 9 | B-Zone PCE Concentration Contours: November-December 2009 |
| Figure 10 | B-Zone cis-1,2-DCE Concentration Contours: November-December 2009 |
| Figure 11 | B-Zone Vinyl Chloride Concentration Contours: November-December 2009 |
| Figure 12 | B-Zone Ethene Concentration Contours: November-December 2009 |
| Figure 13 | B-Zone 1,1,1-TCA Concentration Contours: November-December 2009 |
| Figure 14 | B-Zone 1,1-DCA Concentration Contours: November-December 2009 |
| Figure 15 | B-Zone 1,1-DCE Concentration Contours: November-December 2009 |
| Figure 16 | C-Zone PCE Concentration Contours: November-December 2009 |
| Figure 17 | C-Zone cis-1,2-DCE Concentration Contours: November-December 2009 |
| Figure 18 | C-Zone Vinyl Chloride Concentration Contours: November-December 2009 |
| Figure 19 | C-Zone Ethene Concentration Contours: November-December 2009 |
| Figure 20 | C-Zone 1,1,1-TCA Concentration Contours: November-December 2009 |
| Figure 21 | C-Zone 1,1-DCA Concentration Contours: November-December 2009 |
| Figure 22 | C-Zone 1,1-DCE Concentration Contours: November-December 2009 |
| Figure 23 | A-Zone VOC Sampling Results: November-December 2009 |
| Figure 24 | B-Zone Sulfate Concentration Contours: November-December 2009 |
| Figure 25 | C-Zone Sulfate Concentration Contours: November-December 2009 |
| Figure 26 | B-Zone Methane Concentration Contours: November-December 2009 |
| Figure 27 | C-Zone Methane Concentration Contours: November-December 2009 |
| Figure 28 | Proposed Offsite Groundwater Monitoring Plan |


## List of Appendices


| | |
|---|---|
| Appendix A | Data Usability Summary Report |
| Appendix B | VOC Concentration-Time Graphs |
| Appendix C | Mann-Kendall Statistical Test Results |
| Appendix D | Linear Regression Results |

# 1.0 INTRODUCTION

The Caldwell Trucking Company Superfund Site Trust (Trust) is currently undertaking the remediation of the Caldwell Trucking Company Site (Site) located in Fairfield Township, Essex County, New Jersey (Figure 1), with oversight from U.S. Environmental Protection Agency (USEPA) pursuant to a Consent Decree approved on November 29, 1994. The following remedial activities have been undertaken to date:

***Vadose Zone Remediation***

- Removal and off-Site disposal of underground storage tanks (USTs) and "California List" waste materials.
- Soil vapor extraction (SVE) to remove volatile organic compounds (VOCs) from on-property vadose zone soils.
- Solidification/stabilization of on-property vadose zone source areas.

***Groundwater Remediation***

- Hook-up of residences within the downgradient plume area to public water supply.
- Pre-design studies and design of the Record of Decision (ROD) pump and treat system. Submittal of the Revised Remedial Design Work Plan (RRDWP) (Golder, 2005), Technical Memorandum, Hydraulic Testing of Remediation Wells (Golder, 2007), and Design Report, Groundwater Extraction and Treatment System (Golder, 2008a, 2008b) for a final groundwater remedy for the former Central Lagoon source area. Construction of the groundwater extraction and treatment system (GWTT, 2009); operation of the system beginning in December 2008 (Golder, 2010a, 2010b).
- Construction and monitoring of an in-situ iron reactive wall system (IRWS) and supplementary treatment system to address a surface seep discharge to an unnamed tributary to Deepavaal Brook. Pre-Design Investigation/conceptual design of the unnamed tributary to Deepavaal Brook to delineate and mitigate remaining groundwater impacts to surface water.
- Evaluation of natural attenuation of the off-property chlorinated VOC plume.
- Field pilot test and subsequent continued operation of Accelerated In-situ Biological (AISB) treatment of groundwater source area.

This report presents the results of the area-wide groundwater monitoring that was conducted in November and December 2009, together with an evaluation of the historic trends, current plume status, and progress of natural attenuation. The sampling event represents the fifth round of the long-term monitoring program required by USEPA's May 12, 2004 letter, which states that the Trust will "conduct long-term monitoring to determine whether natural attenuation is continuing to reduce the high levels of contaminants in the downgradient plume." These data supplement multiple previous rounds of sampling that have been conducted by the Trust and USEPA since 1985.

# 2.0 2009 AREA-WIDE SAMPLING

## 2.1 Overview

The 2009 area-wide groundwater sampling event included:

- Water level measurements were collected at 128 wells.
- Sampling of 118 monitoring wells in the area-wide, AISB pilot, and groundwater extraction system networks.
- Sampling of one residential water source on Carlos Drive.

The monitoring well location map is included as Figure 2.

The 2009 event included the following changes, either by design or due to field conditions, to the program followed in the previous area-wide groundwater sampling event in 2008:

- Piezometers P-C15 and P-DC15 were sampled for the first time in 2009 and piezometer P-SC15 was sampled for the first time since 1998. These piezometers, located on the Kingsbridge Road cul-de-sac, were sampled following consultations with EPA regarding the groundwater investigation of the former North Lagoon area.
- Sampling of damaged piezometer PZ-C32D.
- Monitoring well MW-B1 could not be sampled due to flooding conditions that existed at this well location from November 2009 through March 2010. The flooding was due, in part, to the artesian conditions observed at well MW-D1. An artesian well packer was installed in well MW-D1 in February 2010. In addition, heavy snows and extremely heavy rains caused flooding in this area during February and March 2010. Because the well is flush mounted there is virtually no casing above the cement grout such that a temporary riser could not be installed to facilitate sampling. The conditions which caused flooding however have either been addressed (nearby artesian well) or were atypical and should not prevent sampling in the future.
- Monitoring well MW-B13 was not sampled as the potentiometric surface was below the bottom of the screened interval. This condition has existed at this well since 1998.
- D-zone monitoring wells (MW-D1, MW-D3, MW-D5, MW-D6, MW-D7, and MW-D10) were not sampled in 2009. These wells were sampled in 2008 and are sampled on a less frequent basis.

Monitoring wells were sampled for target compound list (TCL) volatile organic compounds (VOCs) by USEPA SW846 method 8260B and the following Natural Attenuation Parameters (NAPs):

- Chloride
- Alkalinity (total)
- Sulfate
- Sulfide
- Nitrate
- Methane, ethane, ethene (MEE, also referred to as "light hydrocarbons")
- Total organic carbon (TOC)

Natural attenuation field parameters (in addition to purge stabilization parameters) include:

- Dissolved oxygen
- Oxidation-reduction potential (ORP)
- pH
- Ferrous iron

## 2.2 Groundwater Level Measurements

Groundwater level measurements were collected using an electronic water level indicator, which was decontaminated prior to use at each monitoring point. Depth to water was recorded from top of casing (TOC) and water elevations were calculated using the surveyed elevation of the well. Water levels were recorded on November 30, 2009, and are presented in Table 1. In addition to the wells included in the analytical program, water level measurements were also recorded at seep area wells MWA-3 and MWB-3 to refine the contouring in this area.

## 2.3 Groundwater Sample Collection

All groundwater samples were collected in accordance with the low-flow procedures specified in the RRDWP. Prior to sampling, each monitoring well was purged using a decontaminated 2-inch submersible pump (Grundfos Redi-Flo) and 3/8-inch Teflon-lined polyethylene tubing that is dedicated to each well. Wells were purged at a rate of approximately 100 to 500 milliliters per minute (ml/min). Efforts were made to minimize well drawdown by adjusting the flow as necessary and frequently monitoring the water level during purging. In general, a minimum of 3 feet of water was maintained over the pump intake to avoid the risk of entrainment of air and pump overheating. Water removed during purging was transferred to storage drums for later treatment through the on-Site groundwater treatment system.

During purging, field parameters were monitored with a Horiba U-22 instrument. Measurements were collected using a flow-through cell device in order to minimize sample exposure to the atmosphere. Measurements were collected approximately every 5 minutes until the parameters stabilized, based on three consecutive readings within the following ranges:

- Temperature: +/- 10%
- pH: +/- 0.1
- Specific conductance: +/- 3%
- Oxidation-reduction potential (ORP): +/- 10 mV (using a platinum electrode)
- Dissolved Oxygen: +/- 10%
- Turbidity: +/- 10%

The stabilized readings are presented in Table 2.

Once purging was completed, the discharge tubing was disconnected from the flow-through cell and samples were collected directly from the end of the discharge tubing. Certified clean sample bottles, which were provided by the laboratories, were filled by allowing the pump discharge to flow gently down the inside of the bottle with minimal agitation. Each pre-labeled bottle was capped as it was filled. VOC and light hydrocarbon (MEE) samples were collected first, at a flow rate of 100 to 250 ml/min, eliminating any headspace in the vials. The samples were preserved according to method-specific requirements, and promptly placed in a cooler with wet ice and maintained at approximately 4°C. Following sample collection, the groundwater was tested for ferrous iron ($Fe^{2+}$) using the Hach® Iron Field Test Kit, in accordance with the manufacturer's written procedures.

Deviations from the above procedures due to field conditions at specific locations are described below:

- Due to excessive water level drawdown, wells MW-C17, MW-C18, MW-C20, MW-C21, MW-C22, MW-C24 and MW-C28 were purged a minimum of one pump and tubing volume then allowed to recharge without removing the pump. Following recharge, samples were collected. This procedure is in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) section 6.9.2.3 (NJDEP, 2005) for low-yield wells.
- Monitoring well MW B-2, in the seep area, was sampled on March 3, 2010 as it was not located during the November-December 2009 event.
- Monitoring well MW-C13 had a damaged casing that prevented lowering a pump into the well and therefore MW-C13 was sampled with a bailer. MW-C13 is located on the back side of the soil stabilization pile in the former North Lagoon Area. It appears the soil stabilization pile may have shifted causing the casing to bend about 5-10 feet below top of casing (it is a stick-up well). The well is located on the slope of the pile near the Site perimeter fencing and is not accessible with equipment necessary to excavate to the required depth to make repairs. Therefore, this well will continue to be monitored in its current condition.
- Piezometer PZ-C32D has a misshapen (out-of-round) casing that prevents lowering a 2-inch submersible pump into the well. The well was purged using the low flow procedure with a peristaltic pump. Once readings stabilized, the pump was turned off, the intake tubing was extracted from the screen midpoint, and the sample was collected from the intake end of the tubing by disconnecting the pump and allowing water to flow freely into vials. The casing is misshapen to at least 6 feet below grade and repairs would require significant excavation of adjacent material including the asphalt and road base of O'Connor Drive. The piezometer is located adjacent to piezometer PZ-C32, which is used in the capture evaluation of the pumping system, as it is screened across the cobble zone and bedrock. Piezometer PZ-C32D, which is screened within bedrock only, is not used in the capture evaluation, but provides useful information on conditions within the bedrock. Therefore, this well will continue to be monitored in its current condition.
- Monitoring well MW-A7 was sampled with a bailer after purging using low flow procedures caused excessive drawdown in the well. Due to the limited water column in this well, sufficient water for low flow sampling was not available.
- Piezometer P-DC15 was sampled with a bailer, because purging of the well was not needed due to the artesian conditions at this well.

These deviations are not expected to have caused any material impacts in meeting the project objectives.

Monitoring well MW-C47 was sampled in December 2009 during the area wide event, and was re-sampled on March 24, 2010, to test the sensitivity of results to purging volume. Using typical low flow purging rates, excessive drawdown is exhibited in this well. In the December 2009 sampling, the purging was discontinued after 2.7 liters were purged, which approximately equaled the total drawdown volume in the wellbore, and sampling proceeded as for a low-yield well as described in the first bullet above. In March 2010, the volume of water purged (7.9 liters) exceeded the drawdown volume in the wellbore, ensuring that formation water was sampled. The analytical results from this well are discussed in Section 3.3.1.

In addition to the primary samples, the following quality assurance/quality control (QA/QC) samples were collected:

- Fifteen trip blanks.
- Six field duplicates from wells MW-B19, MW-B9, MW-C34, MW-C35, MW-C37, and MW-C42.
- Five matrix spike/matrix spike duplicates from wells MW-B26, MW-B12, TW-2, MW-C19, MW-C31, and P-B16.
- Eight field rinsate blanks (collected from decontaminated submersible pumps).

All samples were shipped to the laboratories under chain-of-custody via courier.

## 2.4 Residential Well Sample Collection

A residential well sample was collected at 31 Carlos Drive. Four other residences had been sampled in previous area wide program events: 26, 28, 39, and 33 Carlos Drive. There is no current occupant of 26 Carlos Drive and the 28 Carlos Drive and 33 Carlos Drive residences have been connected to the public water supply and the wells were abandoned. The resident at 39 Carlos Drive was not at his residence during the sampling event and access to the well was not available.

Sample collection followed the protocol of previous area wide events. Prior to sample collection, the residential well was purged by running the outside faucet at a rate of 1 to 5 gallons per minute for 15 minutes to discharge a volume equal to at least one and a half pipe volumes. Following purging, field parameters (Section 2.3) were measured as grab samples with a Horiba U-22 instrument. Once purging was completed, samples were collected directly from the faucet by gently filling the vial and eliminating headspace. The samples were also preserved according to method-specific requirements, and promptly placed in a cooler with wet ice and maintained at approximately 4°C. In addition to the primary samples, trip blanks were also shipped to the laboratory under chain-of-custody procedures.

## 2.5 Analytical Program and Data Evaluation

VOC analyses were performed by TestAmerica of Edison, New Jersey for samples from most wells, and by S2C2 Inc. of Warren, New Jersey, for samples from wells MW-B14, MW-B19, MW-B20, MW-B21,

MW-B22, MW-B23, MW-B24, MW-C14, MW-C19, MW-C20, MW-C21, MW-C22, MW-C23, and MW-C24. Light hydrocarbons and natural attenuation parameters (NAPs)[1] were analyzed by TestAmerica of Edison, New Jersey. Each of the laboratories is NJDEP-certified. Samples were analyzed according to the following USEPA method guidelines:

- VOCs following USEPA SW846[2] Method 8260B Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (December, 1996).
- Chloride, Nitrate, and Sulfate following USEPA Methods for Chemical Analysis of Water and Wastes[3] (MCAWW) Method 300.0.
- Alkalinity following USEPA MCAWW Method 310.2.
- Sulfide following Standard Method[4] 4500S2-F Sulfide by Iodometry.
- TOC following Standard Method 5310B Total Organic Carbon by High-Temperature Combustion.
- Methane, Ethane, Ethene (MEE) following Microseeps Standard Operating Procedure (SOP) AM20GAX.

Because some wells have historically contained elevated levels of target VOCs or elevated organic carbon due to nutrient injections, some samples required dilution to bring them within the range of the instrument calibration. Therefore, the laboratory analyzed samples from these monitoring wells twice (dual analysis) - once at a high dilution level to quantify the primary VOCs, and once at a lower dilution level to achieve lower reporting limits (RLs) for compounds not detected at the higher dilution levels. The results reported herein are for the lowest dilution level, except in cases where a result exceeded the linear range of the instrument calibration as identified by the laboratory. In these instances, the results from the higher dilution are reported. Dual analysis was performed for the following wells: MW-B14, MW-B19, MW-B20, MW-B21, MW-B22, MW-B23, MW-B24, MW-C14, MW-C19, MW-C20, MW-C21, MW-C22, MW-C23, and MW-C24.

The data review of the organic fractions was performed in accordance with the USEPA Region II Standard Operating Procedure (SOP) No. HW-24, Revision 1 – Validation of Organic Data Acquired Using SW-846 Method 8260B (June 1999), where applicable to SW-846 Method 8260B or AM20GAX. The NAP analytical data review was performed in accordance with the USEPA Region II Standard Operating Procedure (SOP) No. HW-2, Revision 13 Evaluation of Metals Data for the Contract Laboratory Program (CLP) based on Statement of Work (SOW) – ILM05.3.

The data usability summary report is provided as Appendix A and the analytical data and qualifiers for each sample point are summarized in Tables 3 through 10.

[1] NAPs included chloride, nitrate, sulfate, alkalinity, sulfide, and total organic carbon (TOC).
[2] USEPA, 1996, Test methods for evaluating solid waste, physical/chemical methods (SW-846): 3rd edition, Environmental Protection Agency, National Center for Environmental Publications, Cincinnati, Ohio, accessed at URL http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm
[3] USEPA, 1983, Methods for Chemical Analysis of Water and Wastes, EPA600/4-79-20, Office of Research and Development, Washington, D.C.
[4] Standard Methods for the Examination of Water and Wastewater.

# 3.0 PLUME STATUS EVALUATION

## 3.1 Overview

Table 1 presents all Site wells included in the November-December 2009 event and their association with the following remedial areas:

- Accelerated in-Situ Biological (AISB) pilot test in the former Central Lagoon area.
- Groundwater extraction and treatment system along O'Connor Drive, placed in operation in December 2008, and its associated network of pumping wells, piezometers, and monitoring wells.
- Area-wide groundwater monitoring program, generally comprising wells downgradient of the source areas but also inclusive of on-property wells outside the direct influence of remedial systems.

This report focuses on the results from the off-property area-wide sampling and the status of ongoing natural attenuation. A detailed review of the wells associated with the other two remedial areas is performed separate from this reporting.

The following sections provide an analysis of the historic and current status of the off-property plume. This analysis addresses the overall changes in groundwater concentrations since 1985, and specifically since the last area-wide sampling in 2008. Trichloroethene (TCE) was identified in the ROD as a primary constituent of concern and the report specifically addresses the spatial distribution of TCE over time (Section 3.3) and the trends in TCE plume mass (Section 3.3.2). The spatial distribution of other site COCs (Section 3.4), statistical trends in COC concentrations (Section 3.5), and results of geochemical/natural attenuation indicator parameters (Section 3.6) are also discussed. Groundwater potentiometric maps are presented in Section 3.2.

Data is presented separately for each hydrogeologic zone, according to the following scheme (NUS, 1989):

- A-zone: Shallow overburden groundwater above a clay layer. This zone is present at and to the north of Kingsbridge Road.
- B-zone: Overburden groundwater below the clay layer.
- C-zone: Upper bedrock groundwater including weathered bedrock and "cobble zone".

Consistent with previous area-wide reports (Golder, 2002; 2006; 2007, 2008, 2009), the plume conditions are discussed in terms of the following areas (see Figure 2):

- Plume core: Generally defined as the portion of the plume of historically highest concentrations off site in which groundwater flow could potentially be traced back to the Site source areas. This includes the area north of O'Connor Drive (excluding General Hose wells), and extending to the pre-seep area and roughly bounded by Passaic Avenue to the west, and Carlos Drive to the east. There were 23 wells monitored within the plume core in 2009 as listed in Table 1 and shown on Figure 2.
- Former North Lagoon and General Hose areas (11 wells).

- Pre-seep area: The area directly upgradient of the seep (5 wells).
- Lateral extents: Areas to the east and west of the plume core (15 wells).
- On-property: Wells on Caldwell Trucking property proximate to the former Central Lagoon area (4 wells).
- Toe of the plume: Wells near the Passaic River along the downgradient edge of the plume (8 wells).
- Upgradient: Wells hydraulically upgradient of the Caldwell Trucking Site (1 well).

In performing this evaluation, the following sources of data were used:

- 1985 data: Remedial Investigation, Caldwell Trucking Company Site, NUS. EPA Work Assignment Number 69-2LB3, June 1986.
- 1988 data: Final Offsite Remedial Investigation Report, Caldwell Trucking Company Site, NUS/Ebasco, EPA Work Assignment Number 145-2LB3, July 1989.
- 1994 data: Final Offsite Groundwater Remediation Pre-Design Investigation Report, Eckenfelder, January, 1995.
- 1996 data: Additional Groundwater and Surface Water Studies, Eckenfelder, 1997.
- 1998 data: Site Wide Groundwater Data Report, Golder Sierra, 1998.
- 2000 data: Source Area New Monitoring Wells, Field Investigation and Sampling Data and Updated Site Conceptual Model, Golder Sierra, May 2000.
- 2001 data: Area-Wide Groundwater Evaluation, Golder Associates Inc., March 2002.
- 2005 data: Area-Wide Groundwater Evaluation, Golder Associates Inc., February 2006.
- 2006 data: Remedial Action Update, Source Area Groundwater Remediation, Golder Associates Inc., July 2006.
- 2006 data: Area-Wide Groundwater Evaluation, Golder Associates Inc., December 2007.
- 2007 data: Technical Memorandum, Hydraulic Testing of Remediation Wells, Golder Associates Inc., November 2007.
- 2008 data: Area-Wide Groundwater Evaluation, Golder Associates Inc., November 2009.

## 3.2 Groundwater Flow Evaluation

Interpreted groundwater elevation contour maps for B- and C-zone wells are provided as Figures 3 and 4, respectively. Groundwater flow patterns are consistent with previous evaluations. In the downgradient plume area, between roughly Sherwood Lane and the seep area, low hydraulic gradients (approximately 0.001 ft/ft) in the B-zone and C-zone are exhibited, and minor fluctuations in water levels can produce apparently wide variations in the location of the isopotentiometric contours. The monitoring wells installed in 2008 in the North Lagoon vicinity, MW-C47, MW-B48 and MW-C48, did not substantially change the groundwater flow characterization in this area.

## 3.3 Trichloroethene Distribution

### *3.3.1 TCE Concentration Distribution*

The spatial extent and concentrations of the TCE plume from 1988 to 2008 are presented on Figures 5 and 7 for the B-zone and C-zone (modified from Golder, 2002), respectively, and the corresponding maps

for 2009 are provided as Figures 6 and 8. Figures 5 and 7 were created from well data that existed at the times of the sampling events and the well network has expanded over time. Some modifications from the original figures were made primarily to maintain consistency of the contour intervals among all the figures[5].

***B-Zone***

The highest concentration of TCE in the B-zone plume core area in 2009 was 4,700 µg/L in P-B16. Concentrations in the plume core area historically had exceeded 10,000 µg/L up through 1998 (Figure 5) and also exceeded 5,000 µg/L through 2008, but in 2009 no wells exceeded 5,000 µg/L.

Multiple wells in the plume core have exhibited reductions in TCE of over 80% compared to historic levels (MW-BL1, 95%; MW-BL2, 95%; MW-B1[6], >99.9%; PW-B15, 85%; and MW-B2, 95%; see Appendix B for trend graphs). This includes a substantial reduction in the plume core area between the former Central Lagoon and the Sherwood Lane/Kingsbridge Road area, with the concentration of TCE declining 77% in well MW-B11 since 2000 (2,900 µg/L to 670 µg/L) and >99.9% in MW-B1 since 1988 as of October 2008 (16,000 µg/L to 2.1 µg/L). The downgradient B-zone plume has thus been separated from the former Central Lagoon source area by a substantially cleaner zone.

In the pre-seep area, TCE concentrations ranged from 2,700 to 4,700 µg/L, exhibiting a decline from 6,700 to 11,000 µg/L in 2001. In the toe of plume the highest TCE concentration was 240 µg/L (MW-B3), and this well has exhibited decreasing TCE concentrations since 1988 when concentrations were greater than 3,000 µg/L.

The western extent of the B-zone plume is characterized by wells MW-1A, MW-B5, MW-B6, and MW-B7, which had TCE concentrations ranging from 34 µg/L to 380 µg/L in 2010, whereas historically concentrations ranged from below detection limits to 1,500 µg/L. Figures 5 and 8 show that while the plume core area exhibits substantial reductions in TCE concentration, the western plume margin has remained relatively unchanged. This is consistent with previous reporting, which indicates that Site groundwater in this area may be commingling with other sources. This area corresponds to another known contaminant center referred to in USEPA's 1989 ROD[7].

The eastern extent of the plume is defined by wells MW-B9 and MW-B10, where VOCs continued to be below detection limits in 2009.

***C-Zone***

The plume core is demarcated in the C-zone spatially similar to the B-zone. The highest concentration of TCE in the C-zone plume core area in 2009 was 5,100 µg/L in PW-SC15. Since 2001, areas above

[5] In two instances (1988 and 1996 C-zone contours) the 10,000 µg/L contour was expanded to the east, to better reflect the data.
[6] Based on 2008 data, as MW-B1 was inaccessible for sampling in 2009.
[7] There are multiple Known Contaminated Sites/State Cleanup Sites under NJDEP authority in this area, including Monsen Engineering (6 Daniel Road), which has an approved NJDEP Classification Exception Area (CEA); Brockway Standard Inc. (16 Daniel Road); Fairfield Jersey Inc. (300 Fairfield Road); and Republic Tool and Manufacturing (297A Passaic Avenue).

10,000 µg/L of TCE in the C-zone have been limited to the vicinity of the Caldwell Trucking Site (Figures 7 and 8). Historically, the 10,000 µg/L TCE contour extended over a larger area in the C-zone (Figure 7). The 5,000 µg/L TCE contour has also been reduced in areal extent due to decreased concentrations throughout the plume core (e.g., P-SC16, P-SC17, and PW-SC15) and pre-seep areas. In 2009, areas above 5,000 µg/L of TCE in the C-zone are shown to be largely limited to the vicinity of the Caldwell Trucking Site.

Reductions in TCE concentration in C-zone plume core wells have ranged from 48% to 99% (P-SC17; see Appendix B for trend graphs). Similar to the B-zone although not as dramatic, a reduction in concentration in the plume core area between the former Central Lagoon and the Sherwood Lane/Kingsbridge Road area is present with TCE concentrations ranging between 1,600 µg/L (MW-B52) and 3,600 µg/L (MW-C45). Most wells in this area were installed in 2007-2008 and do not contain a long period of record, however historically concentrations in this area were interpreted to be greater than 10,000 µg/L based upon Figure 7.

Wells in the pre-seep area have shown fluctuating concentrations unlike most plume core wells which show steadily declining concentrations in general. While all three pre-seep area wells exhibited lower TCE concentrations in 2009 than their initial sampling, the decline is not statistically significant using the Mann-Kendall trend test (discussed in Section 3.5).

Overall comparisons of current and historic data continue to provide evidence to support that the long-term trend in concentrations of TCE is decreasing area wide. TCE levels have declined in part due to abiotic and biotic degradation processes, as further discussed in Section 3.5.

***Update on Wells of Interest Installed in 2005-2006***

C-zone wells installed in 2005-2006 identified additional areas of elevated VOC concentrations in the vicinity of wells MW-C31 in the southeastern portion of the monitored area and MW-C33 in the former North Lagoon area. In MW-C31, VOC concentrations have declined greatly (from over 115 mg/L in 2005 to 0.6 mg/L in December 2009). These reductions were likely due to biodegradation [as documented in detail in the 2006 area wide report (Golder, 2007)] that was facilitated by the presence of aromatic compounds, specifically toluene, which declined from 11 mg/L in March 2005 to 0.1 mg/L in November 2009. In addition, VOC concentrations decline sharply a short distance away from well MW-C31 as shown by the results from wells MW-C37 and MW-C38, located north and hydraulically downgradient of MW-C31. The TCE levels in these wells were never elevated compared to the results from well MW-C31 and during the 2009 sampling event were 55 and 33 µg/L, respectively. These data indicate that the VOC impacts formerly exhibited in well MW-C31 were localized. Since their initial sampling in December 2005, wells MW-C37 and MW-C38 have contained primarily daughter products (defined in Section 3.5), and total COCs in these wells have declined 39% and 79%, respectively, indicating natural attenuation is significant in this area.

A second area identified in March 2005 in the former North Lagoon area and denoted by monitoring well MW-C33, originally contained over 500 mg/L total COCs. Concentrations at MW-C33 have remained at similar levels through November 2009. The area downgradient of the former North Lagoon is currently being investigated as reported in a letter to EPA dated May 10, 2010 (Golder Associates, *Former North Lagoon Area, Investigation Progress Report- Additional C-Zone Monitoring Wells*).

Monitoring well MW-C47 was installed as part of the continuing investigation of MW-C33 and is located in the area downgradient of the former North Lagoon. This well was sampled in October 2008, December 2009 and March 2010, and the resulting TCE concentrations were 22,000 µg/L (Golder, 2009), 230 µg/L and 2,300 µg/L[8]. The differences in results are likely related to the geologic setting and the volume of water purged from the well prior to sampling. The volume of water purged was greatest for the October 2008 event (13 liters), followed by the March 2010 event (7.9 liters), and lastly the December 2009 event (2.7 liters). The purge volume exceeded the drawdown volume in the wellbore in the October 2008 and March 2010 events only, suggesting that the December 2009 sample may have been composed mostly of wellbore water. Samples with higher VOC concentrations may result from higher purge volumes in a tightly fractured bedrock setting, because only a few fractures may transmit water and relatively low volumes of water can be drawn from relatively distal locations. Given the relatively high concentration gradient in this area, Golder believes it is possible that the October 2008 sample (TCE concentration of 22,000 µg/L) is more representative of water closer to the site (e.g., the vicinity of MW-C33) than in the vicinity of MW-C47, and that the March 2010 sample (TCE concentration of 2,300 µg/L) is most representative of the water in the vicinity of well MW-C47.

### *3.3.2 TCE Mass Distribution*

Estimates of the approximate mass of the TCE plume were developed from the isoconcentration maps presented as Figures 5, 6, 7, and 8, following the same procedure as presented previously (Golder, 2002). The area within each contour interval, $A_c$, was determined and an average concentration within the contour interval, $C_a$, was used to determine the total mass, M, within the contour interval as follows:

$$M = C_a A_c t n (2.832 \times 10^{-8})$$

where:
- M = mass of TCE (kg)
- $C_a$ = average concentration within contours (µg/L)
- $A_c$ = area within contour interval ($ft^2$)
- t = thickness of zone (feet)
- n = total porosity
- $2.832 \times 10^{-8}$ = units conversion factor

Average thicknesses of 30 feet and 20 feet were used for the B- and C-zones, respectively. Total porosities of 0.30 and 0.05 for the B- and C-zones, respectively, were used to be consistent with previous analyses.

[8] The March 2010 sampling was performed following receipt of the December 2009 results, as described in Section 2.3.

Table 11 presents the results of the plume mass calculations, which indicate that the TCE mass in the plume has decreased, by a total of 76%, since 1988. The estimates of mass have increased between 2006 and 2008 due primarily to additional plume delineation that has been performed. In the B-zone additional delineation was performed in the former Central Lagoon near-source area that increased the interpreted spatial extent of the 1000 µg/L contour (wells MW-B43 and MW-B45), as did the newly sampled well P-B16 (discussed in Section 3.3). An increase in the estimated C-zone TCE mass also occurred between 2006 and 2008 due to recent delineation in the vicinity of the former North Lagoon area. While the absolute estimates of plume mass provided by these calculations are uncertain, the overall long-term trends in TCE mass reduction are favorable.

## 3.4 COC Concentration Distributions

The primary COCs identified at the site include TCE, PCE, 1,1,1-TCA, and chloroform, (so called "parent" compounds) together with their associated "daughter" products, i.e., compounds formed from the biotic or abiotic degradation of the parent compounds. The table below lists all of the COCs that are included in subsequent discussions of "total site COCs."

**Groundwater Compounds of Concern (COCs)**

| Chlorinated Ethene Biodegradation Sequence | Chlorinated Ethane Biodegradation Sequence | Chlorinated Methane Biodegradation Sequence | Other |
|---|---|---|---|
| ■ Tetrachloroethene (PCE)<br>■ Trichloroethene (TCE)<br>■ cis-1,2-Dichloroethene (cis-1,2-DCE)<br>■ Vinyl Chloride (VC)<br>■ Ethene[9] | ■ 1,1,1-trichloroethane (1,1,1-TCA)<br>■ 1,1-dichloroethane (1,1-DCA)<br>■ 1,1-dichloroethene (1,1-DCE)<br>■ Chloroethane<br>■ Ethane[9] | ■ Chloroform<br>■ Methylene Chloride<br>■ Chloromethane<br>■ Methane[9] | ■ 1,1,2-trichloroethane<br>■ 1,2-dichloroethane<br>■ trans-1,2-dichloroethene. |

Of these compounds, TCE, PCE, cis-1,2-DCE, vinyl chloride, 1,1,1-TCA, 1,1-DCA, and 1,1-DCE are the most significant in terms of current concentrations and toxicity and are evaluated individually in the following sections.

Isoconcentration contour maps for the seven individual COCs noted above, and ethene, in the B- and C-zones are provided in Figure 6 and Figures 8 through 22. Trend graphs of total COCs are included in Appendix B. Figure 6 and Figures 8 through 22 also show contours of the corresponding data in the Central Lagoon AISB pilot and groundwater extraction areas as inset maps, although these areas are reported in more detail in the annual report of the groundwater extraction system. The following sub-sections provide a discussion of the individual COC concentration distributions in each zone in the context

[9] Methane, ethane, and ethene are included as ultimate daughter products of biodegradation. These compounds are, however, non-toxic in groundwater and as such are not strictly "compounds of concern."

of natural attenuation and associated daughter product generation, and where appropriate molar concentrations are cited.

### 3.4.1 B-Zone

Figure 6 and Figures 9 through 15 are isoconcentration contour maps for the B-zone of the individual COCs and Appendix B includes trend graphs of total COCs.

***Total COCs***

In terms of total COCs, sharp declines have been observed in the B-zone plume core since 1988 (trend graphs are included in Appendix B). For instance, in MW-B1 total COCs have declined from 24,000 µg/L [192 micromoles per liter (µmol/L)] to 4 µg/L[10] (0.04 µmol/L). Also, total COC concentrations in MW-BL1 and MW-BL2 have declined from 48,910 µg/L (409 µmol/L) to 70 µg/L (0.6 µmol/L) and from 49,274 µg/L (407 µmol/L) to 2,383 µg/L (23.7 µmol/L), respectively. Farther downgradient, in the area of MW-B4 and the pre-seep area, a decreasing trend in total COCs is also exhibited, although not as dramatic and concentrations have shown greater variability.

***Parent Compounds (Chloroethenes)***

TCE plume core concentrations have shown sharp declines since 1988, consistent with total COCs as discussed in Section 3.3.1. Also, similar to the total COCs, differences are exhibited in the upgradient portion of the plume (six monitoring wells north of O'Connor Drive and south of Sherwood Lane) where TCE concentrations range from 7.6 to 2,000 µg/L compared with farther downgradient where concentrations are higher [(4,700 µg/L in both P-B16 and MWB-1(seep area)]. In particular, the area of elevated TCE concentrations at P-B16 is localized as TCE concentrations are 820 µg/L at well PW-B15, located only 210 feet to the west and 670 µg/L at MW-B11 located 710 feet upgradient. In addition, the 2009 levels at P-B16 are lower (4,700 µg/L) than the 2008 results (6,900 µg/L).

In general, PCE concentrations have been historically lower than TCE concentrations throughout the on site and downgradient areas. The maximum off-site PCE concentration in the B-zone (400 µg/L) was detected at MW-B45, which is located in the downgradient plume area. This level is an order of magnitude lower than the maximum TCE concentration. PCE concentrations have declined over time consistent with declines in total COCs in most downgradient B-zone wells.

The lower concentrations of parent COCs in the upgradient portion of the plume are attributed to source removal and reduction activities.

***Daughter Products (Chloroethenes)***

Some daughter products of biodegradation are present in the plume core of the B-zone (Kingsbridge Road/Sherwood Lane area). For example, cis-1,2-DCE, an immediate daughter product of TCE via reductive dechlorination, is present throughout the off-site core and downgradient plume areas at

[10] The latest sample for MW-B1 was in October 2008, since the well was inaccessible in 2009.

concentrations ranging from 29 µg/L to 2,400 µg/L (Figure 10). In the upgradient portion of the plume (immediately north of O'Connor Drive), cis-1,2-DCE concentrations exceed the parent compound concentrations (PCE and TCE), suggesting the influence of AISB and natural degradation. In fact, in five wells immediately downgradient of O'Connor Drive (B11, B43, BL1, BL2 and B45), the average TCE to cis-1,2-DCE concentration ratio is 0.4. Farther downgradient, TCE concentrations exceed cis-1,2-DCE concentrations, and in the pre-seep area, the TCE to cis-1,2-DCE ratio is 1.8.

The presence of natural degradation is also supported by the observation that cis-1,2-DCE concentrations have historically increased in correlation with reductions in the TCE concentrations in B-zone wells (e.g., MW-BL2, MW-B4 and MW-B5, as shown in Appendix B). These results indicate that reductive dechlorination of TCE to cis-1,2-DCE is occurring in the plume core. While cis-1,2-DCE concentrations increased historically in some B-zone wells, more recent declines indicate continued degradation.

Although cis-1,2-DCE is relatively prevalent, vinyl chloride (Figure 11), the daughter product of cis-1,2-DCE degradation, is present at much lower levels in the B-zone, where detected. While cis-1,2-DCE concentrations in the plume core and downgradient area range from 29 to 2,400 µg/L, vinyl chloride levels in the upgradient portion of the plume core range from below detection limits to 300 µg/L and farther downgradient range from below detection limits to 78 µg/L.

Although these daughter products of biodegradation are present in the plume core, the reductions in parent compound concentrations are not accompanied by sequential production of equivalent molar concentrations of daughter products along the reductive pathway. This may indicate rapid reductive dechlorination and/or the presence of additional mechanisms of degradation. For example, the direct oxidation of cis-1,2-DCE to carbon dioxide, water, and chloride can occur under iron-reducing, sulfate-reducing, or methanogenic conditions, with no production of vinyl chloride (Chapelle, 2001), and as discussed in Section 3.6, geochemical indicators support the presence of this potential alternate degradation pathway. Similarly, the presence of vinyl chloride and, in some wells, ethene (Figure 12), is consistent with anaerobic reductive dehalogenation rather than direct oxidation. Therefore, both pathways (reductive dechlorination and anaerobic oxidation) appear to be active in the off-site area, with the reductive dechlorination pathway generally associated with more strongly reducing conditions.

***Other COCs***

Other parent compounds, including 1,1,1-TCA and chloroform, have also been substantially degraded since 1988 in the B-zone. 1,1,1-TCA degradation by biotic and/or abiotic pathways has occurred in all impacted areas of the B-zone (Figures 13 through 15). The biological daughter product (1,1-DCA) is present in some areas at levels higher than 1,1-DCE (abiotic product) and which approach or surpass the 1,1,1-TCA concentration (e.g., in the area of MW-BL2/MW-B43), while 1,1-DCE is higher in concentration than 1,1-DCA in the pre-seep area. The sum of the daughter products exceeds or approaches the 1,1,1-TCA concentrations on a molar basis in many areas (e.g., the pre-seep area), indicating that both the biological and abiotic pathways are significant for 1,1,1-TCA. Chloroform has been substantially reduced

in all areas of the plume. For example, chloroform was present at 64,000 µg/L in MW-BL2 in 1988 and most recently was 12 µg/L, below the federal MCL of 80 µg/L. The maximum chloroform concentration in B-zone wells in the downgradient area is 74 µg/L in MW-B45. The degradation of chloroform along a reductive pathway produces methylene chloride, however this compound has generally not been detected downgradient, and therefore an alternate pathway, such as anaerobic oxidation, may be active.

Overall, substantial areas of the plume core in the B-zone have undergone relatively large declines in total VOC concentrations since 1988. The daughter product concentrations suggest that biological (reductive dechlorination, anaerobic oxidation) as well as abiotic processes are active in the B-zone throughout the plume.

### *3.4.2 C-Zone*

Isoconcentration contour maps of the C-zone are presented in Figure 8 and Figures 16 through 22. In the C-zone, operation of the pumping system has isolated the former Central Lagoon source area from the downgradient plume. A zone of reduced concentrations between O'Connor Drive and the monitoring wells immediately downgradient has developed as shown in Figures 7 and 8.

***Total COCs***

In terms of total COCs, steep declines have been observed in the off-site C-zone plume core since 1988 (trend graphs are included in Appendix B). For instance, in P-SC17, total COCs have declined from 15,250 µg/L (125 µmol/L) to 52 µg/L (0.46 µmol/L). Also, total COC concentrations in MW-C5 have declined from 3,200 µg/L (28.4 µmol/L) to 97 µg/L[11] (1.4 µmol/L). Farther downgradient, in the area of MW-C3, MW-C6 and the pre-seep area, concentrations have shown greater variability although total COCs are lower than initially exhibited in these wells.

***Parent Compounds (Chloroethenes)***

Concentrations of TCE in the plume core area downgradient from the Site property and former Central Lagoon area range from 1,900-5,100 µg/L in the C-zone and are generally higher than in the B-zone in this area. Total COCs follow the same relative trend. However, in the pre-seep area, TCE (and COC) concentrations in the C-zone remain lower (2,200-2,500 µg/L), as has been the case historically, than in the B-zone (2,700-4,700 µg/L).

Similar to the B-zone, historic PCE concentrations in the C-zone have generally been lower than TCE concentrations throughout the on site and downgradient areas. The maximum PCE concentration in off-site plume core and downgradient area in the C-zone is 310 µg/L (MW-C45), an order of magnitude lower than the maximum TCE concentration. PCE concentrations have declined consistent with declines in total COCs over time in most downgradient C-zone wells.

[11] The latest sample for MW-B1 was in October 2008, since the well was inaccessible in 2009.

The decreasing concentrations of parent COCs in the C zone in the upgradient portion of the plume are attributed to source removal and reduction activities.

***Daughter Products (Chloroethenes)***

Some daughter products of biodegradation are present in the C-zone plume core (Kingsbridge Road/Sherwood Lane area) and downgradient areas, including the area downgradient of the North Lagoon/former General Hose property. The daughter product cis-1,2-DCE is present throughout the downgradient plume and generally increases in concentration with distance from the Site property as shown in Figure 17, suggesting active biodegradation of TCE is occurring in the C-zone. This is also shown by comparing the average TCE to cis-1,2-DCE concentration ratio on a molar basis in five C-zone wells south of Sherwood Lane (C11, C43, C44, C45 and C52), which results in a value of 4.4, to the wells in the pre-seep area (C-1, C-4 and C-5) which results in a lower value (1.8). A decreasing parent to daughter ratio is indicative of the degradation of the parent compound. Although cis-1,2-DCE is relatively prevalent, off-site (outside the AISB pilot test area) vinyl chloride concentrations are much lower or non-detect, similar to its presence in the B-zone (Figure 18).

While daughter product generation via reductive dechlorination is evident throughout the plume, the levels of daughter products are well below the declines in parent compounds on a molar basis. For example, in PW-SC15, TCE exhibits a historically decreasing trend and has declined by 26.6 umol/L since 1994. Comparatively, the cis-1,2-DCE at PW-SC15 did not exhibit historic increasing trends in response to the TCE reduction and has actually declined by 13.4 umol/L suggesting a progression of dechlorination beyond cis-1,2-DCE via an alternate degradation pathway. This is further supported by the vinyl chloride levels at PW-SC15 which increased to 4.3 umol/L in 2006, and subsequently declined to 1.2 umol/L in 2009. As discussed further in Section 3.6, anaerobic oxidation of cis 1,2-DCE may be occurring in conjunction with reductive dechlorination..

***Other COCs***

Also similar to the B-zone, 1,1,1-TCA degradation has occurred in all areas of the C-zone via abiotic (1,1–DCE) or biological (1,1-DCA) pathways (Figures 20 through 22). Both of the degradation pathways are significant, with comparatively higher concentrations of both daughter compounds being detected in different areas of the plume. Both daughter compounds are present in the pre-seep area at similar levels. The average molar concentration ratio of 1,1,1-TCA (parent) to the sum of 1,1-DCA and 1,1-DCE (daughters) declines from 1.7 in the five wells south of Sherwood Lane to 0.7 in the three pre-seep area wells, indicating active degradation.

Overall, concentrations in the C-zone are generally higher than in the B-zone except for the pre-seep area, where there may be upwelling of C-zone groundwater. Similar to the B-zone, daughter product concentrations suggest that biotic (reductive dechlorination, anaerobic oxidation) as well as abiotic processes are active in the C-zone.

### 3.4.3 A-Zone

A-zone data from the 2009 area-wide event are shown on Figure 23. Due to the absence of A zone groundwater on-Site and the clay confining unit below the A-zone, impacts to the A-zone are limited to areas where the clay is missing and hydraulic gradients are upward from the B-zone, such as in the vicinity of well MW-A4. Three existing wells (MW-A1, MW-A2, and MW-A6) were added to the area wide event in 2006, and one existing well (MW-A7) was added to the event in 2008.

Overall, total COC concentrations in the A-zone wells range from below detection limits in four wells, less than 5 µg/L in two wells (MW-A2 and MW-A3), 68 µg/L in one well (MW-A6) and 8,100 µg/L in one well (MW-A4). Consistent with previous sampling events, MW-A4, which is located in an area where the clay layer between the A-zone and B-zone is absent, shows the highest concentrations in the A-zone wells. Elsewhere, A-zone well concentrations are much lower. The three A-zone wells along the eastern lateral edge of the plume (MW-A9, MW-A10, and MW-A11) have always shown very low or non-detected concentrations of all compounds (there were no detections in 2009). The A-zone well at the toe of the plume, MW-A3, has always been ≤13 µg/L of total COCs and shows no statistically significant trends in total COCs or any individual COC.

Daughter products of biodegradation are detected in the A-zone wells, and comprise a substantial proportion of the total COC concentrations in MW-A4 and MW-A6. The compounds cis-1,2-DCE, 1,1-DCA and 1,1-DCE are the most prevalent daughter products detected. While moderately reducing conditions exist in some areas of the A-zone, transport from lower units is likely responsible for speciation of compounds in the A-zone.

## 3.5 Time Trend Analyses

Time trend analyses have been conducted for COC concentrations in 56 wells. In sum, 22 B-zone, 26 C-zone, and 8 A-zone wells are included in the analysis. Concentration-time plots from 1985 to the present are provided in Appendix B for these wells, as well as for 13 additional wells with shorter data records. Time trend analyses were not conducted for wells within the AISB pilot test zone because these wells are influenced by the ongoing accelerated biological treatment and do not reflect area-wide conditions. Wells where the historical data record is too short to discern valid trends, including certain recently installed wells on O'Connor Drive and on the General Hose property, were also excluded from the analyses. Certain wells were sampled on up to three dates in early 1988, with sampling occurring one to two months apart. These data in several wells showed high variability. Because including these data would provide undue weight to data with high variability, only one date for each well was included in the time trend analyses. For wells where the total VOCs varied significantly, the sampling date with the highest VOCs was used, for the other wells, the first sampling date was used.

The Mann-Kendall testing procedure was used to ascertain statistical time-trends (USEPA, 2000), and the results are presented in Table 12. The Mann-Kendall test is a non-parametric time series analysis that

does not assume any particular distribution of the data, and a trend is defined by the relative magnitudes of the data and their relative temporal occurrence rather than the actual concentrations. In the Mann-Kendall analysis, "H2" indicates a statistically significant falling trend, "H1" indicates a rising trend, and "H0" indicates no trend. Table 12 is organized into "Parent" compounds and "Daughter" compounds in order to differentiate the effect of degradation of a parent compound, resulting in a falling trend, from creation of daughter compounds, resulting in a rising trend. Rising and falling trends identified by the Mann-Kendall method are highlighted. Full details of the statistical analyses are included as Appendix C.

Because the Mann-Kendall procedure does not evaluate the magnitude of the trend, the parametric technique of linear regression was also performed to offer additional insight into the magnitude of trends in the groundwater concentration data. In this analysis, a linear least squares regression line was calculated and cases where a slope greater than 10 µg/L/year or less than -10 µg/L/year resulted are highlighted on Table 12. If the regression correlation coefficient was very poor (< 0.2), the slope was not considered reliable and is not included in the table. Full details of the linear regression analysis are included in Appendix D. Additional caution is advised in evaluating the results of these analyses since neither method evaluates whether changes in concentration occurred predominately early, late or steadily throughout the period of record.

The following discussion of concentration-time trends in B- and C-zone wells is organized by areal regions of the plume, as indicated on Figure 2. Trends in A-zone wells are discussed separately.

***Plume Core***

The plume core is generally defined as the portion of the plume of historically highest concentrations downgradient from the Site and active AISB area, in which groundwater flow potentially can be traced back to the Site source areas. Ten B-zone wells and ten C-zone wells are located in the plume core that contain a data record sufficient for statistical characterization, and a relatively large percentage of instances (41%) demonstrate decreasing statistical trends for parent compounds with the remaining cases demonstrating a stable trend. For TCE, 65% of the wells demonstrate a downward trend. Downward trends in total VOCs are demonstrated in seven wells, with the remaining wells demonstrating stable trends. A small number (two) of increasing trends are exhibited for daughter products, reflecting the production of these compounds in conjunction with the degradation of parent compounds.

***Pre-seep Area***

The pre-seep area includes two B-zone (MWB-1 and MWB-2) and three C-zone wells (MWC-1, MWC-4, and MWC-5), located directly upgradient of the seep surface water discharge area, and the results demonstrate predominately stable time trends with four downward trends also demonstrated. Of note, linear regression analysis of TCE demonstrates relatively high negative slopes (-78 to -360 µg/L/yr) and for the daughter compounds, one increasing trend is demonstrated, indicating biodegradation is occurring in the pre-seep area and/or upgradient.

***Lateral Extent (Eastern and Western Edges)***

The plume lateral extent is monitored by four B-zone and four C-zone wells and the analysis indicates that five of the eight wells show stable or decreasing trends of total COCs. Increasing trends in total COCs are exhibited on the western fringes of the plume (MW-1, MW-1A and MW-B7), in an area of other known contaminant centers referred to in USEPA's 1989 ROD. The plume core generally exhibits downward and stable trends, suggesting that the conditions noted in the three western lateral extent wells do not indicate changes in the Caldwell Trucking plume, but may be due to the commingling of groundwater downgradient from the other known contaminant centers. Furthermore, a decreasing trend is exhibited in MW-C5, which is located between the Site and MW-1A/MW-1, suggesting that MW-1A/MW-1 may be impacted by an additional source.

***On-Property***

Wells MW-B16 and MW-C16 are located on the Caldwell Trucking property approximately 270 feet lateral to the AISB pilot area within the former Central Lagoon area, and are included as control wells for the AISB area. Wells MW-C17 and MW-C18 are also on the Caldwell Trucking property to the west of the former Central Lagoon area. Mann-Kendall testing of the data demonstrates stable or decreasing trends for parent compounds, and, notably, a downward trend for cis-1,2-DCE in all wells. These data indicate that natural biodegradation is occurring in some areas on the property without enhancement.

***Toe of Plume***

The toe of the plume is monitored by three wells near the Passaic River (MW-B3, MW-C3, and MW-B9). Mann-Kendall testing results demonstrate predominately stable and decreasing trends with one well demonstrating a downward trend for total VOCs (MW-B3). Linear regression slopes for TCE are relatively high (-72 to -113 µg/L/yr) in MW-B3 and MW-C3. The predominance of stable trends in daughter products is due largely to non-detects of many daughter products.

***A-Zone***

Mann-Kendall testing of eight A-zone wells indicates that these are dominated by stable trends. In this context it is important to note that all but two of the nine wells sampled contained total COCs of 4.9 µg/L or less in 2009. Well MW-A6 contained total COCs of 68 µg/L, a decrease from 121 µg/L in 2008. Well MW-A4 demonstrates stable trends except for a downward trend in parent compound 1,1,1-TCA and an upward trend in total COCs and in daughter product cis-1,2-DCE. The trend graph for MW-A4 (Appendix B, Figure B1-9) shows that concentrations rose from 1988 to 1998 but have decreased since then.

***Summary***

Mann-Kendall analysis of total COCs resulted in 37 wells with stable trends, 12 wells with falling trends, and 4 wells with increasing trends. The wells with overall increasing trends include two B-zone wells and one C-zone well located on the western lateral fringe. Areas of the plume in which multiple wells demonstrate falling trends include the plume core (B- and C- zones) and the B- zone in the Seep area. The A-zone, the lateral areas of the plume in the C-zone, the North Lagoon areas in the B- and C- zones,

the on property wells in the B- and C- zones, and the toe of the plume (B-zone) also contain wells with declining trends in total COCs.

For all wells with a sufficient data record, there were 77% stable trends, 18% decreasing and 5% increasing trends, in comparison with the 2008 data for which there were 64% stable, 29% decreasing and 7% increasing trends. The statistical changes are due in part to the minor change in the analysis as described in the beginning of this section, and to changes in the program sampling for 2009 (e.g., D-zone wells were in 2008 but not in 2009).

Overall, concentrations of parent compounds are falling in most areas of the plume, as evidenced in particular by the number of negative regression slopes in TCE concentrations (31 wells) versus positive slopes (2 wells). Daughter compound concentration trends are variable, consistent with the varying stages of parent compound degradation.

## 3.6 Natural Attenuation Parameter Distribution

In order to further assess the extent to which the observed favorable concentration trends in the downgradient plume area are the result of natural biodegradation, the following section examines the distribution of terminal electron acceptors, electron donors, geochemical parameters, biogenic gases and daughter products, all commonly referred to as "natural attenuation parameters" (NAPs).

For the biologically mediated transformations occurring in natural attenuation, the following electron acceptor reactions illustrate the use and production of various compounds involved. Sampling for these compounds, known as indicator parameters, allows for interpretation of the bio-geochemical environments present at a site. For the electron acceptor reaction, the preferred oxidation-reduction potential (ORP) is provided.

<u>Electron Acceptor Reactions</u>

| | |
|---|---|
| Oxygen: $1/4\ O_2 + H^+ + e^- = 1/2\ H_2O$ | (ORP = +820 mV) |
| Nitrate: $1/5\ NO_3^- + 6/5\ H^+ + e^- = 1/10\ N_2 + 3/5\ H_2O$ | (ORP = +740 mV) |
| Iron: $1/2\ FeOOH_{(s)} + 1/2\ HCO_3^- + H^+ + ½\ e^- = 1/2\ FeCO_3 + H_2O$ | (ORP = -50 mV) |
| Sulfate: $1/8\ SO4^{-2} + 19/16\ H^+ + e^- = 1/16\ H_2S + 1/16\ HS^- + 1/2\ H_2O$ | (ORP = -220 mV) |
| Methanogenesis: $1/8\ CO_2 + H^+ + e^- = 1/8\ CH_4 + 1/24\ H_2O$ | (ORP = -240 mV) |

The natural attenuation indicator parameters in the downgradient plume are evaluated below, including the significance of each parameter with respect to the natural attenuation evaluation. Field parameters DO, ORP, ferrous iron, and pH are listed in Table 2 and the remaining laboratory analyzed parameters are listed in Tables 5 and 8.

- Dissolved oxygen (DO) indicates whether aerobic or anaerobic conditions (suitable for reductive dechlorination) exist. Oxygen levels generally remain non-detect or <1 mg/L, indicating anaerobic conditions persist site-wide. A-zone wells exhibit higher levels of DO in general, consistent with typical shallow water table conditions. This is shown in the

following table, which summarizes the number of wells less than or greater than 1.0 mg/L of DO.

| | Number of Wells | |
|---|---|---|
| **Zone** | DO < 1.0 mg/L | DO > 1.0 mg/L |
| A-zone | 5 | 6 |
| B-zone | 46 | 4 |
| C-zone | 39 | 19 |

- Oxygen reduction potential (redox or ORP) is a measure of the relative concentrations of redox pairs (e.g., ferrous and ferric iron) which indicates the degree to which conditions are reducing in the aquifer, and are conducive to the activity of various bacterium populations (e.g., iron reducers) that facilitate biodegradation. ORP is a general indicator and is less reliable than individual analyte analysis. The following table summarizes the number of wells below and above 50 mV, the level at which a reductive pathway is possible (Weidemeier, et al., 1997).

| | Number of Wells | |
|---|---|---|
| **Zone** | ORP < 50 mV | ORP > 50 mV |
| A-zone | 7 | 4 |
| B-zone | 38 | 11 |
| C-zone | 48 | 10 |

In the B-zone and the C-zone, areas of active biodegradation generally correlated with areas of low ORP. For example, in the B-zone of the plume core in the Sherwood Lane/Kingsbridge Road area, ORP ranged from -112 mV to +105 mV, and the wells that exhibited degradation of TCE correlated with the more reducing values of ORP (e.g., ORP in MW-BL2 was -112 mV). In the C-zone, 24 wells have ORP of -100 mV or less and 4 wells have ORP of -200 mV or less. These wells are located in different areas of the plume, including the O'Connor Drive area, former North Lagoon area, and in the plume core, indicating that highly reducing conditions in the C-zone occur over a relatively widespread area.

- Nitrate is the most energetically favorable electron acceptor; however, concentrations are usually low in aquifers, and complete dechlorination is not documented under strictly nitrate reducing conditions. Presence over 1 mg/L is an unfavorable indicator (USEPA, 1999). Data from 2009 in the B-zone and C-zone plume core wells indicate nitrate concentrations as follows:

| | Number of Wells | |
|---|---|---|
| **Zone** | NO3 < 1 mg/L | NO3 > 1 mg/L |
| A-zone | 5 | 0 |
| B-zone | 10 | 5 |
| C-zone | 18 | 3 |

- Ferrous iron indicates whether iron reducing bacteria are present and active, which can facilitate reductive dechlorination. Reducing conditions are critical to facilitate reductive dechlorination. While there is some correlation between VOC reductions and ferrous iron concentration, some wells with low VOC impacts have ferrous iron detections. For example, while produced in the AISB pilot area, ferrous iron is also present in the A-zone groundwater where VOC impacts are low (e.g., MW-A10) suggesting that the presence of reduced iron is not strongly correlated to VOC biodegradation. In the C-zone, its presence is limited outside of the source areas. However, it can react and precipitate with sulfide, giving false low detections. Therefore, ferrous iron is not a reliable indicator of the microbial populations that facilitate biodegradation of site contaminants.

- Sulfate levels (Figures 24 and 25) indicate whether sulfate reducing bacteria are present and active, which can facilitate reductive dechlorination. Natural sulfate levels are

approximately 30 to 40 mg/L in the B-zone. The pilot area wells indicate nearly complete sulfate elimination, and a substantial area of sulfate reduction was observed in 2006 in the plume core in the Sherwood Lane/Kingsbridge Road area extending to Orlando Drive. This degree of sulfate reduction is lessened in 2008, although a zone in the vicinity of MW-B1 in the plume core remains reduced.

Sulfate reduction in the C-zone is inconsistent outside of the AISB pilot area, in which complete elimination has been achieved, although it appears active in the MW-C31/MW-C37 area. Natural sulfate levels appear to be relatively variable in the C-zone.

- Methane (Figures 26 and 27) is an end product in the reduction of organic compounds, indicating strongly reducing conditions, and is generated at high levels by the AISB system (>5,000 µg/L). Elevated methane concentrations (>1,000 µg/L in MW-B1) correlate with some areas of VOC reduction in the plume core of the B-zone, and methane is generally present throughout the rest of the downgradient plume. In the C-zone, the pattern is similar. In the A-zone methane is detected in some wells which are located adjacent to wetland areas, which may be the source of elevated methane concentrations (MW-A6 and MW-A7 contain 32 µg/L and 150 µg/L, respectively).
- Ethene (Figures 12 and 19) is the ultimate, non-toxic, daughter product of PCE/TCE/cis-1,2-DCE/vinyl chloride degradation following a reductive pathway, and is generated at high levels by the AISB pilot system (>1,000 µg/L). It is present in the former North Lagoon vicinity wells (between 24 µg/L and 180 µg/L in wells MW-C13, MW-C33, and MW-C35), and select plume core wells (540 µg/L in well CTBR). However, ethene is present throughout the downgradient plume, in general, at levels of less than 10 µg/L.
- pH identifies the range within which bacterial populations exist or may be stressed. The range of pH measured in 2009 is generally 6.0-8.0, conducive to bacterial growth and sustainability.
- Alkalinity can be an indicator of biological processes, as the result of bacterial processes that form carbon dioxide. However, natural levels of alkalinity can mask changes due to natural attenuation. Though carbon dioxide is not produced in reductive dechlorination, it is a product of anaerobic oxidation processes, such as sulfate reduction. The Site data show high variability, and do not conclusively support or deny the presence of an anaerobic oxidation pathway.
- Elevated chloride concentrations can indicate areas of substantially active reductive dechlorination, where chloride is produced. Background concentrations, if elevated or highly variable, may mask the production of chloride through natural attenuation. The Site data indicate that chloride concentrations are variable and a reliable background concentration is not identifiable.

In summary, the distribution of terminal electron acceptors, electron donors, geochemical indicators, biogenic gases, and daughter product formation indicate that biodegradation processes are occurring in the plume core area downgradient from the active pilot system. Dissolved oxygen and oxidation-reduction potential data show oxygen depletion and reducing conditions predominate in the B- and C-zones. Sulfate reduction, iron reduction, and methane production are all occurring to some degree. These processes are known to degrade the types of organic COCs present at the Site. Additionally, an anaerobic oxidation pathway appears to be occurring that may be transforming cis-1,2-DCE and vinyl chloride to carbon dioxide. It is therefore reasonable to conclude that the observed reduction in contaminant concentrations in the downgradient plume core area is at least partially attributable to natural biologic processes. With adequate nutrient supply, these same processes will continue to operate into the future to continue to reduce the contaminant concentration in the downgradient plume.

## 3.7 Residential Well Data

One residential well was sampled as more fully discussed in Section 2.4, and there were no detections of volatile organics as shown in Tables 9 and 10.

# 4.0 AREA WIDE GROUNDWATER MONITORING PLAN

The current offsite groundwater monitoring network was developed primarily from the 1985 and 1988 Remedial Investigations, 1994 Pre-Design Investigation, and 1997 pre-seep area investigation (Section 3.1). With the construction and operation of the groundwater extraction and treatment system along O'Connor Drive, modifications to the offsite groundwater monitoring plan are appropriate[12]. COC concentrations are expected to be attenuated due to the operation of the system as well as continued biotic and abiotic in-situ natural attenuation processes.

The monitoring plan proposed is revised as follows, consistent with recent guidance on groundwater monitoring optimization (EPA, 2005; EPA, 2007). In revising the monitoring plan, the following criteria were considered:

- Maintain same areal coverage of wells for VOC monitoring.
- Eliminate redundancies in areas of high well density or low variation of analytes.
- Focus natural attenuation evaluation on B-zone and C-zone.
- Consider ongoing investigation of former North Lagoon area source zone.

The revisions to the program are summarized by hydrogeologic zone as follows.

- A-zone
  - Laboratory natural attenuation parameters are being discontinued in the A-zone. Field collected NAPs will continue to be gathered (e.g., ORP, DO and ferrous iron), however A-zone VOC impacts are discontinuous and while some natural attenuation processes are occurring (methane generation), the distribution of NAPs is not generally correlative with the VOC impacts.
- B-zone
  - Five wells are eliminated from all sampling for specific reasons presented in Table 13.
  - Four additional wells are eliminated from laboratory analyte NAP monitoring since variation across the downgradient area is relatively low for NAPs. Complete coverage of the downgradient area is retained except for the western lateral area, where monitoring well MW-1A has not exhibited NAP values markedly different from MW-B5.
- C-zone
  - Three wells are eliminated from all sampling for specific reasons presented in Table 13.
  - Five additional wells are eliminated from laboratory analyte NAP monitoring since variation across the downgradient area is relatively low for NAPs. Complete coverage of downgradient area is retained.
  - Monitoring wells MW-C41, MW-C42, MW-C47, MW-C48, MW-C53, MW-C54, MW-C55 on the former General Hose property, and P-SC15, P-SC16, P-SC17 and PW-SC15 have all been sampled for purposes of delineating the source area and downgradient of the former North Lagoon area. The extent to which these wells will be included in the long term area wide monitoring program will be determined in

[12] Modifications to the groundwater extraction system monitoring plan will be submitted in a separate document.

conjunction with completion of the source area program. In the short term, these wells will be sampled as shown in Table 13. Monitoring wells P-C15 and P-DC15, also sampled in conjunction with, but screened deeper within the bedrock than, the wells above, were sampled as part of the 2009 area-wide event and exhibited relatively low VOCs (Table 3), and will not be included in the program.

- D-zone
  - The D-zone monitoring methods remain the same as conducted in 2008 with EPA approval, including sampling for VOCs with passive diffusion bag (PDB) samplers. Because of the generally low impacts and downward trends exhibited, the D-zone is proposed to be monitored every three years.

The revised plan is presented in Table 13 and on Figure 29. Table 13 provides a rationale for the changes in monitoring on a per well basis. Overall the number of monitoring wells to be sampled has been reduced from 73 to 62. In addition, the number of wells to be sampled for laboratory analysis of natural attenuation parameters is reduced from 67 to 36.

## 5.0 SUMMARY

The 2009 area-wide groundwater sampling event included wells of the downgradient plume, AISB Pilot wells, and groundwater extraction and monitoring wells in the vicinity of the O'Connor Drive groundwater extraction and treatment system. All wells were sampled during operation of the O'Connor Drive pumping system. The sampling program consisted of the following:

- Water level measurements at 128 wells.
- Sampling of 118 monitoring wells in the area-wide, AISB pilot, and groundwater extraction system networks. The event was conducted during the operation of the extraction system, and constituted the annual sampling event in accordance with the O&M Plan for the extraction system.
- Sampling of one residential water source on Carlos Drive.

The results of the 2009 area-wide groundwater sampling event and the associated assessment of historic concentration trends and natural attenuation indicator parameters lead to the following conclusions:

- The decline in TCE levels in the B-zone plume continues and multiple wells in the plume core exhibit reductions from historic levels of over 80% or 90% and have continued the separation of the downgradient plume from the source area. Overall, the 10,000 µg/L TCE contour no longer exists in the B-zone and TCE levels in the C-zone have declined such that the 10,000 µg/L contour is limited to the immediate vicinity of the Caldwell Trucking property.
- Operation of the pumping system has isolated the source area from the downgradient plume in the C-zone plume and created a zone of much reduced concentrations between O'Connor Drive and the immediately downgradient monitoring wells.
- Plume mass calculations indicate that the TCE plume mass has decreased by approximately 77% since 1988.
- Substantial declines in parent compounds PCE and TCE, and in daughter compounds, have occurred in the core of the B-zone plume between Sherwood Lane and Kingsbridge Road, indicating that no buildup of daughter products has occurred. Sulfate reduction and methanogenesis are present in this area and a direct degradation pathway which does not produce vinyl chloride may be occurring.
- The results of Mann-Kendall statistical testing indicate stable (33) or decreasing (21) trends in total COCs in the 56 wells with sufficient data record to allow statistical analysis (wells with increasing trends are discussed below). The testing indicates that decreasing trends are substantial in the plume core, on-property area outside of the pilot test, and the toe of the plume. Linear regression analysis generally supports the Mann-Kendall results.
- Wells along the eastern fringe of the plume show no evidence of lateral expansion. On the western fringe, some increasing trends are indicated, however, plume core trends are stable or downward, suggesting that other sources identified in the ROD may be contributing to the contamination on the western fringe.
- B-zone and C-zone wells on the Caldwell property lateral to the pilot test area show advanced patterns of reductive dechlorination due to natural attenuation.
- B-zone and C-zone wells at the toe of the plume (adjacent to the Passaic River) show stable and decreasing trends. In the B-zone well, total COC concentrations have declined 94% over the period of record.

- Assessment of natural attenuation parameters indicates that several active biologic processes likely are occurring to varying degrees within the plume, including denitrification, iron reduction, sulfate reduction, methanogenesis and anaerobic oxidation. These observations are supported by both assessments of electron acceptor gradients, the coincident occurrence of consistent dissolved oxygen and ORP environments as well as the levels of daughter products relative to parent compounds.
- The residential well sampled was non-detect for contaminants of concern, which has been the result for residential wells since sampling began.

In summary, current and historic data indicate that the plume downgradient of the Caldwell Trucking Site is attenuating due to natural biodegradation processes. This has resulted in the reduction in area and extent of the core of the plume in the B-zone, including the elimination of any TCE concentrations greater than 10,000 µg/L in this zone. Total COC and TCE concentrations are also decreasing in the C-zone. The concentration trends, plume mass data, and geochemical data provide consistent lines of evidence that natural attenuation is occurring and that it is occurring at a rate that exceeds the contaminant loading from the source. Potential groundwater receptors are currently protected and there is continuing evidence that the areal extent of the plume is reducing.

A revised groundwater monitoring plan is proposed and with EPA's approval, the revised plan will be implemented in 2011. The current offsite groundwater monitoring network was developed from historic remedial investigations. With the construction and operation of the groundwater extraction and treatment system along O'Connor Drive, modifications to the long term offsite groundwater monitoring plan as proposed in Table 13 are appropriate.

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**Table 1**
**Monitoring Well Construction Information and Synoptic Water Level Elevations**
**2009 Area Wide Sampling**
**Caldwell Trucking Superfund Site**

| Well ID | Location or Zone | Zone | Ground Surface Elevation | Top of Casing Elevation | Top of Screen | | Bottom of Screen | | | Sounded Well Depth 2009 | Depth to Groundwater 11/30/09 | Groundwater Elevation 11/30/09 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (ft msl) | (ft msl) | (ft bgs) | (ft msl) | (ft bgs) | (ft msl) | (ft btoc) | (ft btoc) | (ft btoc) | (ft msl) |
| CTBR* | Plume Core | C | 178.79 | 181.59 | 66 | 112.79 | 134 | 44.79 | 136.80 | 135.10 | 10.96 | 170.63 |
| CTMW-1 | Plume Core | B | 177.38 | 178.99 | 20 | 157.38 | 30 | 147.38 | 31.61 | 30.15 | 9.88 | 169.11 |
| MW-1* | Lateral Extent | C | 169.16 | 170.89 | 55 | 114.16 | 110.8 | 58.36 | 112.53 | 112.53 | 2.66 | 168.23 |
| MW-1A | Lateral Extent | B | 168.83 | 171.40 | 42 | 126.83 | 62 | 106.83 | 64.57 | 61.47 | 3.94 | 167.46 |
| MW-4A[d1] | Upgradient | B | 190.28 | 192.24 | 23 | 167.28 | 43 | 147.28 | 44.96 | 48.45 | 23.53 | 168.71 |
| MW-A1 | Plume Core | A | 174.65 | 174.31 | 5 | 169.65 | 12 | 162.65 | 11.66 | 9.97 | 3.99 | 170.32 |
| MW-A10 | Lateral Extent | A | 167.87 | 168.48 | 5 | 162.87 | 15 | 152.87 | 15.61 | 14.06 | 2.95 | 165.53 |
| MW-A11 | Lateral Extent | A | 174.59 | 174.34 | 15 | 159.59 | 25 | 149.59 | 24.75 | 24.31 | 5.73 | 168.61 |
| MW-A2 | Plume Core | A | 167.88 | 167.45 | 3 | 164.88 | 13 | 154.88 | 12.57 | 12.35 | 2.50 | 164.95 |
| MW-A3 | Toe of Plume | A | 165.16 | 167.01 | 5 | 160.16 | 15 | 150.16 | 16.85 | NM | NM | NA |
| MW-A4 | Plume Core | A | 173.43 | 173.20 | 4 | 169.43 | 14 | 159.43 | 13.77 | 13.41 | 7.13 | 166.07 |
| MW-A5 | Lateral Extent | A | 172.06 | 171.94 | 6.5 | 165.56 | 16.5 | 155.56 | 16.38 | 15.29 | 3.71 | 168.23 |
| MW-A6 | Lateral Extent | A | 168.68 | 168.24 | 7 | 161.68 | 17 | 151.68 | 16.56 | 16.84 | 2.48 | 165.76 |
| MW-A7 | Lateral Extent | A | 170.58 | 170.43 | 4 | 166.58 | 14 | 156.58 | 13.85 | 13.31 | 9.87 | 160.56 |
| MW-A9[d2] | Toe of Plume | A | 168.13 | 167.97 | 3 | 165.13 | 13 | 155.13 | 12.84 | NM | Flush | 167.97 |
| MW-B1 | Plume Core | B | 174.69 | 174.34 | 30 | 144.69 | 40 | 134.69 | 39.65 | 38.76 | 5.92 | 168.42 |
| MWB-1 (Seep) | Pre-Seep Area | B | 170.00 | 171.98 | 40 | 130.00 | 45 | 125.00 | 46.98 | 47.00 | 4.13 | 167.85 |
| MW-B10 | Lateral Extent | B | 168.88 | 168.55 | 40 | 128.88 | 50 | 118.88 | 49.67 | 49.11 | 1.46 | 167.09 |
| MW-B11 | Plume Core | B | 187.62 | 187.41 | 19 | 168.62 | 29 | 158.62 | 28.79 | 28.84 | 18.44 | 168.97 |
| MW-B12 | North Lagoon | B | 199.5 | 201.56 | 24.7 | 174.80 | 34.6 | 164.90 | 36.66 | 37.22 | 31.96 | 169.60 |
| MW-B13 | North Lagoon | B | 213.42 | 215.14 | 27.7 | 185.72 | 37.7 | 175.72 | 39.42 | 40.08 | DRY | <175.72 |
| MW-B14 | Pilot Area | B | 189.89 | 191.84 | 48.58 | 141.31 | 58.58 | 131.31 | 60.53 | 60.49 | 22.13 | 169.71 |
| MW-B16 | On Property | B | 197.56 | 199.30 | 25.8 | 171.76 | 30.8 | 166.76 | 32.54 | 32.87 | 27.83 | 171.47 |
| MW-B19 | Pilot Area | B | 193.93 | 195.60 | 48.16 | 145.77 | 58.16 | 135.77 | 59.83 | 59.99 | 25.42 | 170.18 |
| MW-B2 | Plume Core | B | 167.82 | 167.42 | 35 | 132.82 | 45 | 122.82 | 44.60 | 43.72 | > casing | NA |
| MWB-2 (Seep) | Pre-Seep Area | B | 172.32 | 174.26 | 46.5 | 125.82 | 51.5 | 120.82 | 53.44 | 7.24 | 6.25 | 168.01 |
| MW-B20 | Pilot Area | B | 190.8 | 192.63 | 41 | 149.80 | 51 | 139.80 | 52.83 | 50.96 | 22.85 | 169.78 |
| MW-B21 | Pilot Area | B | 194.2 | 195.34 | 39 | 155.20 | 49 | 145.20 | 50.14 | 48.26 | 24.99 | 170.35 |
| MW-B22 | Pilot Area | B | 188.3 | 190.43 | 45.9 | 142.40 | 55.9 | 132.40 | 58.03 | 53.59 | 20.73 | 169.70 |
| MW-B23 | Pilot Area | B | 192.2 | 194.74 | 42.1 | 150.10 | 52.1 | 140.10 | 54.64 | 51.14 | 25.03 | 169.71 |
| MW-B24 | O'Connor Drive Area | B | 184.9 | 187.15 | 42 | 142.90 | 52 | 132.90 | 54.25 | 53.43 | 17.63 | 169.52 |
| MW-B25 | O'Connor Drive Area | B | 185.4 | 185.20 | 40 | 145.40 | 50 | 135.40 | 49.80 | 48.79 | 15.99 | 169.21 |
| MW-B26 | O'Connor Drive Area | B | 187.6 | 182.11 | 40 | 147.60 | 50 | 137.60 | 44.51 | 49.28 | 12.79 | 169.32 |
| MW-B27 | O'Connor Drive Area | B | 181.0 | 180.44 | 44.2 | 136.80 | 54.2 | 126.80 | 53.64 | 53.83 | 11.83 | 168.61 |
| MW-B3 | Toe of Plume | B | 165.05 | 167.15 | 40 | 125.05 | 50 | 115.05 | 52.10 | 51.53 | 2.89 | 164.26 |
| MW-B30 | Heisler Property | B | 194.4 | 193.89 | 55 | 139.40 | 65 | 129.40 | 64.49 | 60.71 | 25.07 | 168.82 |
| MW-B34 | North Lagoon | B | 207.6 | 209.14 | 25 | 182.60 | 35 | 172.60 | 36.54 | 35.57 | 8.43 | 200.71 |
| MW-B4 | Plume Core | B | 173.68 | 173.52 | 44.5 | 129.18 | 54.5 | 119.18 | 54.34 | 53.84 | 7.35 | 166.17 |
| MW-B43 | Nat'l Precision Tool | B | 188.5 | 188.27 | 35 | 153.50 | 45 | 143.50 | 44.77 | 44.60 | 19.13 | 169.14 |
| MW-B45 | Deli | B | 179.1 | 178.92 | 33 | 146.10 | 43 | 136.10 | 42.82 | 41.72 | 9.73 | 169.19 |
| MW-B46 | Rick's Gym | B | 177.4 | 177.21 | 52 | 125.40 | 62 | 115.40 | 61.81 | 43.64 | 7.97 | 169.24 |
| MW-B48 | Carlos Drive | B | 175.0 | 174.66 | 30 | 145.00 | 40 | 135.00 | 39.66 | 32.41 | 5.70 | 168.96 |
| MW-B5 | Lateral Extent | B | 171.99 | 171.74 | 52 | 119.99 | 62 | 109.99 | 61.75 | 59.61 | 3.72 | 168.02 |
| MW-B52 | Pet Lovers | B | 176.9 | 176.63 | 40 | 136.90 | 50 | 126.90 | 49.73 | 48.35 | 7.57 | 169.06 |
| MW-B6 | Plume Core | B | 168.52 | 168.00 | 40 | 128.52 | 50 | 118.52 | 49.48 | 47.63 | 1.39 | 166.61 |
| MW-B7 | Lateral Extent | B | 170.75 | 170.32 | 30 | 140.75 | 40 | 130.75 | 39.57 | 39.16 | 7.42 | 162.90 |
| MW-B9[d2] | Toe of Plume | B | 168.12 | 168.01 | 38 | 130.12 | 48 | 120.12 | 47.89 | NM | 3.88 | 164.13 |
| MW-BL1 | Plume Core | B | 178.32 | 180.35 | 8 | 170.32 | 18 | 160.32 | 20.03 | 19.44 | 11.79 | 168.56 |
| MW-BL2 | Plume Core | B | 178.4 | 178.13 | 7 | 171.40 | 17 | 161.40 | 16.73 | 13.89 | 8.91 | 169.22 |
| MWC-1 (Seep) | Pre-Seep Area | C | 173.26 | 174.79 | 63.5 | 109.76 | 73.5 | 99.76 | 75.03 | 61.90 | 7.00 | 167.79 |
| MW-C10* | Lateral Extent | C | 168.79 | 168.59 | 66 | 102.79 | 102 | 66.79 | 101.80 | NM | 1.55 | 167.04 |
| MW-C11 | Plume Core | C | 187.63 | 187.42 | 56 | 131.63 | 66 | 121.63 | 65.79 | 65.03 | 18.29 | 169.13 |
| MW-C13 | North Lagoon | C | 213.53 | 215.17 | 41.7 | 171.83 | 51.7 | 161.83 | 53.34 | 54.00 | 25.25 | 189.92 |
| MW-C14 | Pilot Area | C | 189.69 | 191.46 | 65.7 | 123.99 | 75.7 | 113.99 | 77.47 | 77.92 | 18.39 | 173.07 |
| MW-C15 | Pilot Area | C | 194.82 | 196.46 | 67.3 | 127.52 | 77.3 | 117.52 | 78.94 | 79.26 | 23.95 | 172.51 |
| MW-C16 | On Property | C | 198.17 | 199.43 | 53 | 145.17 | 63 | 135.17 | 64.26 | 63.85 | 28.25 | 171.18 |
| MW-C17 | On Property | C | 220.0 | 223.84 | 47.3 | 172.70 | 57.3 | 162.70 | 61.14 | 59.00 | 44.84 | 179.00 |
| MW-C18[d3] | On Property | C | 214.16 | 215.66 | 42.7 | 171.46 | 52.7 | 161.46 | 54.20 | NM | 42.37 | 173.29 |
| MW-C19 | Pilot Area | C | 193.83 | 196.20 | 65.75 | 128.08 | 75.75 | 118.08 | 78.12 | 78.26 | 22.05 | 174.15 |
| MW-C20 | Pilot Area | C | 190.4 | 192.29 | 67 | 123.40 | 77 | 113.40 | 78.89 | 73.81 | 20.88 | 171.41 |
| MW-C21 | Pilot Area | C | 195.0 | 196.84 | 67 | 128.00 | 77 | 118.00 | 78.84 | 76.89 | 22.23 | 174.61 |
| MW-C22 | Pilot Area | C | 187.9 | 190.54 | 67 | 120.90 | 77 | 110.90 | 79.64 | 74.94 | 20.79 | 169.75 |
| MW-C23 | Pilot Area | C | 192.0 | 193.96 | 66.79 | 125.21 | 76.79 | 115.21 | 78.75 | 76.11 | 20.42 | 173.54 |
| MW-C24 | O'Connor Drive Area | C | 184.9 | 187.33 | 60 | 124.90 | 70 | 114.90 | 72.43 | 73.95 | 15.21 | 172.12 |
| MW-C26 | O'Connor Drive Area | C | 182.6 | 181.91 | 59.6 | 123.00 | 69.6 | 113.00 | 68.91 | 67.45 | 11.09 | 170.82 |
| MW-C27 | O'Connor Drive Area | C | 181.2 | 180.66 | 64.8 | 116.40 | 74.8 | 106.40 | 74.26 | 72.83 | 11.45 | 169.22 |
| MW-C28 | O'Connor Drive Area | C | 180.0 | 182.80 | 60 | 120.00 | 70 | 110.00 | 72.80 | 65.04 | 13.41 | 169.39 |
| MW-C3* | Toe of Plume | C | 165.22 | 166.82 | 61 | 104.22 | 81 | 84.22 | 82.60 | 85.49 | 2.93 | 163.89 |
| MW-C30 | Heisler Property | C | 194.4 | 193.89 | 73 | 121.40 | 83 | 111.40 | 82.49 | 80.82 | 24.47 | 169.42 |
| MW-C31 | Heisler Property | C | 197.67 | 197.38 | 35 | 162.67 | 45 | 152.67 | 44.71 | 46.80 | TOC | 197.38 |
| MW-C33 | North Lagoon | C | 197.7 | 199.29 | 51 | 146.70 | 61 | 136.70 | 62.59 | 60.19 | 29.64 | 169.65 |
| MW-C34 | North Lagoon | C | 207.3 | 209.09 | 45 | 162.30 | 55 | 152.30 | 56.79 | 55.44 | 11.78 | 197.31 |

**Table 1**
**Monitoring Well Construction Information and Synoptic Water Level Elevations**
**2009 Area Wide Sampling**
**Caldwell Trucking Superfund Site**

| Well ID | Location or Zone | Zone | Ground Surface Elevation | Top of Casing Elevation | Top of Screen | | Bottom of Screen | | | Sounded Well Depth 2009 | Depth to Groundwater 11/30/09 | Groundwater Elevation 11/30/09 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (ft msl) | (ft msl) | (ft bgs) | (ft msl) | (ft bgs) | (ft msl) | (ft btoc) | (ft btoc) | (ft btoc) | (ft msl) |
| MW-C35 | North Lagoon | C | 201.5 | 203.02 | 43 | 158.50 | 53 | 148.50 | 54.52 | 52.56 | 33.31 | 169.71 |
| MW-C37 | Heisler Property | C | 200.8 | 202.63 | 60 | 140.80 | 70 | 130.80 | 71.83 | 71.74 | 33.32 | 169.31 |
| MW-C38 | Heisler Property | C | 194.9 | 194.58 | 55 | 139.90 | 65 | 129.90 | 64.68 | 55.05 | 0.78 | 193.80 |
| MWC-4 (Seep) | Pre-Seep Area | C | 172.15 | 174.33 | 44.85 | 127.30 | 49.85 | 122.30 | 52.03 | 47.41 | 6.25 | 168.08 |
| MW-C41 | General Hose property | C | 188.0 | 187.33 | 66 | 122.00 | 76 | 112.00 | 75.33 | 73.13 | 16.17 | 171.16 |
| MW-C42 | General Hose property | C | 185.8 | 185.46 | 72 | 113.80 | 82 | 103.80 | 81.66 | 78.47 | 16.41 | 169.05 |
| MW-C43 | Nat'l Precision Tool | C | 188.40 | 188.20 | 70 | 118.40 | 80 | 108.40 | 79.80 | 79.90 | 18.86 | 169.34 |
| MW-C44 | Pet Lovers | C | 179.1 | 178.77 | 64 | 115.10 | 74 | 105.10 | 73.67 | 73.61 | 9.44 | 169.33 |
| MW-C45 | Deli | C | 179.0 | 178.66 | 71 | 108.00 | 81 | 98.00 | 80.66 | 80.93 | 9.46 | 169.20 |
| MW-C46 | Rick's Gym | C | 177.5 | 177.27 | 74 | 103.50 | 84 | 93.50 | 83.77 | 83.20 | 8.04 | 169.23 |
| MW-C47 | General Hose property | C | 185.9 | 185.52 | 65 | 120.90 | 75 | 110.90 | 74.62 | 74.00 | 16.20 | 169.32 |
| MW-C48 | Carlos Drive | C | 174.8 | 174.50 | 63 | 111.80 | 73 | 101.80 | 72.70 | 73.29 | 5.31 | 169.19 |
| MW-C5 | Lateral Extent | C | 171.96 | 171.74 | 130 | 41.96 | 140 | 31.96 | 139.78 | NM | 2.64 | 169.10 |
| MWC-5 (Seep) | Pre-Seep Area | C | 171.52 | 173.54 | 47.5 | 124.02 | 57.5 | 114.02 | 59.52 | 54.22 | 5.41 | 168.13 |
| MW-C52 | Pet Lovers | Cc | 176.8 | 176.46 | 67 | 109.80 | 90 | 86.80 | 89.66 | 87.21 | 7.36 | 169.10 |
| MW-C6* | Plume Core | C | 168.68 | 168.45 | 67 | 101.68 | 115 | 53.68 | 114.77 | 116.17 | 1.51 | 166.94 |
| MW-C7* | Lateral Extent | C | 170.58 | 170.24 | 95 | 75.58 | 143 | 27.58 | 142.66 | 140.02 | 2.86 | 167.38 |
| MW-D1 | Plume Core | D | 174.22 | 174.44 | 187 | -12.78 | 197 | -22.78 | 197.22 | NM | Flowing | >174.44 |
| MW-D10 | Lateral Extent | D | 168.64 | 168.23 | 168 | 0.64 | 178 | -9.36 | 177.59 | 136.72 | 0.00 | 168.23 |
| MW-D3 | Toe of Plume | D | 165.43 | 166.97 | 320 | -154.57 | 330 | -164.57 | 331.54 | NM | 0.65 | 166.32 |
| MW-D5 | Lateral Extent | D | 171.93 | 171.61 | 291 | -119.07 | 301 | -129.07 | 300.68 | NM | 2.80 | 168.81 |
| MW-D6 | Plume Core | D | 168.51 | 168.33 | 320 | -151.49 | 330 | -161.49 | 329.82 | NM | 0.75 | 167.58 |
| MW-D7 | Lateral Extent | D | 170.63 | 170.25 | 411 | -240.37 | 421 | -250.37 | 420.62 | NM | 2.97 | 167.28 |
| P-1 | Toe of Plume | B | 169.22 | 170.38 | 48.7 | 120.52 | 53.7 | 115.52 | 54.86 | 55.47 | 6.10 | 164.28 |
| P-1A | Toe of Plume | A | 169.26 | 170.02 | 6.5 | 162.76 | 11.5 | 157.76 | 12.26 | 12.31 | 5.99 | 164.03 |
| P-B16 | Plume Core | B | 174.56 | 174.22 | 32 | 142.56 | 52 | 122.56 | 51.66 | 146.17 | 6.08 | 168.14 |
| P-C15 | Plume Core | C | 172.98 | 172.85 | 135 | 37.98 | 145 | 27.98 | 144.87 | 145.63 | 2.20 | 170.65 |
| P-DC15 | Deep C zone | C | 172.75 | 172.63 | 185 | -12.25 | 195 | -22.25 | 194.88 | NM | Flowing | >172.63 |
| P-SC15 | Plume Core | C | 172.97 | 172.80 | 75 | 97.97 | 95 | 77.97 | 94.83 | 94.44 | 4.61 | 168.19 |
| P-SC16 | Plume Core | C | 174.54 | 174.13 | 75 | 99.54 | 95 | 79.54 | 94.59 | 95.21 | 5.93 | 168.20 |
| P-SC17 | Plume Core | C | 174.50 | 174.68 | 50 | 124.50 | 70 | 104.50 | 70.18 | 68.40 | 6.26 | 168.42 |
| PW-B15 | Plume Core | B | 173.62 | 173.42 | 28 | 145.62 | 43 | 130.62 | 42.80 | 40.14 | 5.22 | 168.20 |
| PW-SC15 | Plume Core | C | 173.39 | 173.11 | 60 | 113.39 | 85 | 88.39 | 84.72 | 84.99 | 4.83 | 168.28 |
| PZ-B32 | O'Connor Drive Area | B | 183.6 | 183.22 | 40 | 143.60 | 50 | 133.60 | 49.62 | 48.16 | 14.02 | 169.20 |
| PZ-B34 | O'Connor Drive Area | B | 177.2 | 176.94 | 34 | 143.20 | 44 | 133.20 | 43.74 | 44.38 | 7.64 | 169.30 |
| PZ-B35 | O'Connor Drive Area | B | 178.0 | 177.61 | 32 | 146.00 | 42 | 136.00 | 41.61 | 41.73 | 8.38 | 169.23 |
| PZ-B36 | O'Connor Drive Area | B | 179.0 | 178.62 | 34 | 145.00 | 44 | 135.00 | 43.62 | 43.89 | 9.42 | 169.20 |
| PZ-B37 | O'Connor Drive Area | B | 180.7 | 180.43 | 35 | 145.70 | 45 | 135.70 | 44.73 | 45.03 | 11.19 | 169.24 |
| PZ-B38 | O'Connor Drive Area | B | 187.4 | 186.79 | 43 | 144.40 | 53 | 134.40 | 52.39 | 52.66 | 17.69 | 169.10 |
| PZ-B49 | O'Connor Drive Area | B | 178.1 | 177.89 | 29 | 149.10 | 39 | 139.10 | 38.79 | 38.94 | 8.71 | 169.18 |
| PZ-B50 | O'Connor Drive Area | B | 178.5 | 178.30 | 33 | 145.50 | 43 | 135.50 | 42.80 | 42.08 | 9.02 | 169.28 |
| PZ-B51 | O'Connor Drive Area | B | 179.7 | 179.47 | 33 | 146.70 | 43 | 136.70 | 42.77 | 41.69 | 10.25 | 169.22 |
| PZ-C32 | O'Connor Drive Area | Cc | 183.9 | 183.54 | 55 | 128.90 | 78 | 105.90 | 77.64 | 77.46 | 14.82 | 168.72 |
| PZ-C32D | O'Connor Drive Area | C | 184.3 | 183.94 | 68 | 116.30 | 78 | 106.30 | 77.64 | 47.59 | 14.71 | 169.23 |
| PZ-C34 | O'Connor Drive Area | Cc | 177.5 | 177.22 | 49 | 128.50 | 72 | 105.50 | 71.72 | 70.04 | 7.73 | 169.49 |
| PZ-C35 | O'Connor Drive Area | Cc | 178.1 | 177.87 | 47 | 131.10 | 70 | 108.10 | 69.77 | 69.51 | 8.72 | 169.15 |
| PZ-C36 | O'Connor Drive Area | Cc | 179.1 | 178.94 | 47 | 132.10 | 70 | 109.10 | 69.84 | 66.64 | 9.47 | 169.47 |
| PZ-C37 | O'Connor Drive Area | Cc | 180.8 | 180.37 | 49 | 131.80 | 72 | 108.80 | 71.57 | 69.76 | 11.19 | 169.18 |
| PZ-C38 | O'Connor Drive Area | Cc | 187.7 | 187.39 | 57 | 130.70 | 80 | 107.70 | 79.69 | 81.52 | 18.72 | 168.67 |
| PZ-C49 | O'Connor Drive Area | Cc | 178.2 | 177.94 | 62 | 116.20 | 85 | 93.20 | 84.74 | 83.71 | 8.74 | 169.20 |
| PZ-C50 | O'Connor Drive Area | Cc | 178.4 | 178.22 | 56 | 122.40 | 79 | 99.40 | 78.82 | 78.25 | 9.03 | 169.19 |
| PZ-C51 | O'Connor Drive Area | Cc | 179.5 | 179.30 | 51 | 128.50 | 74 | 105.50 | 73.80 | 73.49 | 10.11 | 169.19 |
| RW-1** | O'Connor Drive Area | Cc | 182.0 | 181.13 | 54.5 | 127.50 | 77.5 | 104.50 | 76.63 | 76.04 | 34.68 | 146.45 |
| RW-2** | O'Connor Drive Area | Cc | 187.1 | 186.31 | 57 | 130.10 | 80 | 107.10 | 79.21 | 79.08 | 38.99 | 147.32 |
| RW-3** | O'Connor Drive Area | Cc | 178.6 | 177.77 | 57 | 121.60 | 80 | 98.60 | 79.17 | 80.22 | 35.03 | 142.74 |
| RW-4** | O'Connor Drive Area | Cc | 176.9 | 176.09 | 60 | 116.90 | 80 | 96.90 | 79.19 | 78.89 | 35.75 | 140.34 |
| TW-2 | North Lagoon | C | NA | 208.38 | 52 | NA | 72 | NA | NA | 72.37 | 6.98 | 201.40 |

CHECKED: SLJ 120809

Notes:

| | | | |
|---|---|---|---|
| ft msl | = feet mean sea level | | |
| ft bgs | = feet below ground surface | d2 | = data collected on alternate date, 12/9/09 |
| TOC | = water level at top of casing | d3 | = data collected on alternate date, 12/2/09 |
| Cc | = C zone and "cobble zone" | NM | = not measured |
| d1 | = data collected on alternate date, 12/4/09 | NA | = not applicable/water elevation not calculated |

* Open hole within bedrock

** RW wells are pumping wells of extraction system and operating at time of measurement

**Table 2**
**Groundwater Field Parameter Summary**
**2009 Area Wide Sampling**
**Caldwell Trucking Superfund Site**

| Well ID | Zone | Sample Date | Temperature [°C] | pH [std] | Specific Conductance [mS/cm] | Turbidity [ntu] | Dissolved Oxygen [mg/l] | Redox Potential [mV] | Ferrous Iron [mg/L] | Depth to Water [ft-btoc] |
|---|---|---|---|---|---|---|---|---|---|---|
| 31 Carlos | n/a | 12/8/2009 | 14.1 | 7.79 | 0.824 | 0.0 | 2.93 | 78 | 0.0 | NM |
| CTBR | C | 11/19/2009 | 13.9 | 8.57 | 0.370 | 25.2 | 0.00 | -214 | 0.0 | 13.00 |
| CTMW-1 | B | 12/1/2009 | 15.4 | 7.18 | 0.394 | 2.4 | 0.82 | 55 | 0.0 | 9.89 |
| MW-1 | C | 12/2/2009 | 14.7 | 8.26 | 0.294 | 181.0 | 0.10 | -128 | 0.0 | 2.51 |
| MW-1A | B | 12/2/2009 | 15.0 | 7.96 | 0.503 | 14.0 | 0.49 | -8 | 0.0 | 3.90 |
| MW-4A | B | 12/4/2009 | 14.0 | 8.06 | 0.682 | 70.0 | 0.02 | 71 | 0.0 | 23.53 |
| MW-A1 | A | 12/7/2009 | 6.2 | 7.78 | 0.163 | 82.4 | 9.47 | 146 | 0.0 | 2.99 |
| MW-A2 | A | 12/9/2009 | 12.9 | 6.35 | 0.535 | 89.2 | 3.18 | 45 | 0.0 | 1.35 |
| MW-A3 | A | 12/8/2009 | 14.1 | 7.06 | 1.460 | 0.0 | 2.50 | -23 | 0.0 | 5.00 |
| MW-A4 | A | 12/8/2009 | 15.4 | 7.53 | 0.829 | 0.0 | 0.13 | -49 | 0.0 | 6.92 |
| MW-A6 | A | 12/2/2009 | 14.7 | 7.04 | 0.950 | 6.9 | 0.00 | 35 | 0.0 | 2.34 |
| MW-A7 | A | 12/4/2009 | 13.7 | 6.66 | 1.360 | > 1000 | 5.93 | -35 | 0.0 | 9.22 |
| MW-A9 | A | 12/9/2009 | 12.4 | 6.11 | 0.261 | 12.7 | 0.00 | 91 | 0.0 | 0.00 |
| MW-A10 | A | 12/8/2009 | 12.6 | 6.81 | 1.330 | 176.0 | 0.00 | -133 | 1.0 | 2.17 |
| MW-A11 | A | 12/3/2009 | 13.8 | 7.23 | 0.467 | 8.2 | 2.62 | 113 | 0.0 | 5.55 |
| MW-B2 | B | 12/9/2009 | 13.0 | 7.63 | 0.488 | 6.5 | 2.93 | 92 | 0.0 | 0.00 |
| MW-B3 | B | 12/8/2009 | 12.5 | 7.14 | 0.551 | 6.9 | 0.08 | 1 | 0.0 | 2.78 |
| MW-B4 | A | 12/8/2009 | 13.3 | 7.50 | 0.723 | 7.4 | 0.00 | 0 | 0.0 | 6.99 |
| MW-B5 | B | 12/8/2009 | 14.8 | 7.29 | 0.532 | 0.0 | 0.02 | -154 | 0.6 | 3.61 |
| MW-B6 | B | 12/2/2009 | 13.0 | 7.10 | 0.723 | 21.3 | 0.00 | 72 | 0.0 | 1.28 |
| MW-B7 | B | 12/4/2009 | 14.0 | 8.03 | 0.495 | 105.0 | 0.06 | -182 | 0.0 | 6.90 |
| MW-B9 | B | 12/9/2009 | 11.8 | 7.08 | 0.313 | 127.0 | 0.00 | -76 | 0.0 | 3.88 |
| MW-B10 | B | 12/8/2009 | 12.6 | 7.08 | 0.771 | 7.6 | 0.00 | 50 | 0.0 | 1.12 |
| MW-B11 | B | 11/20/2009 | 18.5 | 6.91 | 0.447 | 56.2 | 0.30 | 64 | 0.0 | 18.52 |
| MW-B12 | B | 11/23/2009 | 17.0 | 6.92 | 0.970 | 95.7 | 0.48 | 132 | 0.0 | 32.02 |
| MW-B14 | B | 11/16/2009 | 15.5 | 6.74 | 1.020 | 0.0 | 0.00 | -231 | 2.2 | 22.11 |
| MW-B16 | B | 11/30/2009 | 14.9 | 6.41 | 0.432 | 106.0 | 0.28 | 124 | 0.0 | 27.87 |
| MW-B19 | B | 11/17/2009 | 15.4 | 6.22 | 4.780 | 45.4 | 1.19 | -161 | 3.0 | 25.36 |
| MW-B20 | B | 11/16/2009 | 14.9 | 6.10 | 5.040 | 249.0 | 0.33 | -235 | 1.1 | 22.57 |
| MW-B21 | B | 11/18/2009 | 15.5 | 6.12 | 4.650 | 169.0 | 0.00 | -182 | 2.4 | 25.00 |
| MW-B22 | B | 11/16/2009 | 14.9 | 6.75 | 0.580 | 46.9 | 0.00 | -163 | 0.4 | 19.73 |
| MW-B23 | B | 11/16/2009 | 15.9 | 6.48 | 0.717 | 475.0 | 0.00 | -128 | 1.1 | 25.02 |
| MW-B24 | B | 11/17/2009 | 13.7 | 6.89 | 0.826 | 33.1 | 0.00 | -129 | 0.0 | 17.70 |
| MW-B25 | B | 11/17/2009 | 15.0 | 6.80 | 0.707 | 47.0 | 0.00 | -167 | 0.6 | 16.02 |
| MW-B26 | B | 11/17/2009 | 14.0 | 7.24 | 0.509 | 20.8 | 0.00 | -2 | 0.0 | 12.60 |
| MW-B27 | B | 11/18/2009 | 13.5 | 6.72 | 0.572 | 0.0 | 0.00 | -39 | 0.3 | 11.25 |
| MW-B30 | B | 11/25/2009 | 15.2 | 6.83 | 0.433 | 214.0 | 0.00 | -20 | 0.6 | 25.00 |
| MW-B34 | B | 11/23/2009 | 13.4 | 7.16 | 0.933 | 87.7 | 0.38 | 67 | 0.8 | 8.47 |
| MW-B43 | B | 11/20/2009 | 14.7 | 6.86 | 0.572 | 10.8 | 0.00 | 63 | 0.0 | 19.25 |
| MW-B45 | B | 11/20/2009 | 14.6 | 7.72 | 0.621 | 69.7 | 0.00 | 20 | 0.5 | 9.79 |
| MW-B46 | B | 11/24/2009 | 14.5 | 6.97 | 0.471 | 38.0 | 0.14 | 84 | 0.6 | 8.00 |
| MW-B48 | B | 12/3/2009 | 13.1 | 10.21 | 0.431 | 94.1 | 4.76 | 18 | 0.0 | 4.53 |
| MW-B52 | B | 12/1/2009 | 14.0 | 7.23 | 0.383 | 36.7 | 0.23 | 31 | 0.0 | 7.61 |
| MW-BL1 | B | 12/2/2009 | 14.1 | 5.93 | 0.267 | 10.0 | 0.00 | 105 | 0.0 | 11.96 |
| MW-BL2 | B | 12/2/2009 | 18.6 | 6.69 | 0.519 | 20.0 | 0.17 | -112 | 3.6 | 9.63 |
| MWB-1 (Seep) | B | 12/3/2009 | 13.1 | 7.67 | 0.605 | 33.2 | 0.22 | -29 | 0.0 | 4.18 |
| MWB-2 (Seep) | B | 3/3/2010 | 13.1 | 7.47 | 0.760 | 3.0 | 0.00 | -1 | 0.0 | 5.95 |
| MW-C3 | C | 12/8/2009 | 12.6 | 8.47 | 0.379 | 5.0 | 0.15 | 24 | 0.0 | 3.80 |
| MW-C5 | C | 12/8/2009 | 12.1 | 8.99 | 0.569 | 65.7 | 0.00 | -145 | 0.0 | 2.61 |
| MW-C6 | C | 12/2/2009 | 13.4 | 7.51 | 0.470 | 47.3 | 0.04 | -114 | 0.0 | 1.45 |
| MW-C7 | C | 12/4/2009 | 13.4 | 8.02 | 0.438 | 61.0 | 0.00 | 14 | 0.0 | 2.91 |
| MW-C10 | C | 12/8/2009 | 13.7 | 7.81 | 0.914 | 0.0 | 0.07 | -26 | 0.0 | 1.34 |
| MW-C11 | C | 11/20/2009 | 15.7 | 7.90 | 0.690 | 17.1 | 0.00 | -33 | 0.0 | 18.00 |
| MW-C13 | C | 12/8/2009 | 11.4 | 6.83 | 0.999 | 616.0 | 2.05 | 59 | 0.0 | 45.15 |
| MW-C14 | C | 11/16/2009 | 14.6 | 6.35 | 3.830 | 207.0 | 0.50 | -134 | 4.0 | 17.79 |
| MW-C15 | C | 11/16/2009 | 13.6 | 9.34 | 0.428 | 28.9 | 3.72 | -58 | 0.0 | 23.79 |
| MW-C16 | C | 11/30/2009 | 14.7 | 7.51 | 0.861 | 77.3 | 0.61 | 11 | 0.0 | 23.49 |
| MW-C17 | C | 11/20/2009 | 13.0 | 11.61 | 1.510 | 31.3 | 2.25 | -110 | 0.0 | 40.40 |
| MW-C18 | C | 12/2/2009 | 15.7 | 7.42 | 0.474 | 349.0 | 4.95 | 96 | 0.0 | 42.37 |
| MW-C19 | C | 11/17/2009 | 12.2 | 6.27 | 6.810 | 68.5 | 5.61 | -115 | 0.6 | 21.76 |
| MW-C20 | C | 11/16/2009 | 11.8 | 6.11 | 5.960 | 826.0 | 0.54 | -109 | 2.6 | 20.25 |
| MW-C21 | C | 11/16/2009 | 12.6 | 6.07 | 3.800 | 152.0 | 1.03 | -116 | 2.2 | 21.68 |
| MW-C22 | C | 11/16/2009 | 15.5 | 6.27 | 8.970 | 764.0 | 7.74 | -101 | 1.6 | 21.87 |
| MW-C23 | C | 11/16/2009 | 13.0 | 6.48 | 1.120 | 126.0 | 0.00 | -74 | 0.6 | 19.99 |
| MW-C24 | C | 11/17/2009 | 10.5 | 6.87 | 9.340 | 39.2 | 4.03 | -126 | 1.0 | 14.70 |
| MW-C26 | C | 11/17/2009 | 13.8 | 6.77 | 2.030 | 12.9 | 0.00 | -180 | 1.0 | 12.89 |
| MW-C27 | C | 11/17/2009 | 14.5 | 6.86 | 0.242 | 21.9 | 0.00 | -138 | 0.2 | 11.24 |
| MW-C28 | C | 11/20/2009 | 13.5 | 11.09 | 0.724 | 36.4 | 0.80 | -96 | 0.0 | 12.70 |
| MW-C30 | C | 11/25/2009 | 15.7 | 7.20 | 0.524 | 43.9 | 0.07 | -31 | 0.0 | 24.33 |
| MW-C31 | C | 12/1/2009 | 11.5 | 7.06 | 0.197 | 56.2 | 0.01 | -130 | 0.2 | 0.00 |
| MW-C33 | C | 11/23/2009 | 14.6 | 7.66 | 1.030 | 541.0 | 0.54 | -156 | 0.7 | 29.37 |
| MW-C34 | C | 11/23/2009 | 13.9 | 7.77 | 0.749 | 43.2 | 0.12 | 11 | 0.0 | 12.82 |
| MW-C35 | C | 11/25/2009 | 12.3 | 7.84 | 0.691 | 207.0 | 0.00 | 4 | 0.2 | 33.27 |
| MW-C37 | C | 12/1/2009 | 14.0 | 10.42 | 0.594 | 46.3 | 0.11 | -141 | 0.0 | 33.24 |

**Table 2**
**Groundwater Field Parameter Summary**
**2009 Area Wide Sampling**
**Caldwell Trucking Superfund Site**

| Well ID | Zone | Sample Date | Temperature [°C] | pH [std] | Specific Conductance [mS/cm] | Turbidity [ntu] | Dissolved Oxygen [mg/l] | Redox Potential [mV] | Ferrous Iron [mg/L] | Depth to Water [ft-btoc] |
|---|---|---|---|---|---|---|---|---|---|---|
| MW-C38 | C | 12/1/2009 | 13.9 | 9.79 | 0.611 | 64.5 | 0.22 | -81 | 0.0 | 0.10 |
| MW-C41 | C | 12/4/2009 | 13.9 | 8.78 | 1.230 | > 1000 | 6.28 | -29 | 0.0 | 15.22 |
| MW-C42 | C | 12/7/2009 | 14.6 | 7.49 | 1.270 | 91.1 | 0.72 | -215 | 0.8 | 16.25 |
| MW-C43 | C | 11/20/2009 | 13.7 | 8.64 | 0.484 | 194.0 | 0.00 | -226 | 0.0 | 17.67 |
| MW-C44 | C | 12/2/2009 | 13.6 | 7.54 | 0.518 | 44.5 | 0.11 | -23 | 0.0 | 9.42 |
| MW-C45 | C | 11/20/2009 | 14.6 | 7.87 | 0.535 | 63.2 | 0.00 | -62 | 0.0 | 9.49 |
| MW-C46 | C | 11/24/2009 | 14.7 | 7.64 | 0.602 | 53.6 | 0.54 | 53 | 0.4 | 8.07 |
| MW-C47 | C | 3/24/2010 | 11.5 | 11.53 | 3.990 | 138.0 | 1.49 | -50 | 0.0 | 13.48 |
| MW-C48 | C | 12/3/2009 | 12.1 | 11.03 | 0.520 | 33.3 | 0.00 | -10 | 0.0 | 5.05 |
| MW-C52 | C | 12/1/2009 | 14.6 | 7.93 | 0.584 | 49.6 | 0.00 | -182 | 0.0 | 7.31 |
| MWC-1 (Seep) | C | 12/3/2009 | 14.0 | 8.16 | 0.468 | 15.7 | 0.23 | 49 | 0.0 | 6.35 |
| MWC-4 (Seep) | C | 12/3/2009 | 14.7 | 7.55 | 0.840 | 5.2 | 0.15 | 58 | 0.0 | 6.24 |
| MWC-5 (Seep) | C | 12/3/2009 | 13.4 | 7.41 | 0.817 | 55.4 | 0.00 | 17 | 0.0 | 5.42 |
| P-1 | B | 12/9/2009 | 14.4 | 7.56 | 0.533 | 27.1 | 0.00 | 33 | 0.0 | 6.76 |
| P-1A | A | 12/9/2009 | 15.3 | 6.32 | 0.475 | 13.3 | 1.61 | 130 | 0.0 | 6.12 |
| P-C15 | C | 12/7/2009 | 12.3 | 10.28 | 0.479 | 130.0 | 2.81 | -219 | 0.1 | 0.79 |
| P-DC15 | C | 12/4/2009 | 12.7 | 7.62 | 0.717 | 2.6 | 2.90 | 89 | 0.0 | 0.00 |
| P-SC15 | C | 12/7/2009 | 12.7 | 8.55 | 0.518 | 302.0 | 1.97 | 76 | 0.0 | 1.54 |
| PW-SC15 | C | 12/4/2009 | 14.9 | 6.91 | 0.848 | 16.3 | 0.01 | 18 | 0.0 | 4.55 |
| PW-B15 | B | 12/4/2009 | 16.2 | 7.44 | 0.922 | 24.1 | 0.00 | -57 | 0.0 | 5.06 |
| P-B16 | B | 12/7/2009 | 15.3 | 7.06 | 0.832 | 114.0 | 0.02 | 1 | 0.0 | 5.92 |
| P-SC16 | C | 12/4/2009 | 15.7 | 8.15 | 0.355 | 21.4 | 0.16 | 35 | 0.0 | 5.29 |
| P-SC17 | C | 12/7/2009 | 12.8 | 6.60 | 0.633 | 62.7 | 3.41 | 133 | 0.0 | 6.08 |
| PZ-B32 | B | 11/19/2009 | 15.0 | 7.13 | 0.725 | 49.1 | 0.00 | -71 | 1.0 | 14.13 |
| PZ-B34 | B | 11/19/2009 | 15.3 | 7.55 | 0.605 | 40.3 | 0.09 | 42 | 0.1 | 7.70 |
| PZ-B35 | B | 11/19/2009 | 14.9 | 7.49 | 0.591 | 16.9 | 0.31 | 37 | 0.0 | 9.50 |
| PZ-B36 | B | 11/19/2009 | 15.2 | 7.19 | 0.626 | 129.0 | 0.00 | -5 | 0.1 | 9.54 |
| PZ-B37 | B | 11/18/2009 | 14.8 | 6.97 | 0.538 | 0.0 | 0.00 | 17 | 0.0 | 11.30 |
| PZ-B38 | B | 11/19/2009 | 13.7 | 7.00 | 0.769 | 14.9 | 0.00 | 46 | 0.0 | 17.75 |
| PZ-B49 | B | 11/24/2009 | 15.8 | 6.99 | 0.613 | 74.8 | 0.43 | 41 | 0.0 | 9.42 |
| PZ-B50 | B | 11/18/2009 | 15.6 | 7.40 | 0.578 | 45.7 | 0.24 | 32 | 0.0 | 9.14 |
| PZ-B51 | B | 11/18/2009 | 15.2 | 7.21 | 0.664 | 81.9 | 0.00 | -25 | 0.0 | 10.29 |
| PZ-C32 | C | 11/19/2009 | 14.1 | 7.52 | 0.675 | 74.8 | 0.00 | -114 | 0.0 | 14.95 |
| PZ-C32D | C | 12/8/2009 | 12.5 | 7.46 | 0.668 | 24.3 | 2.02 | -98 | 0.0 | 14.49 |
| PZ-C34 | C | 11/19/2009 | 14.1 | 7.54 | 0.621 | 29.4 | 0.90 | 64 | 0.1 | 7.82 |
| PZ-C35 | C | 11/19/2009 | 14.3 | 7.54 | 0.600 | 30.4 | 0.67 | 55 | 0.1 | 8.82 |
| PZ-C36 | C | 11/18/2009 | 13.8 | 7.57 | 0.550 | 40.6 | 0.42 | -41 | 0.0 | 9.88 |
| PZ-C37 | C | 11/18/2009 | 14.5 | 7.07 | 0.546 | 149.0 | 0.00 | -89 | 0.0 | 11.30 |
| PZ-C38 | C | 11/19/2009 | 14.3 | 7.10 | 0.685 | 68.3 | 0.00 | -36 | 0.0 | 18.80 |
| PZ-C49 | C | 11/24/2009 | 13.9 | 7.98 | 0.655 | 74.3 | 0.55 | -141 | 0.0 | 8.93 |
| PZ-C50 | C | 11/24/2009 | 13.8 | 7.82 | 0.622 | 70.9 | 0.13 | 41 | 0.4 | 9.18 |
| PZ-C51 | C | 11/24/2009 | 14.6 | 7.45 | 0.619 | 82.6 | 0.00 | 8 | 0.4 | 9.94 |
| RW-1 | C | 11/18/2009 | 14.7 | 7.48 | 0.593 | 2.6 | 3.70 | -154 | 0.6 | NM |
| RW-2 | C | 11/18/2009 | 13.8 | 7.09 | 0.665 | 0.0 | 1.63 | -157 | 0.4 | NM |
| RW-3 | C | 11/18/2009 | 13.6 | 7.35 | 0.559 | 0.0 | 2.36 | -10 | 0.4 | NM |
| RW-4 | C | 11/18/2009 | 14.2 | 7.46 | 0.610 | 0.0 | 3.13 | 20 | 0.4 | NM |
| TW-2 | C | 11/25/2009 | 13.7 | 7.11 | 0.662 | 31.0 | 4.24 | 89 | 0.0 | 6.92 |

CHECKED: ELD 060110

**Abbreviations:**

- °C = Degrees Celcius
- std = standard units
- mS/cm = Millisiemens per centimeter
- ntu = nephelometric turbidity units
- mg/l = milligrams per liter
- mV = millivolts
- ft-btoc = feet below top of casing
- NM = Not Measured

**Wells in program not sampled:**

1. 26 Carlos Drive was a vacant property
2. MW-B13 not sampled as well was dry.

**Notes:**

1. Water level measurements recorded prior to purging for sampling.
2. All monitoring wells were purged using the low flow purge and sampling technique (USEPA, 1998) except as otherwise noted.
3. Due to excessive water level drawdown, the following monitoring wells were purged a minimum of one pump and tubing volume than allowed to recharge in accordance with NJDEP field sampling procedures for low-yield wells: MW-B12, P-C15, P-SC15, MW-C16, MW-C17, MW-C18, MW-C20, MW-C21, MW-C22, MW-C23, MW-C24, MW-C28, MW-C31 and MW-C33.
4. Due to physical constraints in the monitoring the following monitoring wells were purged using a peristaltic pump, then sampled using a teflon bailer and nylon rope: MW-C13 and PZ-C32D.
5. Due to a low water level in the well, the following wells were sampled using volume-average sampling techniques: MW-A7 and MWB-2 (Seep).
6. As monitoring well P-DC15 was artesian, it was sampled using a teflon bailer and nylon rope in accordance with NJDEP volume-average sampling techniques.

# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | CTBR 11/19/2009 N | | | CTMW-1 12/1/2009 N | | | MW-1 12/2/2009 N | | | MW-1A 12/2/2009 N | | | MW-4A 12/4/2009 N | | | MW-A1 12/7/2009 N | | | MW-A10 12/8/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 470 | | 50 | 7.4 | | 1 | 6.7 | | 2 | 8.9 | | 1 | 10 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1,2-Trichloroethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 35 | J | 50 | 1.4 | | 1 | 8.1 | | 2 | 4.7 | | 1 | 2.5 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 230 | | 50 | 1 | | 1 | 28 | | 2 | 6.7 | | 1 | 1.2 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichloroethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroform | ug/l | 300 | | 50 | 1.1 | | 1 | 15 | | 2 | 2 | | 1 | 1.1 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloromethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 2200 | | 50 | 4.1 | | 1 | 28 | | 2 | 10 | | 1 | 3.8 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Ethane | ug/l | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | NDR | | |
| Ethene | ug/l | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | NDR | | |
| Methane | ug/l | 540 | | 5 | < 5 | U | 5 | 8.1 | | 5 | < 5 | U | 5 | < 5 | U | 5 | 11 | | 5 | NDR | | |
| Methylene Chloride | ug/l | 11 | J | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | 890 | | 50 | 12 | | 1 | 6.9 | | 2 | < 1 | U | 1 | 11 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Trichloroethene | ug/l | 6100 | | 50 | 77 | | 1 | 450 | | 2 | 34 | | 1 | 120 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Vinyl Chloride | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-A11 12/3/2009 N | | | MW-A2 12/9/2009 N | | | MW-A3 12/8/2009 N | | | MW-A4 12/8/2009 N | | | MW-A6 12/2/2009 N | | | MW-A7 12/4/2009 N | | | MW-A9 12/9/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 550 | | 10 | 6.4 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | 0.99 | J | 1 | 150 | | 10 | 5.4 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 180 | | 10 | 4.5 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroform | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 84 | | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | < 1 | U | 1 | < 1 | U | 1 | 2.8 | | 1 | 3400 | | 10 | 45 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Ethane | ug/l | NDR | | | < 5 | U | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | NDR | | | < 5 | U | 5 | NDR | | | 5.7 | | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Methane | ug/l | NDR | | | < 5 | U | 5 | NDR | | | 9.5 | | 5 | 32 | | 5 | 150 | | 5 | < 5 | U | 5 |
| Methylene Chloride | ug/l | < 1 | U | 1 | 0.29 | J | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 320 | | 10 | 1.1 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Trichloroethene | ug/l | < 1 | U | 1 | 0.5 | J | 1 | < 1.8 | U | 1.8 | 3400 | | 10 | 5.2 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Vinyl Chloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | 1.1 | | 1 | 33 | | 10 | 0.54 | J | 1 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
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NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MWB-1 (SEEP) 12/3/2009 N | | | MW-B10 12/8/2009 N | | | MW-B11 11/20/2009 N | | | MW-B12 11/23/2009 N | | | MW-B2 12/9/2009 N | | | MW-B2 3/3/2010 N | | | MWB-2 (SEEP) 12/3/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 370 | | 25 | < 1 | U | 1 | 260 | | 5 | 210 | | 10 | 2.8 | | 1 | 410 | | 10 | < 1 | U | 1 |
| 1,1,2-Trichloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 72 | | 25 | < 1 | U | 1 | 64 | | 5 | 62 | | 10 | < 1 | U | 1 | 120 | | 10 | < 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 200 | | 25 | < 1 | U | 1 | 39 | | 5 | < 10 | U | 10 | 1.3 | | 1 | 150 | | 10 | < 1 | U | 1 |
| 1,2-Dichloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Chloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | 5.9 | J | 10 | < 1 | U | 1 |
| Chloroform | ug/l | 150 | | 25 | < 1 | U | 1 | 8.9 | | 5 | < 10 | U | 10 | 1 | | 1 | 60 | | 10 | < 1 | U | 1 |
| Chloromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 1400 | | 25 | < 1 | U | 1 | 830 | | 5 | 890 | | 10 | 6.2 | | 1 | 1900 | | 10 | < 1 | U | 1 |
| Ethane | ug/l | < 5 | U | 5 | NDR | | | < 5 | U | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | NDR | | |
| Ethene | ug/l | < 5 | U | 5 | NDR | | | < 5 | U | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | NDR | | |
| Methane | ug/l | < 5 | U | 5 | NDR | | | < 5 | U | 5 | NDR | | | < 5 | U | 5 | 7.1 | | 5 | NDR | | |
| Methylene Chloride | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | 84 | | 25 | < 1 | U | 1 | 160 | | 5 | 27 | | 10 | 2.3 | | 1 | 200 | | 10 | < 1 | U | 1 |
| Trichloroethene | ug/l | 4700 | | 25 | < 1 | U | 1 | 670 | | 5 | 26 | | 10 | 60 | | 1 | 2700 | | 10 | < 1 | U | 1 |
| Vinyl Chloride | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | 72 | | 10 | < 1 | U | 1 | 23 | | 10 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
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NDR - Sample was not analyzed for the listed parameter.

why did they not analyze for these parameters.

Checked by: CDL Date: June 10, 2010

Golder Associates

# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-B3 12/8/2009 N | | | MW-B30 11/25/2009 N | | | MW-B34 11/23/2009 N | | | MW-B4 12/8/2009 N | | | MW-B43 11/20/2009 N | | | MW-B45 11/20/2009 N | | | MW-B46 11/24/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 2.7 | | 1 | 170 | | 5 | 1 | | 1 | 190 | | 5 | 270 | | 10 | 310 | | 10 | 5.3 | | 1 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 4.8 | | 1 | 100 | | 5 | < 1 | U | 1 | 58 | | 5 | 290 | | 10 | 200 | | 10 | 1.3 | | 1 |
| 1,1-Dichloroethene | ug/l | 12 | | 1 | 43 | | 5 | 0.21 | J | 1 | 80 | | 5 | < 10 | U | 10 | 88 | | 10 | 1.5 | | 1 |
| 1,2-Dichloroethane | ug/l | 0.25 | J | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Chloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Chloroform | ug/l | 0.72 | J | 1 | 2 | J | 5 | < 1 | U | 1 | 26 | | 5 | 21 | | 10 | 74 | | 10 | 5 | | 1 |
| Chloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 92 | | 1 | 950 | | 5 | 0.82 | J | 1 | 1100 | | 5 | 1500 | | 10 | 2400 | | 10 | 3.6 | | 1 |
| Ethane | ug/l | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | NDR | | | < 25 | U | 25 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | < 5 | U | 5 | 120 | | 5 | < 5 | U | 5 | NDR | | | 360 | | 25 | 120 | | 5 | < 5 | U | 5 |
| Methane | ug/l | < 5 | U | 5 | 220 | | 5 | < 5 | U | 5 | NDR | | | 850 | | 25 | 150 | | 5 | < 5 | U | 5 |
| Methylene Chloride | ug/l | < 1 | U | 1 | < 5 | U | 5 | 0.58 | J | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | 5.6 | | 1 | 33 | | 5 | 1.4 | | 1 | 100 | | 5 | 240 | | 10 | 400 | | 10 | 8.1 | | 1 |
| Trichloroethene | ug/l | 240 | | 1 | 190 | | 5 | 10 | | 1 | 1600 | | 5 | 810 | | 10 | 2000 | | 10 | 66 | | 1 |
| Vinyl Chloride | ug/l | < 1 | U | 1 | 140 | | 5 | < 1 | U | 1 | 13 | | 5 | 210 | | 10 | 300 | | 10 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B48 | | | MW-B5 | | | MW-B52 | | | MW-B6 | | | MW-B7 | | | MW-B9 | | | MW-B9 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/3/2009 | | | 12/8/2009 | | | 12/1/2009 | | | 12/2/2009 | | | 12/4/2009 | | | 12/9/2009 | | | 12/9/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | FD | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | < 1 | U | 1 | 27 | | 1 | 7.7 | | 1 | 30 | | 1 | 13 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | < 1 | U | 1 | 4.6 | | 1 | 2.2 | | 1 | 13 | | 1 | 18 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | < 1 | U | 1 | 11 | | 1 | 1.2 | | 1 | 17 | | 1 | 23 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 0.45 | J | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroform | ug/l | < 1 | U | 1 | 24 | | 1 | 2.9 | | 1 | 2.7 | | 1 | 5.7 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | < 1 | U | 1 | 66 | | 1 | 14 | | 1 | 210 | | 1 | 69 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Ethane | ug/l | < 5 | U | 5 | NDR | | | < 5 | U | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | < 5 | U | 5 | NDR | | | < 5 | U | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Methane | ug/l | < 5 | U | 5 | NDR | | | < 5 | U | 5 | NDR | | | 21 | | 5 | 18 | | 5 | 20 | | 5 |
| Methylene Chloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | < 1 | U | 1 | 43 | | 1 | 16 | | 1 | 18 | | 1 | 1.7 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Trichloroethene | ug/l | < 1 | U | 1 | 380 | | 1 | 90 | | 1 | 350 | | 1 | 210 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Vinyl Chloride | ug/l | < 1 | U | 1 | 7 | | 1 | < 1 | U | 1 | 0.63 | J | 1 | 0.45 | J | 1 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
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NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-BL1 | | | MW-BL2 | | | MWC-1 (SEEP) | | | MW-C10 | | | MW-C11 | | | MW-C13 | | | MW-C16 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/2/2009 | | | 12/2/2009 | | | 12/3/2009 | | | 12/8/2009 | | | 11/20/2009 | | | 12/8/2009 | | | 11/30/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 28 | | 1 | 200 | | 5 | 39 | | 5 | < 1 | U | 1 | 460 | | 10 | 3.2 | | 1 | 410 | | 25 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| 1,1-Dichloroethane | ug/l | 3.8 | | 1 | 130 | | 5 | 74 | | 5 | < 1 | U | 1 | 65 | | 10 | 9.6 | | 1 | 170 | | 25 |
| 1,1-Dichloroethene | ug/l | 1.1 | | 1 | 43 | | 5 | 120 | | 5 | < 1 | U | 1 | 94 | | 10 | 0.75 | J | 1 | 66 | | 25 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | 4 | J | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Chloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Chloroform | ug/l | < 1 | U | 1 | 12 | | 5 | 330 | | 5 | < 1 | U | 1 | 37 | | 10 | 0.23 | J | 1 | 24 | J | 25 |
| Chloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| cis-1,2-Dichloroethene | ug/l | 29 | | 1 | 1400 | | 5 | 460 | | 5 | < 1 | U | 1 | 570 | | 10 | 170 | | 1 | 4500 | | 25 |
| Ethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 5 | U | 5 | NDR | | | NDR | | | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | < 5 | U | 5 | 180 | | 25 | < 5 | U | 5 | NDR | | | NDR | | | 7.5 | | 5 | < 5 | U | 5 |
| Methane | ug/l | 40 | | 5 | 500 | | 25 | 16 | | 5 | NDR | | | NDR | | | 180 | | 5 | < 5 | U | 5 |
| Methylene Chloride | ug/l | 0.21 | J | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Tetrachloroethene | ug/l | 0.4 | J | 1 | 84 | | 5 | 44 | | 5 | < 1 | U | 1 | 180 | | 10 | 34 | | 1 | 15 | J | 25 |
| Trichloroethene | ug/l | 7.6 | | 1 | 330 | | 5 | 2200 | | 5 | < 1 | U | 1 | 2100 | | 10 | 20 | | 1 | 51 | | 25 |
| Vinyl Chloride | ug/l | < 1 | U | 1 | 180 | | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | 27 | | 1 | 43 | | 25 |

Notes:
ug/l - micrograms per liter
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Qualifiers:
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Checked by: CDL Date: June 10, 2010

Golder Associates

# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C17 | | | MW-C18 | | | MW-C3 | | | MW-C30 | | | MW-C31 | | | MW-C33 | | | MW-C34 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/20/2009 | | | 12/2/2009 | | | 12/8/2009 | | | 11/25/2009 | | | 12/1/2009 | | | 11/23/2009 | | | 11/23/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | FD | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | < 1 | U | 1 | 8.3 | | 1 | 14 | | 5 | 87 | | 5 | 70 | | 1 | 87000 | | 1000 | < 1 | U | 1 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 0.2 | J | 1 | 90 | | 1 | 19 | | 5 | 7.8 | | 5 | 58 | | 1 | 2600 | | 1000 | < 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | < 1 | U | 1 | 6.2 | | 1 | 62 | | 5 | 25 | | 5 | 8 | | 1 | 6100 | | 1000 | < 1 | U | 1 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | 2.6 | J | 5 | < 5 | U | 5 | 1.6 | | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Chloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Chloroform | ug/l | < 1 | U | 1 | 2 | | 1 | 280 | | 5 | 17 | | 5 | 1 | | 1 | 20000 | | 1000 | < 1 | U | 1 |
| Chloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 2.1 | | 1 | 100 | | 1 | 89 | | 5 | 130 | | 5 | 350 | | 1 | 11000 | | 1000 | < 1 | U | 1 |
| Ethane | ug/l | NDR | | | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | 26 | | 5 | < 5 | U | 5 |
| Ethene | ug/l | NDR | | | < 5 | U | 5 | < 5 | U | 5 | 5.2 | | 5 | 5.8 | | 5 | 36 | | 5 | < 5 | U | 5 |
| Methane | ug/l | NDR | | | 5.6 | | 5 | < 5 | U | 5 | 23 | | 5 | < 5 | U | 5 | 24 | | 5 | < 5 | U | 5 |
| Methylene Chloride | ug/l | < 1 | U | 1 | 0.28 | J | 1 | < 5 | U | 5 | < 5 | U | 5 | 1.6 | | 1 | 79000 | | 1000 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | 0.53 | J | 1 | 18 | | 1 | 12 | | 5 | 170 | | 5 | 31 | | 1 | 9600 | | 1000 | < 1 | U | 1 |
| Trichloroethene | ug/l | 2.3 | | 1 | 230 | | 1 | 1100 | | 5 | 920 | | 5 | 53 | | 1 | 3E+05 | | 1000 | < 1 | U | 1 |
| Vinyl Chloride | ug/l | < 1 | U | 1 | 3.6 | | 1 | < 5 | U | 5 | 5.7 | | 5 | 69 | | 1 | < 1000 | U | 1000 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C34 | | | MW-C35 | | | MW-C35 | | | MW-C37 | | | MW-C37 | | | MW-C38 | | | MWC-4 (SEEP) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/23/2009 | | | 11/25/2009 | | | 11/25/2009 | | | 12/1/2009 | | | 12/1/2009 | | | 12/1/2009 | | | 12/3/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | FD | | | N | | | FD | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 1100 | | 25 | 1300 | | 50 | 8.8 | | 1 | 310 | | 10 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 1,1-Dichloroethane | ug/l | < 1 | U | 1 | 2.5 | | 1 | 1.7 | | 1 | 220 | | 25 | 260 | | 50 | 12 | | 1 | 110 | | 10 |
| 1,1-Dichloroethene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 76 | | 25 | 84 | | 50 | 2.1 | | 1 | 120 | | 10 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | 0.37 | J | 1 | < 10 | U | 10 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Chloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Chloroform | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 15 | J | 25 | 20 | J | 50 | 1.2 | | 1 | 35 | | 10 |
| Chloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| cis-1,2-Dichloroethene | ug/l | < 1 | U | 1 | 0.86 | J | 1 | 0.59 | J | 1 | 5200 | | 25 | 6200 | | 50 | 180 | | 1 | 1800 | | 10 |
| Ethane | ug/l | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | NDR | | |
| Ethene | ug/l | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | NDR | | |
| Methane | ug/l | < 5 | U | 5 | 86 | | 5 | 110 | | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | NDR | | |
| Methylene Chloride | ug/l | < 1 | U | 1 | 0.34 | J | 1 | 0.5 | J | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Tetrachloroethene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 8.6 | J | 25 | 14 | J | 50 | 1.7 | | 1 | 140 | | 10 |
| Trichloroethene | ug/l | < 1 | U | 1 | 0.71 | J | 1 | 0.76 | J | 1 | 33 | | 25 | 55 | | 50 | 33 | | 1 | 2500 | | 10 |
| Vinyl Chloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 52 | | 25 | 64 | | 50 | < 1 | U | 1 | 9.7 | J | 10 |

Notes:
ug/l - micrograms per liter
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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C41 | | | MW-C42 | | | MW-C42 | | | MW-C43 | | | MW-C44 | | | MW-C45 | | | MW-C46 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/4/2009 | | | 12/7/2009 | | | 12/7/2009 | | | 11/20/2009 | | | 12/2/2009 | | | 11/20/2009 | | | 11/24/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | FD | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 1700 | | 50 | 1200 | | 10 | 1300 | | 10 | 650 | | 10 | 360 | | 10 | 480 | | 20 | 39 | | 5 |
| 1,1,2-Trichloroethane | ug/l | <50 | U | 50 | 2.1 | J | 10 | 3.2 | J | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,1-Dichloroethane | ug/l | 740 | | 50 | 86 | | 10 | 84 | | 10 | 53 | | 10 | 46 | | 10 | 53 | | 20 | 6.7 | | 5 |
| 1,1-Dichloroethene | ug/l | 210 | | 50 | 240 | | 10 | 260 | | 10 | 150 | | 10 | 150 | | 10 | 150 | | 20 | 27 | | 5 |
| 1,2-Dichloroethane | ug/l | <50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Carbon Tetrachloride | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Chloroethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Chloroform | ug/l | 530 | | 50 | 120 | | 10 | 120 | | 10 | 120 | | 10 | 220 | | 10 | 160 | | 20 | 51 | | 5 |
| Chloromethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| cis-1,2-Dichloroethene | ug/l | 810 | | 50 | 3900 | | 10 | 3900 | | 10 | 440 | | 10 | 330 | | 10 | 380 | | 20 | 11 | | 5 |
| Ethane | ug/l | 10 | | 5 | 6.6 | | 5 | 15 | | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | 23 | | 5 | 16 | | 5 | 37 | | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Methane | ug/l | 220 | | 5 | 250 | | 5 | 530 | | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Methylene Chloride | ug/l | 1200 | | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Tetrachloroethene | ug/l | 45 | J | 50 | 140 | | 10 | 150 | | 10 | 270 | | 10 | 160 | | 10 | 310 | | 20 | 100 | | 5 |
| Trichloroethene | ug/l | 9200 | | 50 | 2600 | | 10 | 2600 | | 10 | 3100 | | 10 | 2700 | | 10 | 3600 | | 20 | 970 | | 5 |
| Vinyl Chloride | ug/l | < 50 | U | 50 | 45 | | 10 | 49 | | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |

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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C47 | | | MW-C47 | | | MW-C48 | | | MW-C5 | | | MWC-5 (SEEP) | | | MW-C52 | | | MW-C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/4/2009 | | | 3/24/2010 | | | 12/3/2009 | | | 12/8/2009 | | | 12/3/2009 | | | 12/1/2009 | | | 12/2/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 14 | | 1 | 230 | | 10 | < 1 | U | 1 | < 1 | U | 1 | 290 | | 10 | 200 | | 5 | 19 | | 5 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | 0.76 | J | 5 | < 5 | U | 5 |
| 1,1-Dichloroethane | ug/l | 6.1 | | 1 | 17 | | 10 | < 1 | U | 1 | 4.3 | | 1 | 110 | | 10 | 110 | | 5 | 19 | | 5 |
| 1,1-Dichloroethene | ug/l | 7.6 | | 1 | 120 | | 10 | < 1 | U | 1 | 0.88 | J | 1 | 120 | | 10 | 66 | | 5 | 55 | | 5 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Chloroethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Chloroform | ug/l | 0.78 | J | 1 | 81 | | 10 | < 1 | U | 1 | < 1 | U | 1 | 35 | | 10 | 91 | | 5 | 62 | | 5 |
| Chloromethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| cis-1,2-Dichloroethene | ug/l | 6.1 | | 1 | 12 | | 10 | < 1 | U | 1 | 11 | | 1 | 1700 | | 10 | 1400 | | 5 | 220 | | 5 |
| Ethane | ug/l | < 25 | U | 25 | 6 | | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | < 25 | U | 25 | 6.6 | | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | 250 | | 5 | < 5 | U | 5 |
| Methane | ug/l | 1100 | | 25 | 210 | | 5 | < 5 | U | 5 | 620 | | 5 | 6 | | 5 | 450 | | 5 | 7.1 | | 5 |
| Methylene Chloride | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Tetrachloroethene | ug/l | 18 | | 1 | 69 | | 10 | < 1 | U | 1 | 1.5 | | 1 | 130 | | 10 | 180 | | 5 | 32 | | 5 |
| Trichloroethene | ug/l | 230 | | 1 | 2300 | | 10 | < 1 | U | 1 | 6.6 | | 1 | 2300 | | 10 | 1600 | | 5 | 800 | | 5 |
| Vinyl Chloride | ug/l | 0.94 | J | 1 | < 10 | U | 10 | < 1 | U | 1 | 72 | | 1 | 13 | | 10 | 110 | | 5 | < 5 | U | 5 |

Notes:
ug/l - micrograms per liter
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
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NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-C7 12/4/2009 N | | | P-B16 12/7/2009 N | | | P-C15 12/7/2009 N | | | P-DC15 12/4/2009 N | | | P-SC15 12/7/2009 N | | | P-SC16 12/4/2009 N | | | P-SC17 12/7/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 10 | | 5 | 860 | | 25 | 0.31 | J | 1 | 0.7 | J | 1 | 1.8 | | 1 | 85 | | 5 | 16 | | 1 |
| 1,1,2-Trichloroethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 43 | | 5 | 190 | | 25 | 6.6 | | 1 | < 1 | U | 1 | 2.7 | | 1 | 59 | | 5 | 3 | | 1 |
| 1,1-Dichloroethene | ug/l | 61 | | 5 | 190 | | 25 | 4.4 | | 1 | < 1 | U | 1 | 9.6 | | 1 | 110 | | 5 | 1.6 | | 1 |
| 1,2-Dichloroethane | ug/l | 2.1 | J | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 3 | J | 5 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Chloroethane | ug/l | < 5 | U | 5 | 20 | J | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Chloroform | ug/l | 140 | | 5 | 13 | J | 25 | 0.48 | J | 1 | < 1 | U | 1 | 4.7 | | 1 | 87 | | 5 | < 1 | U | 1 |
| Chloromethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 260 | | 5 | 1800 | | 25 | 31 | | 1 | < 1 | U | 1 | 28 | | 1 | 670 | | 5 | 17 | | 1 |
| Ethane | ug/l | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | < 5 | U | 5 | 6.1 | | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | 5.9 | | 5 | < 5 | U | 5 |
| Methane | ug/l | < 5 | U | 5 | 48 | | 5 | 5.2 | | 5 | < 5 | U | 5 | < 5 | U | 5 | 14 | | 5 | 5.4 | | 5 |
| Methylene Chloride | ug/l | < 5 | U | 5 | < 25 | U | 25 | 1.7 | | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | 26 | | 5 | 100 | | 25 | 7.3 | | 1 | 0.41 | J | 1 | 4.4 | | 1 | 50 | | 5 | 0.46 | J | 1 |
| Trichloroethene | ug/l | 1200 | | 5 | 4700 | | 25 | 91 | | 1 | 4 | | 1 | 140 | | 1 | 1900 | | 5 | 13 | | 1 |
| Vinyl Chloride | ug/l | < 5 | U | 5 | 78 | | 25 | 1.2 | | 1 | < 1 | U | 1 | < 1 | U | 1 | 8.3 | | 5 | 1.2 | | 1 |

Notes:
ug/l - micrograms per liter
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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | PW-B15 | | | PW-SC15 | | | PZ-B32 | | | PZ-B34 | | | PZ-B35 | | | PZ-B36 | | | PZ-B37 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/4/2009 | | | 12/4/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/18/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 270 | | 2 | 1300 | | 20 | 230 | | 10 | 14 | | 1 | 13 | | 1 | 62 | | 2 | 35 | | 1 |
| 1,1,2-Trichloroethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 81 | | 2 | 200 | | 20 | 920 | | 10 | 2.6 | | 1 | 3.1 | | 1 | 73 | | 2 | 18 | | 1 |
| 1,1-Dichloroethene | ug/l | 60 | | 2 | 220 | | 20 | 54 | | 10 | 6.5 | | 1 | 3.8 | | 1 | 15 | | 2 | 4.8 | | 1 |
| 1,2-Dichloroethane | ug/l | 1.1 | J | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Chloroethane | ug/l | 10 | | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Chloroform | ug/l | 5.1 | | 2 | 33 | | 20 | 11 | | 10 | 19 | | 1 | 8.7 | | 1 | 4.1 | | 2 | 2.1 | | 1 |
| Chloromethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 590 | | 2 | 2000 | | 20 | 1400 | | 10 | 14 | | 1 | 18 | | 1 | 410 | | 2 | 92 | | 1 |
| Ethane | ug/l | < 5 | U | 5 | < 5 | U | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | NDR | | | < 5 | U | 5 |
| Ethene | ug/l | < 5 | U | 5 | 20 | | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | NDR | | | 25 | | 5 |
| Methane | ug/l | 120 | | 5 | 95 | | 5 | NDR | | | < 5 | U | 5 | < 5 | U | 5 | NDR | | | 19 | | 5 |
| Methylene Chloride | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | 54 | | 2 | 57 | | 20 | 70 | | 10 | 14 | | 1 | 19 | | 1 | 42 | | 2 | 53 | | 1 |
| Trichloroethene | ug/l | 820 | | 2 | 5100 | | 20 | 180 | | 10 | 200 | | 1 | 150 | | 1 | 140 | | 2 | 180 | | 1 |
| Vinyl Chloride | ug/l | 64 | | 2 | 78 | | 20 | 570 | | 10 | < 1 | U | 1 | < 1 | U | 1 | 110 | | 2 | 11 | | 1 |

Notes:
ug/l - micrograms per liter
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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | PZ-B38 | | | PZ-B49 | | | PZ-B50 | | | PZ-B51 | | | PZ-C32 | | | PZ-C34 | | | PZ-C35 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/19/2009 | | | 11/24/2009 | | | 11/18/2009 | | | 11/18/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/19/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 530 | | 25 | 8.8 | | 1 | 9.8 | | 1 | 280 | | 10 | 290 | | 10 | 8.6 | | 1 | 9.2 | | 1 |
| 1,1,2-Trichloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 870 | | 25 | 1.9 | | 1 | 2 | | 1 | 370 | | 10 | 340 | | 10 | 1.4 | | 1 | 1.9 | | 1 |
| 1,1-Dichloroethene | ug/l | 120 | | 25 | 2 | | 1 | 1.8 | | 1 | 64 | | 10 | 68 | | 10 | 2.1 | | 1 | 2 | | 1 |
| 1,2-Dichloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Chloroform | ug/l | 19 | J | 25 | 4.2 | | 1 | 2.3 | | 1 | 17 | | 10 | 11 | | 10 | 2.3 | | 1 | 2.1 | | 1 |
| Chloromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 3900 | | 25 | 5.5 | | 1 | 5.7 | | 1 | 2100 | | 10 | 2000 | | 10 | 4.3 | | 1 | 6.5 | | 1 |
| Ethane | ug/l | < 100 | U | 100 | < 5 | U | 5 | < 5 | U | 5 | < 50 | U | 50 | < 100 | U | 100 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | 2200 | | 100 | < 5 | U | 5 | < 5 | U | 5 | 1100 | | 50 | 730 | | 100 | < 5 | U | 5 | < 5 | U | 5 |
| Methane | ug/l | 3600 | | 100 | < 5 | U | 5 | < 5 | U | 5 | 1400 | | 50 | 990 | | 100 | < 5 | U | 5 | < 5 | U | 5 |
| Methylene Chloride | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Tetrachloroethene | ug/l | 51 | | 25 | 12 | | 1 | 16 | | 1 | 98 | | 10 | 100 | | 10 | 25 | | 1 | 16 | | 1 |
| Trichloroethene | ug/l | 190 | | 25 | 110 | | 1 | 110 | | 1 | 280 | | 10 | 510 | | 10 | 110 | | 1 | 110 | | 1 |
| Vinyl Chloride | ug/l | 1000 | | 25 | < 1 | U | 1 | < 1 | U | 1 | 600 | | 10 | 460 | | 10 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | PZ-C36 11/18/2009 N | | | PZ-C37 11/18/2009 N | | | PZ-C38 11/19/2009 N | | | PZ-C49 11/24/2009 N | | | PZ-C50 11/24/2009 N | | | PZ-C51 11/24/2009 N | | | RW-1 11/18/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 25 | | 1 | 120 | | 5 | 360 | | 20 | 31 | | 2 | 40 | | 1 | 120 | | 5 | 300 | | 10 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,1-Dichloroethane | ug/l | 12 | | 1 | 81 | | 5 | 820 | | 20 | 3.2 | | 2 | 36 | | 1 | 120 | | 5 | 150 | | 10 |
| 1,1-Dichloroethene | ug/l | 3.8 | | 1 | 31 | | 5 | 75 | | 20 | 12 | | 2 | 6 | | 1 | 29 | | 5 | 76 | | 10 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Chloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Chloroform | ug/l | 2.9 | | 1 | 7.4 | | 5 | 8.2 | J | 20 | 20 | | 2 | 5.2 | | 1 | 11 | | 5 | 56 | | 10 |
| Chloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| cis-1,2-Dichloroethene | ug/l | 79 | | 1 | 880 | | 5 | 2600 | | 20 | 4.9 | | 2 | 200 | | 1 | 870 | | 5 | 2200 | | 10 |
| Ethane | ug/l | < 5 | U | 5 | < 5 | U | 5 | < 100 | U | 100 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | < 5 | U | 5 | 300 | | 5 | 1500 | | 100 | < 5 | U | 5 | < 5 | U | 5 | 150 | | 5 | 410 | | 5 |
| Methane | ug/l | < 5 | U | 5 | 480 | | 5 | 2500 | | 100 | < 5 | U | 5 | 5.7 | | 5 | 230 | | 5 | 540 | | 5 |
| Methylene Chloride | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Tetrachloroethene | ug/l | 34 | | 1 | 62 | | 5 | 23 | | 20 | 110 | | 2 | 30 | | 1 | 63 | | 5 | 160 | | 10 |
| Trichloroethene | ug/l | 170 | | 1 | 310 | | 5 | 94 | | 20 | 680 | | 2 | 160 | | 1 | 360 | | 5 | 1300 | | 10 |
| Vinyl Chloride | ug/l | 2.3 | | 1 | 160 | | 5 | 1200 | | 20 | < 2 | U | 2 | 5.6 | | 1 | 180 | | 5 | 280 | | 10 |

Notes:
ug/l - micrograms per liter
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# Table 3
## Area-Wide Monitoring Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | RW-2 11/18/2009 N | | | RW-3 11/18/2009 N | | | RW-4 11/18/2009 N | | | TW-2 11/25/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 500 | | 20 | 210 | | 10 | 53 | | 2 | < 1 | U | 1 |
| 1,1,2-Trichloroethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 660 | | 20 | 76 | | 10 | 20 | | 2 | < 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 95 | | 20 | 56 | | 10 | 15 | | 2 | < 1 | U | 1 |
| 1,2-Dichloroethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Chloroethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Chloroform | ug/l | 56 | | 20 | 71 | | 10 | 18 | | 2 | < 1 | U | 1 |
| Chloromethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 3500 | | 20 | 630 | | 10 | 130 | | 2 | < 1 | U | 1 |
| Ethane | ug/l | < 25 | U | 25 | < 5 | U | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | 1700 | | 25 | 110 | | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Methane | ug/l | 2900 | | 25 | 190 | | 5 | < 5 | U | 5 | < 5 | U | 5 |
| Methylene Chloride | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | 0.39 | J | 1 |
| Tetrachloroethene | ug/l | 91 | | 20 | 260 | | 10 | 110 | | 2 | < 1 | U | 1 |
| Trichloroethene | ug/l | 580 | | 20 | 1800 | | 10 | 620 | | 2 | 1.5 | | 1 |
| Vinyl Chloride | ug/l | 720 | | 20 | 89 | | 10 | 2.8 | | 2 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
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# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | CTBR | | | CTMW-1 | | | MW-1 | | | MW-1A | | | MW-4A | | | MW-A1 | | | MW-A10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/19/2009 | | | 12/1/2009 | | | 12/2/2009 | | | 12/2/2009 | | | 12/4/2009 | | | 12/7/2009 | | | 12/8/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 500 | U | 500 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 500 | U | 500 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 500 | U | 500 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| Acetone | ug/l | < 500 | U | 500 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 | < 10 | U | 10 | 40 | | 10 | < 10 | U | 10 |
| Benzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromoform | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromomethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | 1.1 | J | 2 | 1.3 | | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Freon 113 | ug/l | 3400 | | 50 | 32 | | 1 | 75 | | 2 | 31 | | 1 | 33 | | 1 | 0.32 | J | 1 | < 1 | U | 1 |
| Isopropylbenzene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 100 | U | 100 | < 2 | U | 2 | < 4 | U | 4 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 100 | U | 100 | < 2 | U | 2 | < 4 | U | 4 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 50 | U | 50 | < 1 | U | 1 | 0.39 | J | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| o-Xylene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Styrene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Toluene | ug/l | 5.5 | J | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 50 | U | 50 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

Golder Associates

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-A11 | | | MW-A2 | | | MW-A3 | | | MW-A4 | | | MW-A6 | | | MW-A7 | | | MW-A9 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/3/2009 | | | 12/9/2009 | | | 12/8/2009 | | | 12/8/2009 | | | 12/2/2009 | | | 12/4/2009 | | | 12/9/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 27 | | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 3.6 | J | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| Acetone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| Benzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromoform | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromomethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Freon 113 | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 920 | | 10 | 14 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 20 | U | 20 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 20 | U | 20 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | < 1 | U | 1 | 0.3 | J | 1 | < 10 | U | 10 | 0.38 | J | 1 | < 1 | U | 1 | < 1 | U | 1 |
| o-Xylene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Styrene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Toluene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 8.6 | J | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MWB-1 (SEEP) | | | MW-B10 | | | MW-B11 | | | MW-B12 | | | MW-B2 | | | MW-B2 | | | MWB-2 (SEEP) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/3/2009 | | | 12/8/2009 | | | 11/20/2009 | | | 11/23/2009 | | | 12/9/2009 | | | 3/3/2010 | | | 12/3/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | 2 | J | 10 | < 1 | U | 1 | 12 | | 10 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | 1.8 | J | 10 | < 1 | U | 1 | 2 | J | 10 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 |
| Acetone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 |
| Benzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Bromoform | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Bromomethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Freon 113 | ug/l | 820 | | 25 | < 1 | U | 1 | 100 | | 5 | 2800 | | 10 | 7.5 | | 1 | 780 | | 10 | < 1 | U | 1 |
| Isopropylbenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 50 | U | 50 | < 2 | U | 2 | < 10 | U | 10 | < 20 | U | 20 | < 2 | U | 2 | < 20 | U | 20 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 50 | U | 50 | < 2 | U | 2 | < 10 | U | 10 | < 20 | U | 20 | < 2 | U | 2 | < 20 | U | 20 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| o-Xylene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Styrene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Toluene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | < 25 | U | 25 | < 1 | U | 1 | 3.3 | J | 5 | 4.5 | J | 10 | < 1 | U | 1 | 2.7 | J | 10 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B3 | | | MW-B30 | | | MW-B34 | | | MW-B4 | | | MW-B43 | | | MW-B45 | | | MW-B46 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/8/2009 | | | 11/25/2009 | | | 11/23/2009 | | | 12/8/2009 | | | 11/20/2009 | | | 11/20/2009 | | | 11/24/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | 7.3 | | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | 1.1 | J | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 |
| Acetone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 |
| Benzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Bromoform | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Bromomethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Freon 113 | ug/l | 22 | | 1 | 670 | | 5 | 5.7 | | 1 | 460 | | 5 | 1200 | | 10 | 1600 | | 10 | 31 | | 1 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | < 10 | U | 10 | < 2 | U | 2 | < 10 | U | 10 | < 20 | U | 20 | < 20 | U | 20 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 10 | U | 10 | < 2 | U | 2 | < 10 | U | 10 | < 20 | U | 20 | < 20 | U | 20 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| o-Xylene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Styrene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Toluene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | 0.36 | J | 1 | 3.3 | J | 5 | < 1 | U | 1 | 8.3 | | 5 | 5.6 | J | 10 | 8.8 | J | 10 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

Golder Associates

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B48 | | | MW-B5 | | | MW-B52 | | | MW-B6 | | | MW-B7 | | | MW-B9 | | | MW-B9 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/3/2009 | | | 12/8/2009 | | | 12/1/2009 | | | 12/2/2009 | | | 12/4/2009 | | | 12/9/2009 | | | 12/9/2009 | | |
| N=Normal, FD=Field Dupticate | | N | | | N | | | N | | | N | | | N | | | FD | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| Acetone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 |
| Benzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromoform | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Bromomethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Freon 113 | ug/l | < 1 | U | 1 | 210 | | 1 | 40 | | 1 | 130 | | 1 | 73 | | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 0.21 | J | 1 | 0.84 | J | 1 | < 1 | U | 1 | < 1 | U | 1 |
| o-Xylene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Styrene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Toluene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 | 0.2 | J | 1 | < 1 | U | 1 | 0.22 | J | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-BL1 | | | MW-BL2 | | | MWC-1 (SEEP) | | | MW-C10 | | | MW-C11 | | | MW-C13 | | | MW-C16 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/2/2009 | | | 12/2/2009 | | | 12/3/2009 | | | 12/8/2009 | | | 11/20/2009 | | | 12/8/2009 | | | 11/30/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | 11 | | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | 0.3 | J | 1 | < 25 | U | 25 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | 2.4 | J | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | 0.22 | J | 1 | < 25 | U | 25 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 250 | U | 250 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 250 | U | 250 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 250 | U | 250 |
| Acetone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 250 | U | 250 |
| Benzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | 1.7 | J | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Bromoform | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Bromomethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Freon 113 | ug/l | 3.7 | | 1 | 910 | | 5 | 280 | | 5 | < 1 | U | 1 | 340 | | 10 | 110 | | 1 | 560 | | 25 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | < 10 | U | 10 | < 10 | U | 10 | < 2 | U | 2 | < 20 | U | 20 | < 2 | U | 2 | < 50 | U | 50 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 10 | U | 10 | < 10 | U | 10 | < 2 | U | 2 | < 20 | U | 20 | < 2 | U | 2 | < 50 | U | 50 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| o-Xylene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Styrene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Toluene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 | 4.3 | J | 5 | < 5 | U | 5 | < 1 | U | 1 | 7 | J | 10 | 1.7 | | 1 | 5.8 | J | 25 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 25 | U | 25 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

Golder Associates

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C17 | | | MW-C18 | | | MW-C3 | | | MW-C30 | | | MW-C31 | | | MW-C33 | | | MW-C34 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/20/2009 | | | 12/2/2009 | | | 12/8/2009 | | | 11/25/2009 | | | 12/1/2009 | | | 11/23/2009 | | | 11/23/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | FD | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | 0.68 | J | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | 2.2 | J | 10 | < 10000 | U | 10000 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | < 10 | U | 10 | < 10000 | U | 10000 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | < 10 | U | 10 | < 10000 | U | 10000 | < 10 | U | 10 |
| Acetone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | < 50 | U | 50 | 31 | | 10 | < 10000 | U | 10000 | < 10 | U | 10 |
| Benzene | ug/l | 0.76 | J | 1 | 0.16 | J | 1 | < 5 | U | 5 | < 5 | U | 5 | 0.24 | J | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Bromoform | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Bromomethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | 1.1 | | 1 | 280 | J | 1000 | < 1 | U | 1 |
| Freon 113 | ug/l | < 1 | U | 1 | 260 | | 1 | 170 | | 5 | 550 | | 5 | 20 | | 1 | 53000 | | 1000 | 0.38 | J | 1 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | 0.4 | J | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 10 | U | 10 | < 10 | U | 10 | 3.9 | | 2 | 660 | J | 2000 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 10 | U | 10 | < 10 | U | 10 | < 2 | U | 2 | < 2000 | U | 2000 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | 0.85 | J | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| o-Xylene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | 1.7 | | 1 | 240 | J | 1000 | < 1 | U | 1 |
| Styrene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Toluene | ug/l | 0.12 | J | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | 120 | | 1 | 4900 | | 1000 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 | 5.1 | | 1 | 2.7 | J | 5 | < 5 | U | 5 | 0.61 | J | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | 2 | J | 5 | < 5 | U | 5 | < 1 | U | 1 | < 1000 | U | 1000 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C34 | | | MW-C35 | | | MW-C35 | | | MW-C37 | | | MW-C37 | | | MW-C38 | | | MWC-4 (SEEP) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/23/2009 | | | 11/25/2009 | | | 11/25/2009 | | | 12/1/2009 | | | 12/1/2009 | | | 12/1/2009 | | | 12/3/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | FD | | | N | | | FD | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | 5.6 | J | 10 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 250 | U | 250 | < 500 | U | 500 | 0.98 | J | 10 | < 100 | U | 100 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 250 | U | 250 | < 500 | U | 500 | < 10 | U | 10 | < 100 | U | 100 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 250 | U | 250 | < 500 | U | 500 | < 10 | U | 10 | < 100 | U | 100 |
| Acetone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 250 | U | 250 | < 500 | U | 500 | 36 | | 10 | < 100 | U | 100 |
| Benzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | 2.7 | | 1 | < 10 | U | 10 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Bromoform | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Bromomethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | 0.51 | J | 1 | < 10 | U | 10 |
| Freon 113 | ug/l | 0.57 | J | 1 | < 1 | U | 1 | < 1 | U | 1 | 320 | | 25 | 400 | | 50 | 2.6 | | 1 | 540 | | 10 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 50 | U | 50 | < 100 | U | 100 | 1 | J | 2 | < 20 | U | 20 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 50 | U | 50 | < 100 | U | 100 | < 2 | U | 2 | < 20 | U | 20 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | 0.69 | J | 1 | < 10 | U | 10 |
| o-Xylene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | 0.91 | J | 1 | < 10 | U | 10 |
| Styrene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Toluene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | 9.5 | | 1 | < 10 | U | 10 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 6.4 | J | 25 | 9.2 | J | 50 | 0.41 | J | 1 | 2 | J | 10 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 25 | U | 25 | < 50 | U | 50 | < 1 | U | 1 | < 10 | U | 10 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C41 | | | MW-C42 | | | MW-C42 | | | MW-C43 | | | MW-C44 | | | MW-C45 | | | MW-C46 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/4/2009 | | | 12/7/2009 | | | 12/7/2009 | | | 11/20/2009 | | | 12/2/2009 | | | 11/20/2009 | | | 11/24/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | FD | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,2,4-Trichlorobenzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,2-Dibromoethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,2-Dichlorobenzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,2-Dichloropropane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,3-Dichlorobenzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 1,4-Dichlorobenzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| 2-Butanone | ug/l | < 500 | U | 500 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 200 | U | 200 | < 50 | U | 50 |
| 2-Hexanone | ug/l | < 500 | U | 500 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 200 | U | 200 | < 50 | U | 50 |
| 4-Methyl-2-pentanone | ug/l | < 500 | U | 500 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 200 | U | 200 | < 50 | U | 50 |
| Acetone | ug/l | < 500 | U | 500 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 100 | U | 100 | < 200 | U | 200 | < 50 | U | 50 |
| Benzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Bromodichloromethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Bromoform | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Bromomethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Carbon Disulfide | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Chlorobenzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| cis-1,3-Dichloropropene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Cyclohexane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Dibromochloromethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Dichlorodifluoromethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Ethylbenzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Freon 113 | ug/l | 630 | | 50 | 2200 | | 10 | 2800 | | 10 | 330 | | 10 | 360 | | 10 | 730 | | 20 | 330 | | 5 |
| Isopropylbenzene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| m,p-Xylenes | ug/l | < 100 | U | 100 | < 20 | U | 20 | < 20 | U | 20 | < 20 | U | 20 | < 20 | U | 20 | < 40 | U | 40 | < 10 | U | 10 |
| Methyl Acetate | ug/l | < 100 | U | 100 | < 20 | U | 20 | < 20 | U | 20 | < 20 | U | 20 | < 20 | U | 20 | < 40 | U | 40 | < 10 | U | 10 |
| Methyl tert-Butyl Ether | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| o-Xylene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Styrene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Toluene | ug/l | 72 | | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| trans-1,2-Dichloroethene | ug/l | < 50 | U | 50 | 7.2 | J | 10 | 7.9 | J | 10 | 1.8 | J | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| trans-1,3-Dichloropropene | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |
| Trichlorofluoromethane | ug/l | < 50 | U | 50 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 5 | U | 5 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C47 | | | MW-C47 | | | MW-C48 | | | MW-C5 | | | MWC-5 (SEEP) | | | MW-C52 | | | MW-C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/4/2009 | | | 3/24/2010 | | | 12/3/2009 | | | 12/8/2009 | | | 12/3/2009 | | | 12/1/2009 | | | 12/2/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | 4.3 | J | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| 2-Butanone | ug/l | 4.5 | J | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 50 | U | 50 | < 50 | U | 50 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 50 | U | 50 | < 50 | U | 50 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 50 | U | 50 | < 50 | U | 50 |
| Acetone | ug/l | 32 | | 10 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 50 | U | 50 | < 50 | U | 50 |
| Benzene | ug/l | 0.4 | J | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Bromoform | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Bromomethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Freon 113 | ug/l | 30 | | 1 | 650 | | 10 | < 1 | U | 1 | 0.67 | J | 1 | 510 | | 10 | 930 | | 5 | 220 | | 5 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | 4.3 | J | 20 | < 2 | U | 2 | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 10 | U | 10 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 2 | U | 2 | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 10 | U | 10 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| o-Xylene | ug/l | < 1 | U | 1 | 1.6 | J | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Styrene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Toluene | ug/l | 0.43 | J | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | 0.4 | J | 1 | < 10 | U | 10 | 1.9 | J | 5 | < 5 | U | 5 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 5 | U | 5 | < 5 | U | 5 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-C7 12/4/2009 N | | | P-B16 12/7/2009 N | | | P-C15 12/7/2009 N | | | P-DC15 12/4/2009 N | | | P-SC15 12/7/2009 N | | | P-SC16 12/4/2009 N | | | P-SC17 12/7/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 5 | U | 5 | 5.6 | J | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 1 | J | 5 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 50 | U | 50 | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 50 | U | 50 | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 50 | U | 50 | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | < 10 | U | 10 |
| Acetone | ug/l | < 50 | U | 50 | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 | 12 | | 10 |
| Benzene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Bromoform | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Bromomethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Freon 113 | ug/l | 96 | | 5 | 450 | | 25 | 4.5 | | 1 | 2 | | 1 | 19 | | 1 | 180 | | 5 | 4.9 | | 1 |
| Isopropylbenzene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 10 | U | 10 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 2 | U | 2 | < 2 | U | 2 | < 2 | U | 2 | < 10 | U | 10 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| o-Xylene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Styrene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Toluene | ug/l | < 5 | U | 5 | < 25 | U | 25 | 0.21 | J | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | 1.5 | J | 5 | 6.9 | J | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 4.1 | J | 5 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 5 | U | 5 | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010



Golder Associates

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | PW-B15 | | | PW-SC15 | | | PZ-B32 | | | PZ-B34 | | | PZ-B35 | | | PZ-B36 | | | PZ-B37 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/4/2009 | | | 12/4/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/18/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | 2.4 | | 2 | 4 | J | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 20 | U | 20 | < 200 | U | 200 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 20 | U | 20 | < 200 | U | 200 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 20 | U | 20 | < 200 | U | 200 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 |
| Acetone | ug/l | < 20 | U | 20 | < 200 | U | 200 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 | < 20 | U | 20 | < 10 | U | 10 |
| Benzene | ug/l | 0.58 | J | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Bromoform | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Bromomethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Freon 113 | ug/l | 220 | | 2 | 440 | | 20 | 2400 | | 10 | 110 | | 1 | 79 | | 1 | 430 | | 2 | 250 | | 1 |
| Isopropylbenzene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 4 | U | 4 | < 40 | U | 40 | < 20 | U | 20 | < 2 | U | 2 | < 2 | U | 2 | < 4 | U | 4 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 4 | U | 4 | < 40 | U | 40 | < 20 | U | 20 | < 2 | U | 2 | < 2 | U | 2 | < 4 | U | 4 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| o-Xylene | ug/l | < 2 | U | 2 | < 20 | U | 20 | 5 | J | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Styrene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Toluene | ug/l | < 2 | U | 2 | < 20 | U | 20 | 2.7 | J | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | 2.8 | | 2 | 6.2 | J | 20 | 14 | | 10 | < 1 | U | 1 | < 1 | U | 1 | 1.6 | J | 2 | 0.49 | J | 1 |
| trans-1,3-Dichloropropene | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 2 | U | 2 | < 20 | U | 20 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 | < 2 | U | 2 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
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Checked by: CDL Date: June 10, 2010

Golder Associates

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | PZ-B38 | | | PZ-B49 | | | PZ-B50 | | | PZ-B51 | | | PZ-C32 | | | PZ-C34 | | | PZ-C35 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/19/2009 | | | 11/24/2009 | | | 11/18/2009 | | | 11/18/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/19/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 |
| Acetone | ug/l | < 250 | U | 250 | < 10 | U | 10 | < 10 | U | 10 | < 100 | U | 100 | < 100 | U | 100 | < 10 | U | 10 | < 10 | U | 10 |
| Benzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Bromoform | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Bromomethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Freon 113 | ug/l | 3000 | | 25 | 52 | | 1 | 46 | | 1 | 1800 | | 10 | 1800 | | 10 | 75 | | 1 | 54 | | 1 |
| Isopropylbenzene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 50 | U | 50 | < 2 | U | 2 | < 2 | U | 2 | < 20 | U | 20 | < 20 | U | 20 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 50 | U | 50 | < 2 | U | 2 | < 2 | U | 2 | < 20 | U | 20 | < 20 | U | 20 | < 2 | U | 2 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| o-Xylene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | 2 | J | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Styrene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Toluene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | 23 | J | 25 | < 1 | U | 1 | < 1 | U | 1 | 24 | | 10 | 7.4 | J | 10 | < 1 | U | 1 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 25 | U | 25 | < 1 | U | 1 | < 1 | U | 1 | < 10 | U | 10 | < 10 | U | 10 | < 1 | U | 1 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | PZ-C36 | | | PZ-C37 | | | PZ-C38 | | | PZ-C49 | | | PZ-C50 | | | PZ-C51 | | | RW-1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/18/2009 | | | 11/18/2009 | | | 11/19/2009 | | | 11/24/2009 | | | 11/24/2009 | | | 11/24/2009 | | | 11/18/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 200 | U | 200 | < 20 | U | 20 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 200 | U | 200 | < 20 | U | 20 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 200 | U | 200 | < 20 | U | 20 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 |
| Acetone | ug/l | < 10 | U | 10 | < 50 | U | 50 | < 200 | U | 200 | < 20 | U | 20 | < 10 | U | 10 | < 50 | U | 50 | < 100 | U | 100 |
| Benzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Bromoform | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Bromomethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Freon 113 | ug/l | 130 | | 1 | 690 | | 5 | 2400 | | 20 | 300 | | 2 | 360 | | 1 | 560 | | 5 | 1500 | | 10 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| m,p-Xylenes | ug/l | < 2 | U | 2 | < 10 | U | 10 | < 40 | U | 40 | < 4 | U | 4 | < 2 | U | 2 | < 10 | U | 10 | < 20 | U | 20 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 10 | U | 10 | < 40 | U | 40 | < 4 | U | 4 | < 2 | U | 2 | < 10 | U | 10 | < 20 | U | 20 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| o-Xylene | ug/l | < 1 | U | 1 | < 5 | U | 5 | 6.1 | J | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Styrene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Toluene | ug/l | < 1 | U | 1 | < 5 | U | 5 | 13 | J | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| trans-1,2-Dichloroethene | ug/l | 0.37 | J | 1 | 4.2 | J | 5 | 14 | J | 20 | < 2 | U | 2 | 1.2 | | 1 | 5.2 | | 5 | 5.8 | J | 10 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 5 | U | 5 | < 20 | U | 20 | < 2 | U | 2 | < 1 | U | 1 | < 5 | U | 5 | < 10 | U | 10 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The enalyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 4
## Area-Wide Monitoring Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | RW-2 11/18/2009 N | | | RW-3 11/18/2009 N | | | RW-4 11/18/2009 N | | | TW-2 11/25/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| 2-Butanone | ug/l | < 200 | U | 200 | < 100 | U | 100 | < 20 | U | 20 | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 200 | U | 200 | < 100 | U | 100 | < 20 | U | 20 | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 200 | U | 200 | < 100 | U | 100 | < 20 | U | 20 | < 10 | U | 10 |
| Acetone | ug/l | < 200 | U | 200 | < 100 | U | 100 | < 20 | U | 20 | < 10 | U | 10 |
| Benzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Bromoform | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Bromomethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Cyclohexane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Freon 113 | ug/l | 2800 | | 20 | 1100 | | 10 | 330 | | 2 | < 1 | U | 1 |
| Isopropylbenzene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 40 | U | 40 | < 20 | U | 20 | < 4 | U | 4 | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 40 | U | 40 | < 20 | U | 20 | < 4 | U | 4 | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| o-Xylene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Styrene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Toluene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | 20 | | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 20 | U | 20 | < 10 | U | 10 | < 2 | U | 2 | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | CTBR 11/19/2009 N | | | CTMW-1 12/1/2009 N | | | MW-1 12/2/2009 N | | | MW-1A 12/2/2009 N | | | MW-4A 12/4/2009 N | | | MW-A1 12/7/2009 N | | | MW-A2 12/9/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 67.9 | | 5 | 138 | | 5 | 54.8 | | 5 | 150 | | 5 | 101 | | 5 | 27.2 | | 5 | 146 | | 5 |
| Chloride | mg/l | 50.5 | | 5 | 82.1 | | 5 | 30.9 | | 5 | 46.6 | | 5 | 115 | | 5 | 13.8 | | 5 | 32.3 | | 5 |
| Nitrate | mg/l | 0.14 | | 0.1 | 1.8 | | 0.1 | 0.47 | | 0.1 | 0.3 | | 0.1 | 1.7 | | 0.1 | < 0.1 | U | 0.1 | 0.15 | | 0.1 |
| Sulfate | mg/l | 23.1 | | 5 | 30.1 | | 10 | 35.3 | | 10 | 32.2 | | 5 | 33.4 | | 5 | 19.8 | B | 5 | 51 | | 10 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | 1.8 | | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 1.2 | | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | R | 1 | < 1 | U | 1 | 22.8 | | 1 | 7.7 | | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-A4 | | | MW-A6 | | | MW-A7 | | | MW-A9 | | | MWB-1 (SEEP) | | | MW-B11 | | | MW-B2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/8/2009 | | | 12/2/2009 | | | 12/4/2009 | | | 12/9/2009 | | | 12/3/2009 | | | 11/20/2009 | | | 12/8/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 234 | | 5 | 176 | | 5 | 439 | | 5 | 89 | | 5 | 193 | | 5 | 133 | | 5 | 164 | | 5 |
| Chloride | mg/l | 85.8 | | 5 | 181 | | 10 | 184 | | 10 | 8.8 | | 5 | 48.8 | | 5 | 38.5 | | 5 | 35.5 | | 5 |
| Nitrate | mg/l | 0.81 | | 0.1 | 0.12 | | 0.1 | 0.13 | | 0.1 | 0.11 | | 0.1 | 0.49 | J | 0.1 | 2.6 | | 0.2 | 1.1 | | 0.1 |
| Sulfate | mg/l | 34.7 | | 5 | 27 | | 5 | 27.1 | | 5 | 16.4 | | 5 | 37.5 | | 5 | 21.8 | | 5 | 25.6 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | < 1 | R | 1 | < 1 | R | 1 | 6.6 | | 1 | < 1 | R | 1 | < 1 | R | 1 | 1.1 | | 1 | < 1 | R | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit.
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
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NDR - Sample was not analyzed for the listed parameter.

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# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B2 | | | MW-B3 | | | MW-B30 | | | MW-B34 | | | MW-B43 | | | MW-B45 | | | MW-B46 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 3/3/2010 | | | 12/8/2009 | | | 11/25/2009 | | | 11/23/2009 | | | 11/20/2009 | | | 11/20/2009 | | | 11/24/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 222 | | 5 | 124 | | 5 | 148 | | 5 | 310 | | 5 | 202 | | 5 | 170 | | 5 | 117 | | 5 |
| Chloride | mg/l | 79.9 | | 5 | 69.5 | | 5 | 33.4 | | 5 | 86.2 | | 5 | 51.6 | | 5 | 76 | | 5 | 54.3 | | 5 |
| Nitrate | mg/l | 0.76 | | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | 1.1 | | 0.1 | 0.081 | J | 0.1 | 0.74 | | 0.1 | 1.3 | | 0.1 |
| Sulfate | mg/l | 32.1 | | 5 | 31.9 | | 5 | 18.5 | | 5 | 33.9 | B | 10 | 18.9 | | 5 | 30 | | 5 | 25 | B | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | < 1 | R | 1 | < 1 | U | 1 | 3.5 | | 1 | 1.6 | | 1 | 1.5 | | 1 | 1.3 | | 1 | 1.1 | | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
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# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B48 | | | MW-B52 | | | MW-B7 | | | MW-B9 | | | MW-B9 | | | MW-BL1 | | | MW-BL2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/3/2009 | | | 12/1/2009 | | | 12/4/2009 | | | 12/9/2009 | | | 12/9/2009 | | | 12/2/2009 | | | 12/2/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | FD | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 42 | | 5 | 146 | | 5 | 105 | | 5 | 130 | | 5 | 131 | | 5 | 78.2 | | 5 | 169 | | 5 |
| Chloride | mg/l | 42.9 | | 5 | 67.1 | | 5 | 60.7 | | 5 | 12.7 | | 5 | 14.1 | | 5 | 16.1 | | 5 | 53.1 | | 5 |
| Nitrate | mg/l | 1 | | 0.1 | 1.5 | | 0.1 | < 0.1 | U | 0.1 | 0.063 | J | 0.1 | 0.065 | J | 0.1 | 0.044 | J | 0.1 | 0.063 | J | 0.1 |
| Sulfate | mg/l | 19.6 | | 5 | 27.7 | | 5 | 34.7 | | 5 | 8.9 | | 5 | 8.2 | | 5 | 6.9 | | 5 | 22.4 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | <1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | < 1 | R | 1 | < 1 | U | 1 | 1.9 | | 1 | 3.6 | | 1 | 3.6 | | 1 | < 1 | R | 1 | < 1 | R | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

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# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MWC-1 (SEEP) | | | MW-C13 | | | MW-C16 | | | MW-C18 | | | MW-C3 | | | MW-C30 | | | MW-C31 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/3/2009 | | | 12/8/2009 | | | 11/30/2009 | | | 12/2/2009 | | | 12/8/2009 | | | 11/25/2009 | | | 12/1/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 60.1 | | 5 | 319 | | 5 | 346 | | 5 | 162 | | 5 | 46.7 | | 5 | 113 | | 5 | 73.8 | | 5 |
| Chloride | mg/l | 54 | | 5 | 91.6 | | 5 | 43.2 | | 5 | 11.8 | | 5 | 45 | | 5 | 64.1 | | 5 | 14.5 | | 5 |
| Nitrate | mg/l | 0.11 | | 0.1 | 0.47 | | 0.1 | < 0.1 | U | 0.1 | 3.7 | | 0.4 | 0.35 | | 0.1 | 0.99 | | 0.1 | 0.056 | J | 0.1 |
| Sulfate | mg/l | 60.8 | | 25 | 79.4 | | 20 | 65 | | 20 | 56.9 | | 10 | 48.1 | | 10 | 32.5 | | 10 | 11.2 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | 9.8 | | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | < 1 | U | 1 | < 1 | R | 1 | 12.4 | R | 1 | < 1 | R | 1 | < 1 | U | 1 | 2.2 | | 1 | < 1 | R | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C33 | | | MW-C34 | | | MW-C34 | | | MW-C35 | | | MW-C35 | | | MW-C37 | | | MW-C37 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/23/2009 | | | 11/23/2009 | | | 11/23/2009 | | | 11/25/2009 | | | 11/25/2009 | | | 12/1/2009 | | | 12/1/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | FD | | | N | | | FD | | | N | | | FD | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 88.3 | | 5 | 212 | | 5 | 211 | | 5 | 261 | | 6 | 255 | | 5 | 196 | | 5 | 194 | | 5 |
| Chloride | mg/l | 188 | | 10 | 80.5 | | 5 | 79.8 | | 5 | 72.8 | | 5 | 75 | | 5 | 17 | | 5 | 16.7 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | 1.9 | | 0.1 | 1.9 | | 0.1 | 0.43 | | 0.1 | 0.45 | | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 |
| Sulfate | mg/l | 83 | B | 25 | 39.1 | B | 10 | 38.4 | B | 10 | 26.6 | | 5 | 28.4 | | 5 | 6.9 | | 5 | 6.6 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 29 | | 1 | 2.2 | | 1 | 2.2 | | 1 | 1.9 | | 1 | 1.7 | | 1 | < 1 | R | 1 | < 1 | R | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C38 | | | MW-C41 | | | MW-C42 | | | MW-C42 | | | MW-C44 | | | MW-C45 | | | MW-C46 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 12/1/2009 | | | 12/4/2009 | | | 12/7/2009 | | | 12/7/2009 | | | 12/2/2009 | | | 11/20/2009 | | | 11/24/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | FD | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 125 | | 5 | 47.8 | | 5 | 310 | | 5 | 310 | | 5 | 62.4 | | 5 | 74.8 | | 5 | 175 | | 5 |
| Chloride | mg/l | 191 | | 10 | 344 | | 25 | 379 | | 20 | 326 | | 20 | 98 | | 5 | 93.9 | | 5 | 69.4 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | 0.51 | | 0.1 | 0.58 | | 0.1 | 1.2 | | 0.1 |
| Sulfate | mg/l | 33.2 | | 10 | 16.2 | | 5 | 24.3 | | 5 | 25.5 | | 5 | 31.2 | | 10 | 32.6 | | 10 | 28.9 | B | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | < 1 | R | 1 | 7.5 | | 1 | 5.9 | | 1 | 5.9 | | 1 | < 1 | R | 1 | 0.73 | J | 1 | 0.78 | J | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-C47 12/4/2009 N | | | MW-C47 3/24/2010 N | | | MW-C48 12/3/2009 N | | | MW-C5 12/8/2009 N | | | MWC-5 (SEEP) 12/3/2009 N | | | MW-C52 12/1/2009 N | | | MW-C6 12/2/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 1090 | | 5 | 129 | | 5 | 75.7 | | 5 | 98.6 | | 5 | 199 | | 5 | 161 | | 5 | 90.8 | | 5 |
| Chloride | mg/l | 185 | | 10 | 1310 | | 50 | 37.8 | | 5 | 84.1 | | 5 | 113 | | 5 | 66.2 | | 5 | 69.6 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | 0.1 | | 0.1 | 0.43 | | 0.1 | < 0.1 | U | 0.1 | 1 | | 0.1 | 0.42 | | 0.1 | 0.69 | | 0.1 |
| Sulfate | mg/l | < 5 | U | 5 | 29.2 | B | 5 | 24.5 | | 5 | 46.7 | | 10 | 35.5 | | 5 | 27.8 | | 5 | 31.2 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 9.4 | | 1 | 10.7 | | 1 | < 1 | R | 1 | < 1 | R | 1 | < 1 | R | 1 | < 1 | U | 1 | < 1 | R | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-C7 12/4/2009 N | | | P-B16 12/7/2009 N | | | P-C15 12/7/2009 N | | | P-DC15 12/4/2009 N | | | P-SC15 12/7/2009 N | | | P-SC16 12/4/2009 N | | | P-SC17 12/7/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 69.8 | | 5 | 299 | | 5 | 32.2 | | 5 | 115 | | 5 | 70.8 | | 5 | 80.5 | | 5 | 82.8 | | 5 |
| Chloride | mg/l | 43.9 | | 5 | 49.3 | | 5 | 90.8 | | 5 | 131 | | 5 | 102 | | 5 | 52.2 | | 5 | 134 | | 5 |
| Nitrate | mg/l | 0.34 | | 0.1 | 0.43 | | 0.1 | < 0.1 | U | 0.1 | 1.2 | | 0.1 | 0.34 | | 0.1 | 0.13 | | 0.1 | < 0.1 | U | 0.1 |
| Sulfate | mg/l | 56 | | 10 | 39.4 | | 5 | 42.8 | | 10 | 34 | | 5 | 30.7 | | 5 | 23.9 | | 5 | 13.6 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 2.6 | | 1 | 2.6 | | 1 | 1.5 | | 1 | < 1 | U | 1 | 1.7 | | 1 | < 1 | R | 1 | 18.9 | | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

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# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | PW-B15 12/4/2009 N | | | PW-SC15 12/4/2009 N | | | PZ-B34 11/19/2009 N | | | PZ-B35 11/19/2009 N | | | PZ-B37 11/18/2009 N | | | PZ-B38 11/19/2009 N | | | PZ-B49 11/24/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 257 | | 5 | 249 | | 5 | 152 | | 5 | 143 | | 5 | 117 | | 5 | 281 | | 5 | 143 | | 5 |
| Chloride | mg/l | 124 | | 5 | 102 | | 5 | 76.8 | | 5 | 74.2 | | 5 | 80.1 | | 5 | 79.7 | | 5 | 74.7 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | 0.69 | | 0.1 | 1.5 | | 0.1 | 1.5 | | 0.1 | 1.2 | | 0.1 | < 0.1 | U | 0.1 | 1.7 | | 0.1 |
| Sulfate | mg/l | 19.3 | | 5 | 29.6 | | 5 | 21.1 | | 10 | 32.2 | | 10 | 29.7 | | 10 | 4.2 | J | 5 | 31.1 | B | 10 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 2.6 | | 1 | 2.1 | | 1 | 0.81 | J | 1 | 1.1 | | 1 | 0.86 | J | 1 | 4.7 | | 1 | 1.1 | | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

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# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | PZ-B50 | | | PZ-B51 | | | PZ-C32 | | | PZ-C34 | | | PZ-C35 | | | PZ-C36 | | | PZ-C37 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/18/2009 | | | 11/18/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/19/2009 | | | 11/18/2009 | | | 11/18/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 147 | | 5 | 231 | | 5 | 197 | | 5 | 150 | | 5 | 138 | | 5 | 138 | | 5 | 147 | | 5 |
| Chloride | mg/l | 81.4 | | 5 | 78.2 | | 5 | 80.1 | | 5 | 84.5 | | 5 | 82.2 | | 5 | 78.6 | | 5 | 77.7 | | 5 |
| Nitrate | mg/l | 1.5 | | 0.1 | 0.45 | | 0.1 | < 0.1 | U | 0.1 | 1.4 | | 0.1 | 1.4 | | 0.1 | 1.5 | | 0.1 | 0.048 | J | 0.1 |
| Sulfate | mg/l | 30.1 | | 10 | 20.1 | | 5 | 24.5 | | 5 | 29.2 | | 10 | 29.9 | | 10 | 28.7 | | 10 | 29.8 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 0.97 | J | 1 | 4.1 | | 1 | 1.5 | | 1 | 0.93 | J | 1 | 0.74 | J | 1 | 0.81 | J | 1 | 1.5 | | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

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# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | PZ-C38 | | | PZ-C49 | | | PZ-C50 | | | PZ-C51 | | | RW-1 | | | RW-2 | | | RW-3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/19/2009 | | | 11/24/2009 | | | 11/24/2009 | | | 11/24/2009 | | | 11/18/2009 | | | 11/18/2009 | | | 11/18/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 239 | | 5 | 186 | | 5 | 135 | | 5 | 158 | | 5 | 177 | | 5 | 252 | | 5 | 144 | | 5 |
| Chloride | mg/l | 80.2 | | 5 | 60.4 | | 5 | 82.8 | | 5 | 64.9 | | 5 | 77.2 | | 5 | 75.7 | | 5 | 76.5 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | 0.86 | | 0.1 | 1.5 | | 0.1 | 0.93 | | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | 1 | | 0.1 |
| Sulfate | mg/l | 4.1 | J | 5 | 27.8 | B | 5 | 29.7 | B | 10 | 27.9 | B | 10 | 27.3 | | 5 | 8.5 | | 5 | 29.6 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 2 | | 1 | 0.81 | J | 1 | 0.8 | J | 1 | 1.3 | | 1 | 1.5 | | 1 | 2.7 | | 1 | 0.95 | J | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 5
## Area-Wide Monitoring Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID<br>Sample Date<br>N=Normal, FD=Field Duplicate | | RW-4<br>11/18/2009<br>N | | | TW-2<br>11/25/2009<br>N | | |
|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 178 | | 5 | 191 | | 5 |
| Chloride | mg/l | 79.4 | | 5 | 51 | | 5 |
| Nitrate | mg/l | 1.2 | | 0.1 | 1.7 | | 0.1 |
| Sulfate | mg/l | 28.9 | | 5 | 44.7 | | 10 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 0.87 | J | 1 | 1.9 | | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was anatzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

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# Table 6
## AISB Pilot and O'Connor Drive Area Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B14 | | | MW-B16 | | | MW-B19 | | | MW-B19 | | | MW-B20 | | | MW-B21 | | | MW-B22 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/16/2009 | | | 11/30/2009 | | | 11/17/2009 | | | 11/17/2009 | | | 11/16/2009 | | | 11/18/2009 | | | 11/18/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | FD | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 4700 | | 64 | 96 | | 2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | 2100 | | 64 |
| 1,1,2-Trichloroethane | ug/l | 6.8 | | 2.1 | < 2 | U | 2 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | 6.8 | | 2.1 |
| 1,1-Dichloroethane | ug/l | 990 | | 2.1 | 14 | | 2 | 720 | | 2.1 | 930 | | 2.1 | 800 | | 2.1 | 510 | | 2.1 | 380 | | 2.1 |
| 1,1-Dichloroethene | ug/l | 390 | | 4.6 | 7.9 | | 2 | 220 | | 4.6 | 92 | | 4.6 | 110 | | 4.6 | < 4.6 | U | 4.6 | 480 | | 4.6 |
| 1,2-Dichloroethane | ug/l | < 3.3 | U | 3.3 | < 2 | U | 2 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 |
| Carbon Tetrachloride | ug/l | < 3.1 | U | 3.1 | 13 | | 2 | < 3.1 | U | 3.1 | < 3.1 | U | 3.1 | < 3.1 | U | 3.1 | < 3.1 | U | 3.1 | < 3.1 | U | 3.1 |
| Chloroethane | ug/l | < 4.9 | U | 4.9 | < 2 | U | 2 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 |
| Chloroform | ug/l | 290 | | 1.6 | 4.1 | | 2 | 50 | | 1.6 | 51 | | 1.6 | 71 | | 1.6 | < 1.6 | U | 1.6 | 170 | | 1.6 |
| Chloromethane | ug/l | < 2.1 | U | 2.1 | < 2 | U | 2 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 |
| cis-1,2-Dichloroethene | ug/l | 34000 | | 40 | 410 | | 2 | 9300 | | 20 | 8300 | | 20 | 11000 | | 20 | 9300 | | 20 | 19000 | | 40 |
| Ethane | ug/l | < 120 | U | 120 | NDR | | | < 250 | U | 250 | < 250 | U | 250 | < 120 | U | 120 | < 100 | U | 100 | < 5 | U | 5 |
| Ethene | ug/l | 1000 | | 120 | NDR | | | 1100 | | 250 | 1000 | | 250 | 970 | | 120 | 920 | | 100 | 150 | | 5 |
| Methane | ug/l | 4600 | | 120 | NDR | | | 4200 | | 250 | 3900 | | 250 | 5700 | | 120 | 7700 | | 100 | 130 | | 5 |
| Methylene Chloride | ug/l | 990 | | 4.9 | < 2 | U | 2 | 50 | J | 4.9 | 150 | J | 4.9 | 160 | | 4.9 | 41 | | 4.9 | < 4.9 | U | 4.9 |
| Tetrachloroethene | ug/l | 46 | | 2.9 | 18 | | 2 | 60 | | 2.9 | 76 | | 2.9 | 52 | | 2.9 | 64 | | 2.9 | 1200 | | 2.9 |
| Trichloroethene | ug/l | 52 | | 2.8 | 100 | | 2 | 280 | | 2.8 | 310 | | 2.8 | 280 | | 2.8 | 280 | | 2.8 | 7500 | | 56 |
| Vinyl Chloride | ug/l | 1100 | | 1.7 | 1.4 | J | 2 | 1100 | | 1.7 | 740 | | 1.7 | 760 | | 1.7 | 610 | | 1.7 | 490 | | 1.7 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 6
## AISB Pilot and O'Connor Drive Area Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B23 | | | MW-B24 | | | MW-B25 | | | MW-B26 | | | MW-B27 | | | MW-C14 | | | MW-C15 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/16/2009 | | | 11/17/2009 | | | 11/17/2009 | | | 11/17/2009 | | | 11/18/2009 | | | 11/16/2009 | | | 11/16/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 4.4 | | 0.32 | 1700 | | 3.2 | 460 | | 20 | 260 | | 10 | 290 | | 5 | 1600 | | 32 | 310 | | 20 |
| 1,1,2-Trichloroethane | ug/l | < 0.21 | U | 0.21 | < 2.1 | U | 2.1 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 2.1 | U | 2.1 | < 20 | U | 20 |
| 1,1-Dichloroethane | ug/l | 1100 | | 4.2 | 3900 | | 42 | 1000 | | 20 | 210 | | 10 | 420 | | 5 | 1000 | | 2.1 | 10 | J | 20 |
| 1,1-Dichloroethene | ug/l | < 0.46 | U | 0.46 | < 4.6 | U | 4.6 | 89 | | 20 | 67 | | 10 | 39 | | 5 | 130 | | 4.6 | 290 | | 20 |
| 1,2-Dichloroethane | ug/l | 1.8 | | 0.33 | 15 | | 3.3 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 3.3 | U | 3.3 | < 20 | U | 20 |
| Carbon Tetrachloride | ug/l | < 0.31 | U | 0.31 | < 3.1 | U | 3.1 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 3.1 | U | 3.1 | < 20 | U | 20 |
| Chloroethane | ug/l | < 0.49 | U | 0.49 | < 4.9 | U | 4.9 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 4.9 | U | 4.9 | < 20 | U | 20 |
| Chloroform | ug/l | < 0.16 | U | 0.16 | 29 | | 1.6 | 5.8 | J | 20 | 7.4 | J | 10 | 7.1 | | 5 | 180 | | 1.6 | 550 | | 20 |
| Chloromethane | ug/l | < 0.21 | U | 0.21 | < 2.1 | U | 2.1 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 2.1 | U | 2.1 | < 20 | U | 20 |
| cis-1,2-Dichloroethene | ug/l | < 4.5 | U | 4.5 | 35000 | | 40 | 3100 | | 20 | 1900 | | 10 | 1200 | | 5 | 12000 | | 20 | 180 | | 20 |
| Ethane | ug/l | < 250 | U | 250 | < 50 | U | 50 | < 50 | U | 50 | < 5 | U | 5 | < 25 | U | 25 | < 500 | U | 500 | < 5 | U | 5 |
| Ethene | ug/l | 1500 | | 250 | 2500 | | 50 | 2300 | | 50 | 290 | | 5 | 1200 | | 25 | 1300 | | 500 | < 5 | U | 5 |
| Methane | ug/l | 9300 | | 250 | 2500 | | 50 | 3200 | | 50 | 390 | | 5 | 1300 | | 25 | 18000 | | 500 | < 5 | U | 5 |
| Methylene Chloride | ug/l | 1.5 | | 0.49 | 200 | | 4.9 | < 20 | U | 20 | < 10 | U | 10 | 3.9 | J | 5 | 470 | | 4.9 | < 20 | U | 20 |
| Tetrachloroethene | ug/l | 1.3 | | 0.29 | 15 | | 2.9 | 5.7 | J | 20 | 160 | | 10 | 27 | | 5 | 1100 | | 2.9 | 810 | | 20 |
| Trichloroethene | ug/l | 0.88 | | 0.28 | 36 | | 2.8 | 12 | J | 20 | 1000 | | 10 | 79 | | 5 | 5200 | | 28 | 8400 | | 20 |
| Vinyl Chloride | ug/l | 7.2 | | 0.17 | 9600 | | 34 | 990 | | 20 | 310 | | 10 | 440 | | 5 | 3400 | | 17 | < 20 | U | 20 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit.
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010



Golder Associates

# Table 6
## AISB Pilot and O'Connor Drive Area Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C19 | | | MW-C20 | | | MW-C21 | | | MW-C22 | | | MW-C23 | | | MW-C24 | | | MW-C26 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/17/2009 | | | 11/16/2009 | | | 11/16/2009 | | | 11/16/2009 | | | 11/16/2009 | | | 11/17/2009 | | | 11/17/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | < 3.2 | U | 3.2 | < 32 | R | 32 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | 5.8 | | 0.32 | 420 | | 3.2 | 2100 | | 50 |
| 1,1,2-Trichloroethane | ug/l | < 2.1 | U | 2.1 | < 21 | R | 21 | < 2.1 | U | 2.1 | 14 | | 2.1 | 0.97 | | 0.21 | < 2.1 | U | 2.1 | < 50 | U | 50 |
| 1,1-Dichloroethane | ug/l | 630 | | 2.1 | 670 | J | 2.1 | 640 | | 2.1 | 690 | | 2.1 | 320 | | 1.1 | 750 | | 2.1 | 1900 | | 50 |
| 1,1-Dichloroethene | ug/l | 70 | | 4.6 | < 46 | R | 46 | 110 | | 4.6 | 57 | | 4.6 | < 0.46 | U | 0.46 | < 4.6 | U | 4.6 | 170 | | 50 |
| 1,2-Dichloroethane | ug/l | < 3.3 | U | 3.3 | < 33 | R | 33 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | 1.2 | | 0.33 | < 3.3 | U | 3.3 | 14 | J | 50 |
| Carbon Tetrachloride | ug/l | < 3.1 | U | 3.1 | < 31 | R | 31 | < 3.1 | U | 3.1 | < 3.1 | U | 3.1 | < 0.31 | U | 0.31 | < 3.1 | U | 3.1 | < 50 | U | 50 |
| Chloroethane | ug/l | < 4.9 | U | 4.9 | < 49 | R | 49 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 0.49 | U | 0.49 | < 4.9 | U | 4.9 | < 50 | U | 50 |
| Chloroform | ug/l | < 1.6 | U | 1.6 | 52 | J | 1.6 | 110 | | 1.6 | 540 | | 1.6 | 1.6 | | 0.16 | 51 | | 1.6 | 1000 | | 50 |
| Chloromethane | ug/l | < 2.1 | U | 2.1 | < 21 | R | 21 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | < 0.21 | U | 0.21 | < 2.1 | U | 2.1 | < 50 | U | 50 |
| cis-1,2-Dichloroethene | ug/l | 10000 | | 40 | 10000 | J | 20 | 14000 | | 20 | 4400 | | 100 | 8.1 | | 0.2 | 3800 | | 20 | 8000 | | 50 |
| Ethane | ug/l | < 100 | U | 100 | < 120 | R | 120 | < 50 | U | 50 | < 5 | U | 5 | < 500 | U | 500 | < 25 | U | 25 | NDR | | |
| Ethene | ug/l | 490 | | 100 | 670 | J | 120 | 900 | | 50 | 210 | | 5 | 1200 | | 500 | 830 | | 25 | NDR | | |
| Methane | ug/l | 7400 | | 100 | 6300 | J | 120 | 2800 | | 50 | 580 | | 5 | 16000 | | 500 | 1700 | | 25 | NDR | | |
| Methylene Chloride | ug/l | 47 | | 4.9 | 88 | J | 4.9 | 220 | | 4.9 | 1100 | | 4.9 | < 0.49 | U | 0.49 | 150 | | 4.9 | 16000 | | 50 |
| Tetrachloroethene | ug/l | 55 | | 2.9 | 38 | J | 2.9 | 40 | | 2.9 | 1400 | | 140 | 3.1 | | 0.29 | 2300 | | 29 | 1500 | | 50 |
| Trichloroethene | ug/l | 390 | | 2.8 | 360 | J | 2.8 | 440 | | 2.8 | 13000 | | 140 | 2 | | 0.28 | 1700 | | 28 | 9700 | | 50 |
| Vinyl Chloride | ug/l | 500 | | 1.7 | 520 | J | 1.7 | 850 | | 1.7 | 290 | | 1.7 | 15 | | 0.17 | 670 | | 1.7 | 2000 | | 50 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
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NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 6
## AISB Pilot and O'Connor Drive Area Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C27 | | | MW-C28 | | | PZ-C32D | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/17/2009 | | | 11/20/2009 | | | 12/8/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | 0.83 | J | 1 | 1.8 | | 1 | 82 | | 5 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,1-Dichloroethane | ug/l | 2.3 | | 1 | 7.7 | | 1 | 17 | | 5 |
| 1,1-Dichloroethene | ug/l | < 1 | U | 1 | 1.3 | | 1 | 11 | | 5 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Chloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Chloroform | ug/l | < 1 | U | 1 | < 1 | U | 1 | 18 | | 5 |
| Chloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| cis-1,2-Dichloroethene | ug/l | < 3.2 | U | 3.2 | 50 | | 1 | 500 | | 5 |
| Ethane | ug/l | NDR | | | < 5 | U | 5 | < 5 | U | 5 |
| Ethene | ug/l | NDR | | | < 5 | U | 5 | 64 | | 5 |
| Methane | ug/l | NDR | | | < 5 | U | 5 | 130 | | 5 |
| Methylene Chloride | ug/l | < 1 | U | 1 | 2.5 | | 1 | < 5 | U | 5 |
| Tetrachloroethene | ug/l | 0.78 | J | 1 | 12 | | 1 | 22 | | 5 |
| Trichloroethene | ug/l | 0.33 | J | 1 | 83 | | 1 | 150 | | 5 |
| Vinyl Chloride | ug/l | < 2 | U | 2 | 0.29 | J | 1 | 72 | | 5 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

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# Table 7
## AISB Pilot and O'Connor Drive Area Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B14 | | | MW-B16 | | | MW-B19 | | | MW-B19 | | | MW-B20 | | | MW-B21 | | | MW-B22 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/18/2009 | | | 11/30/2009 | | | 11/17/2009 | | | 11/17/2009 | | | 11/18/2009 | | | 11/18/2009 | | | 11/16/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | FD | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 4.6 | U | 4.6 | < 2 | U | 2 | < 4.6 | U | 4.6 | < 4.6 | U | 4.6 | < 4.6 | U | 4.6 | < 4.6 | U | 4.6 | < 4.6 | U | 4.6 |
| 1,2,4-Trichlorobenzene | ug/l | < 4.2 | U | 4.2 | < 2 | U | 2 | < 4.2 | U | 4.2 | < 4.2 | U | 4.2 | 31 | | 4.2 | 6.1 | | 4.2 | < 4.2 | U | 4.2 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 4.4 | U | 4.4 | < 2 | U | 2 | < 4.4 | U | 4.4 | < 4.4 | U | 4.4 | < 4.4 | U | 4.4 | < 4.4 | U | 4.4 | < 4.4 | U | 4.4 |
| 1,2-Dibromoethane | ug/l | < 1.9 | U | 1.9 | < 2 | U | 2 | < 1.9 | U | 1.9 | < 1.9 | U | 1.9 | < 1.9 | U | 1.9 | < 1.9 | U | 1.9 | < 1.9 | U | 1.9 |
| 1,2-Dichlorobenzene | ug/l | < 3.4 | U | 3.4 | < 2 | U | 2 | < 3.4 | U | 3.4 | < 3.4 | U | 3.4 | 13 | | 3.4 | 5.3 | | 3.4 | < 3.4 | U | 3.4 |
| 1,2-Dichloropropane | ug/l | < 2.4 | U | 2.4 | < 2 | U | 2 | < 2.4 | U | 2.4 | < 2.4 | U | 2.4 | < 2.4 | U | 2.4 | < 2.4 | U | 2.4 | < 2.4 | U | 2.4 |
| 1,3-Dichlorobenzene | ug/l | < 3.1 | U | 3.1 | < 2 | U | 2 | < 3.1 | U | 3.1 | < 3.1 | U | 3.1 | 13 | | 3.1 | < 3.1 | U | 3.1 | < 3.1 | U | 3.1 |
| 1,4-Dichlorobenzene | ug/l | < 4 | U | 4 | < 2 | U | 2 | < 4 | U | 4 | < 4 | U | 4 | 12 | | 4 | < 4 | U | 4 | < 4 | U | 4 |
| 2-Butanone | ug/l | < 23 | U | 23 | < 20 | U | 20 | < 23 | U | 23 | < 23 | U | 23 | < 23 | U | 23 | < 23 | U | 23 | < 23 | U | 23 |
| 2-Hexanone | ug/l | < 24 | U | 24 | < 20 | U | 20 | < 24 | U | 24 | < 24 | U | 24 | < 24 | U | 24 | < 24 | U | 24 | < 24 | U | 24 |
| 4-Methyl-2-pentanone | ug/l | 430 | | 21 | < 20 | U | 20 | 200 | | 21 | 200 | | 21 | 190 | | 21 | 930 | | 21 | < 21 | U | 21 |
| Acetone | ug/l | < 38 | U | 38 | < 20 | U | 20 | < 38 | U | 38 | < 38 | U | 38 | 340 | | 38 | < 38 | U | 38 | 69 | | 38 |
| Benzene | ug/l | < 1.5 | U | 1.5 | < 2 | U | 2 | < 1.5 | U | 1.5 | < 1.5 | U | 1.5 | < 1.5 | U | 1.5 | < 1.5 | U | 1.5 | < 1.5 | U | 1.5 |
| Bromodichloromethane | ug/l | < 2.2 | U | 2.2 | < 2 | U | 2 | < 2.2 | U | 2.2 | < 2.2 | U | 2.2 | < 2.2 | U | 2.2 | < 2.2 | U | 2.2 | < 2.2 | U | 2.2 |
| Bromoform | ug/l | < 4.5 | U | 4.5 | < 2 | U | 2 | < 4.5 | U | 4.5 | < 4.5 | U | 4.5 | < 4.5 | U | 4.5 | < 4.5 | U | 4.5 | < 4.5 | U | 4.5 |
| Bromomethane | ug/l | < 4.9 | U | 4.9 | < 2 | U | 2 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 |
| Carbon Disulfide | ug/l | < 1.8 | U | 1.8 | < 2 | U | 2 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 |
| Chlorobenzene | ug/l | < 1.7 | U | 1.7 | < 2 | U | 2 | < 1.7 | U | 1.7 | < 1.7 | U | 1.7 | 6.1 | | 1.7 | < 1.7 | U | 1.7 | < 1.7 | U | 1.7 |
| cis-1,3-Dichloropropene | ug/l | < 3.2 | U | 3.2 | < 2 | U | 2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 |
| Cyclohexane | ug/l | < 1.8 | U | 1.8 | < 2 | U | 2 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 |
| Dibromochloromethane | ug/l | < 2.7 | U | 2.7 | < 2 | U | 2 | < 2.7 | U | 2.7 | < 2.7 | U | 2.7 | < 2.7 | U | 2.7 | < 2.7 | U | 2.7 | < 2.7 | U | 2.7 |
| Dichlorodifluoromethane | ug/l | < 4.7 | U | 4.7 | < 2 | U | 2 | < 4.7 | U | 4.7 | < 4.7 | U | 4.7 | < 4.7 | U | 4.7 | < 4.7 | U | 4.7 | < 4.7 | U | 4.7 |
| Ethylbenzene | ug/l | 37 | | 1.9 | < 2 | U | 2 | 6.6 | | 1.9 | 6.8 | | 1.9 | 10 | | 1.9 | 11 | | 1.9 | < 1.9 | U | 1.9 |
| Freon 113 | ug/l | 25000 | | 90 | 340 | | 2 | 6400 | | 45 | 6100 | | 45 | 6400 | | 45 | 5000 | | 45 | 6900 | | 90 |
| Isopropylbenzene | ug/l | < 2.1 | U | 2.1 | < 2 | U | 2 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | 5.7 | | 2.1 | < 2.1 | U | 2.1 |
| m,p-Xylenes | ug/l | 93 | | 3.5 | < 4 | U | 4 | 8.8 | | 3.5 | 10 | | 3.5 | 17 | | 3.5 | 17 | | 3.5 | < 3.5 | U | 3.5 |
| Methyl Acetate | ug/l | 390 | | 4.7 | < 4 | U | 4 | 820 | | 4.7 | 1600 | | 4.7 | 3000 | | 47 | 4500 | | 47 | < 4.7 | U | 4.7 |
| Methyl tert-Butyl Ether | ug/l | < 3.2 | U | 3.2 | < 2 | U | 2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 |
| o-Xylene | ug/l | 40 | | 2.2 | < 2 | U | 2 | 8 | | 2.2 | 11 | | 2.2 | 12 | | 2.2 | 16 | | 2.2 | < 2.2 | U | 2.2 |
| Styrene | ug/l | < 1.8 | U | 1.8 | < 2 | U | 2 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 |
| Toluene | ug/l | 460 | | 1.5 | < 2 | U | 2 | 150 | | 1.5 | 150 | | 1.5 | 200 | | 1.5 | 200 | | 1.5 | < 1.5 | U | 1.5 |
| trans-1,2-Dichloroethene | ug/l | 28 | | 3.1 | 1.4 | J | 2 | 14 | | 3.1 | 15 | | 3.1 | 17 | | 3.1 | 7.1 | | 3.1 | 24 | | 3.1 |
| trans-1,3-Dichloropropene | ug/l | < 3.3 | U | 3.3 | < 2 | U | 2 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 |
| Trichlorofluoromethane | ug/l | < 2.6 | U | 2.6 | < 2 | U | 2 | < 2.6 | U | 2.6 | < 2.6 | U | 2.6 | < 2.6 | U | 2.6 | < 2.6 | U | 2.6 | < 2.6 | U | 2.6 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
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Checked by: CDL Date: June 10, 2010

# Table 7
## AISB Pilot and O'Connor Drive Area Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B23 | | | MW-B24 | | | MW-B25 | | | MW-B26 | | | MW-B27 | | | MW-C14 | | | MW-C15 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/16/2009 | | | 11/17/2009 | | | 11/17/2009 | | | 11/17/2009 | | | 11/18/2009 | | | 11/16/2009 | | | 11/16/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 0.46 | U | 0.46 | < 4.6 | U | 4.6 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 4.6 | U | 4.6 | < 20 | U | 20 |
| 1,2,4-Trichlorobenzene | ug/l | 1.2 | | 0.42 | < 4.2 | U | 4.2 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | 23 | | 4.2 | < 20 | U | 20 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 0.44 | U | 0.44 | < 4.4 | U | 4.4 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 4.4 | U | 4.4 | < 20 | U | 20 |
| 1,2-Dibromoethane | ug/l | < 0.19 | U | 0.19 | < 1.9 | U | 1.9 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 1.9 | U | 1.9 | < 20 | U | 20 |
| 1,2-Dichlorobenzene | ug/l | 1.5 | | 0.34 | < 3.4 | U | 3.4 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | 5.8 | | 3.4 | < 20 | U | 20 |
| 1,2-Dichloropropane | ug/l | < 0.24 | U | 0.24 | < 2.4 | U | 2.4 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 2.4 | U | 2.4 | < 20 | U | 20 |
| 1,3-Dichlorobenzene | ug/l | 0.88 | | 0.31 | < 3.1 | U | 3.1 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | 6.3 | | 3.1 | < 20 | U | 20 |
| 1,4-Dichlorobenzene | ug/l | 2.1 | | 0.4 | < 4 | U | 4 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | 6.8 | | 4 | < 20 | U | 20 |
| 2-Butanone | ug/l | < 2.3 | U | 2.3 | < 23 | U | 23 | < 200 | U | 200 | < 100 | U | 100 | < 50 | U | 50 | < 23 | U | 23 | < 200 | U | 200 |
| 2-Hexanone | ug/l | < 2.5 | U | 2.5 | < 24 | U | 24 | < 200 | U | 200 | < 100 | U | 100 | < 50 | U | 50 | < 24 | U | 24 | < 200 | U | 200 |
| 4-Methyl-2-pentanone | ug/l | 1000 | J | 2.1 | < 21 | U | 21 | < 200 | U | 200 | < 100 | U | 100 | < 50 | U | 50 | 1900 | | 21 | < 200 | U | 200 |
| Acetone | ug/l | < 3.8 | U | 3.8 | < 38 | U | 38 | < 200 | U | 200 | < 100 | U | 100 | < 50 | U | 50 | < 38 | U | 38 | < 200 | U | 200 |
| Benzene | ug/l | 0.79 | | 0.15 | < 1.5 | U | 1.5 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 1.5 | U | 1.5 | < 20 | U | 20 |
| Bromodichloromethane | ug/l | < 0.22 | U | 0.22 | < 2.2 | U | 2.2 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 2.2 | U | 2.2 | < 20 | U | 20 |
| Bromoform | ug/l | < 0.45 | U | 0.45 | < 4.5 | U | 4.5 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 4.5 | U | 4.5 | < 20 | U | 20 |
| Bromomethane | ug/l | < 0.49 | U | 0.49 | < 4.9 | U | 4.9 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 4.9 | U | 4.9 | < 20 | U | 20 |
| Carbon Disulfide | ug/l | < 0.18 | U | 0.18 | < 1.8 | U | 1.8 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 1.8 | U | 1.8 | < 20 | U | 20 |
| Chlorobenzene | ug/l | 0.86 | | 0.17 | < 1.7 | U | 1.7 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 1.7 | U | 1.7 | < 20 | U | 20 |
| cis-1,3-Dichloropropene | ug/l | < 0.32 | U | 0.32 | < 3.2 | U | 3.2 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 3.2 | U | 3.2 | < 20 | U | 20 |
| Cyclohexane | ug/l | < 0.18 | U | 0.18 | < 1.8 | U | 1.8 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 1.8 | U | 1.8 | < 20 | U | 20 |
| Dibromochloromethane | ug/l | < 0.27 | U | 0.27 | < 2.7 | U | 2.7 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 2.7 | U | 2.7 | < 20 | U | 20 |
| Dichlorodifluoromethane | ug/l | < 0.47 | U | 0.47 | < 4.7 | U | 4.7 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 4.7 | U | 4.7 | < 20 | U | 20 |
| Ethylbenzene | ug/l | 0.6 | | 0.19 | 40 | | 1.9 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | 23 | | 1.9 | < 20 | U | 20 |
| Freon 113 | ug/l | 140 | | 0.45 | 18000 | | 90 | 2500 | | 20 | 1300 | | 10 | 1800 | | 5 | 9400 | | 45 | 2700 | | 20 |
| Isopropylbenzene | ug/l | < 0.21 | U | 0.21 | < 2.1 | U | 2.1 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 2.1 | U | 2.1 | < 20 | U | 20 |
| m,p-Xylenes | ug/l | < 0.35 | U | 0.35 | 92 | | 3.5 | 8.6 | J | 40 | < 20 | U | 20 | < 10 | U | 10 | 53 | | 3.5 | < 40 | U | 40 |
| Methyl Acetate | ug/l | 190 | | 0.47 | 170 | | 4.7 | < 40 | U | 40 | < 20 | U | 20 | < 10 | U | 10 | 7200 | | 47 | < 40 | U | 40 |
| Methyl tert-Butyl Ether | ug/l | < 0.32 | U | 0.32 | < 3.2 | U | 3.2 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 3.2 | U | 3.2 | < 20 | U | 20 |
| o-Xylene | ug/l | 1.5 | | 0.22 | 46 | | 2.2 | 8.8 | J | 20 | < 10 | U | 10 | 3.1 | J | 5 | 23 | | 2.2 | < 20 | U | 20 |
| Styrene | ug/l | < 0.18 | U | 0.18 | < 1.8 | U | 1.8 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 1.8 | U | 1.8 | < 20 | U | 20 |
| Toluene | ug/l | 8 | | 0.15 | 560 | | 1.5 | 27 | | 20 | < 10 | U | 10 | < 5 | U | 5 | 390 | | 1.5 | < 20 | U | 20 |
| trans-1,2-Dichloroethene | ug/l | 7.5 | | 0.31 | 14 | | 3.1 | 24 | | 20 | 3.8 | J | 10 | 9.5 | | 5 | 12 | | 3.1 | < 20 | U | 20 |
| trans-1,3-Dichloropropene | ug/l | < 0.33 | U | 0.33 | < 3.3 | U | 3.3 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 3.3 | U | 3.3 | < 20 | U | 20 |
| Trichlorofluoromethane | ug/l | < 0.26 | U | 0.26 | < 2.6 | U | 2.6 | < 20 | U | 20 | < 10 | U | 10 | < 5 | U | 5 | < 2.6 | U | 2.6 | < 20 | U | 20 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 7
## AISB Pilot and O'Connor Drive Area Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-C19 11/17/2009 N | | | MW-C20 11/16/2009 N | | | MW-C21 11/16/2009 N | | | MW-C22 11/16/2009 N | | | MW-C23 11/16/2009 N | | | MW-C24 11/17/2009 N | | | MW-C26 11/17/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 4.6 | U | 4.6 | < 46 | R | 46 | < 4.6 | U | 4.6 | < 4.6 | U | 4.6 | < 0.46 | U | 0.46 | < 4.6 | U | 4.6 | < 50 | U | 50 |
| 1,2,4-Trichlorobenzene | ug/l | 8 | | 4.2 | < 42 | R | 42 | 53 | | 4.2 | < 4.2 | U | 4.2 | 1.5 | | 0.42 | < 4.2 | U | 4.2 | < 50 | U | 50 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 4.4 | U | 4.4 | < 44 | R | 44 | < 4.4 | U | 4.4 | < 4.4 | U | 4.4 | < 0.44 | U | 0.44 | < 4.4 | U | 4.4 | < 50 | U | 50 |
| 1,2-Dibromoethane | ug/l | < 1.9 | U | 1.9 | < 19 | R | 19 | < 1.9 | U | 1.9 | < 1.9 | U | 1.9 | < 0.19 | U | 0.19 | < 1.9 | U | 1.9 | < 50 | U | 50 |
| 1,2-Dichlorobenzene | ug/l | 5.6 | | 3.4 | < 34 | R | 34 | 14 | | 3.4 | < 3.4 | U | 3.4 | 0.96 | | 0.34 | < 3.4 | U | 3.4 | < 50 | U | 50 |
| 1,2-Dichloropropane | ug/l | < 2.4 | U | 2.4 | < 24 | R | 24 | < 2.4 | U | 2.4 | < 2.4 | U | 2.4 | < 0.24 | U | 0.24 | < 2.4 | U | 2.4 | < 50 | U | 50 |
| 1,3-Dichlorobenzene | ug/l | 5.7 | | 3.1 | < 31 | R | 31 | 14 | | 3.1 | < 3.1 | U | 3.1 | 0.59 | | 0.31 | < 3.1 | U | 3.1 | < 50 | U | 50 |
| 1,4-Dichlorobenzene | ug/l | 5.4 | | 4 | < 40 | R | 40 | 12 | | 4 | < 4 | U | 4 | 1.1 | | 0.4 | < 4 | U | 4 | < 50 | U | 50 |
| 2-Butanone | ug/l | < 23 | U | 23 | < 230 | R | 230 | < 23 | U | 23 | < 23 | U | 23 | < 2.3 | U | 2.3 | < 23 | U | 23 | < 500 | U | 500 |
| 2-Hexanone | ug/l | < 24 | U | 24 | < 250 | R | 250 | < 24 | U | 24 | < 24 | U | 24 | < 2.5 | U | 2.5 | < 24 | U | 24 | < 500 | U | 500 |
| 4-Methyl-2-pentanone | ug/l | 1100 | | 21 | 1500 | J | 21 | 290 | | 21 | 1200 | | 21 | 1300 | | 10 | 2000 | | 21 | 1600 | | 500 |
| Acetone | ug/l | 920 | | 38 | < 380 | R | 380 | 520 | | 38 | < 38 | U | 38 | 1500 | | 19 | < 38 | U | 38 | < 500 | U | 500 |
| Benzene | ug/l | < 1.5 | U | 1.5 | < 15 | R | 15 | < 1.5 | U | 1.5 | < 1.5 | U | 1.5 | < 0.15 | U | 0.15 | < 1.5 | U | 1.5 | < 50 | U | 50 |
| Bromodichloromethane | ug/l | < 2.2 | U | 2.2 | < 22 | R | 22 | < 2.2 | U | 2.2 | < 2.2 | U | 2.2 | < 0.22 | U | 0.22 | < 2.2 | U | 2.2 | < 50 | U | 50 |
| Bromoform | ug/l | < 4.5 | U | 4.5 | < 45 | R | 45 | < 4.5 | U | 4.5 | < 4.5 | U | 4.5 | < 0.45 | U | 0.45 | < 4.5 | U | 4.5 | < 50 | U | 50 |
| Bromomethane | ug/l | < 4.9 | U | 4.9 | < 49 | R | 49 | < 4.9 | U | 4.9 | < 4.9 | U | 4.9 | < 0.49 | U | 0.49 | < 4.9 | U | 4.9 | < 50 | U | 50 |
| Carbon Disulfide | ug/l | < 1.8 | U | 1.8 | < 18 | R | 18 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 0.18 | U | 0.18 | < 1.8 | U | 1.8 | < 50 | U | 50 |
| Chlorobenzene | ug/l | < 1.7 | U | 1.7 | < 17 | R | 17 | < 1.7 | U | 1.7 | < 1.7 | U | 1.7 | < 0.17 | U | 0.17 | < 1.7 | U | 1.7 | < 50 | U | 50 |
| cis-1,3-Dichloropropene | ug/l | < 3.2 | U | 3.2 | < 32 | R | 32 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 0.32 | U | 0.32 | < 3.2 | U | 3.2 | < 50 | U | 50 |
| Cyclohexane | ug/l | < 1.8 | U | 1.8 | < 18 | R | 18 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 0.18 | U | 0.18 | < 1.8 | U | 1.8 | < 50 | U | 50 |
| Dibromochloromethane | ug/l | < 2.7 | U | 2.7 | < 27 | R | 27 | < 2.7 | U | 2.7 | < 2.7 | U | 2.7 | < 0.27 | U | 0.27 | < 2.7 | U | 2.7 | < 50 | U | 50 |
| Dichlorodifluoromethane | ug/l | < 4.7 | U | 4.7 | < 47 | R | 47 | < 4.7 | U | 4.7 | < 4.7 | U | 4.7 | < 0.47 | U | 0.47 | < 4.7 | U | 4.7 | < 50 | U | 50 |
| Ethylbenzene | ug/l | 7.9 | | 1.9 | 5.8 | J | 1.9 | 8.2 | | 1.9 | 28 | | 1.9 | 1.3 | | 0.19 | 44 | | 1.9 | 17 | J | 50 |
| Freon 113 | ug/l | 3700 | | 90 | 4300 | J | 45 | 2000 | | 4.5 | 9600 | | 220 | 440 | | 2.2 | 11000 | | 45 | 6500 | | 50 |
| Isopropylbenzene | ug/l | 5.1 | | 2.1 | < 21 | R | 21 | < 2.1 | U | 2.1 | < 2.1 | U | 2.1 | 0.73 | | 0.21 | < 2.1 | U | 2.1 | < 50 | U | 50 |
| m,p-Xylenes | ug/l | 13 | | 3.5 | 8.6 | J | 3.5 | 14 | | 3.5 | 65 | | 3.5 | 2.4 | | 0.35 | 120 | | 3.5 | 44 | J | 100 |
| Methyl Acetate | ug/l | 28000 | | 94 | 16000 | J | 47 | 6200 | | 47 | 46000 | | 240 | < 0.47 | U | 0.47 | 3600 | | 47 | 77 | J | 100 |
| Methyl tert-Butyl Ether | ug/l | < 3.2 | U | 3.2 | < 32 | R | 32 | < 3.2 | U | 3.2 | < 3.2 | U | 3.2 | < 0.32 | U | 0.32 | < 3.2 | U | 3.2 | < 50 | U | 50 |
| o-Xylene | ug/l | 12 | | 2.2 | 8.8 | J | 2.2 | 11 | | 2.2 | 34 | | 2.2 | 4.6 | | 0.22 | 46 | | 2.2 | 24 | J | 50 |
| Styrene | ug/l | < 1.8 | U | 1.8 | < 18 | R | 18 | < 1.8 | U | 1.8 | < 1.8 | U | 1.8 | < 0.18 | U | 0.18 | < 1.8 | U | 1.8 | < 50 | U | 50 |
| Toluene | ug/l | 180 | | 1.5 | 150 | J | 1.5 | 96 | | 1.5 | 390 | | 1.5 | 9.9 | | 0.15 | 92 | | 1.5 | 290 | | 50 |
| trans-1,2-Dichloroethene | ug/l | 18 | | 3.1 | 18 | J | 3.1 | 17 | | 3.1 | 16 | | 3.1 | 7.9 | | 0.31 | 9.8 | | 3.1 | 20 | J | 50 |
| trans-1,3-Dichloropropene | ug/l | < 3.3 | U | 3.3 | < 33 | R | 33 | < 3.3 | U | 3.3 | < 3.3 | U | 3.3 | < 0.33 | U | 0.33 | < 3.3 | U | 3.3 | < 50 | U | 50 |
| Trichlorofluoromethane | ug/l | < 2.6 | U | 2.6 | < 26 | R | 26 | < 2.6 | U | 2.6 | < 2.6 | U | 2.6 | < 0.26 | U | 0.26 | < 2.6 | U | 2.6 | < 50 | U | 50 |

Notes:
ug/l - micrograms per liter.
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NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 7
## AISB Pilot and O'Connor Drive Area Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-C27 11/17/2009 N | | | MW-C28 11/20/2009 N | | | PZ-C32D 12/8/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| 2-Butanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 |
| 2-Hexanone | ug/l | < 10 | U | 10 | < 10 | U | 10 | < 50 | U | 50 |
| 4-Methyl-2-pentanone | ug/l | 5.8 | J | 10 | < 10 | U | 10 | < 50 | U | 50 |
| Acetone | ug/l | < 10 | U | 10 | 230 | | 10 | < 50 | U | 50 |
| Benzene | ug/l | < 1 | U | 1 | 0.42 | J | 1 | < 5 | U | 5 |
| Bromodichloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Bromoform | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Bromomethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Carbon Disulfide | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Chlorobenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Cyclohexane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Dibromochloromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Ethylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Freon 113 | ug/l | 23 | | 1 | 25 | | 1 | 420 | | 5 |
| Isopropylbenzene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| m,p-Xylenes | ug/l | 0.54 | J | 2 | < 2 | U | 2 | < 10 | U | 10 |
| Methyl Acetate | ug/l | < 2 | U | 2 | < 2 | U | 2 | < 10 | U | 10 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 | 1.4 | | 1 | < 5 | U | 5 |
| o-Xylene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Styrene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Toluene | ug/l | 0.42 | J | 1 | 0.56 | J | 1 | < 5 | U | 5 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 | 0.17 | J | 1 | < 5 | U | 5 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 | < 1 | U | 1 | < 5 | U | 5 |

Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
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Checked by: CDL Date: June 10, 2010

# Table 8
## AISB Pilot and O'Connor Drive Area Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-B14 | | | MW-B19 | | | MW-B19 | | | MW-B20 | | | MW-B21 | | | MW-B22 | | | MW-B23 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/16/2009 | | | 11/17/2009 | | | 11/17/2009 | | | 11/16/2009 | | | 11/18/2009 | | | 11/16/2009 | | | 11/16/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | FD | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 366 | | 5 | 2040 | | 5 | 2040 | | 5 | 2240 | | 5 | 2160 | | 5 | 154 | | 5 | 332 | | 5 |
| Chloride | mg/l | 99.4 | | 5 | 93.8 | | 5 | 94.8 | | 5 | 95.9 | | 5 | 78.1 | | 5 | 78 | | 5 | 30.6 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 |
| Sulfate | mg/l | 7.7 | | 5 | 0.68 | J | 5 | 0.48 | J | 5 | 2.1 | J | 5 | 1.5 | J | 5 | 35.3 | | 10 | < 5 | U | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 270 | | 5 | 3840 | | 100 | 3840 | | 100 | 4480 | | 100 | 3500 | | 50 | 4.8 | J | 1 | 155 | | 5 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
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J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
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NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010



Golder Associates

# Table 8
## AISB Pilot and O'Connor Drive Area Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID / Sample Date / N=Normal, FD=Field Duplicate | | MW-B24 11/17/2009 N | | | MW-B25 11/17/2009 N | | | MW-B26 11/17/2009 N | | | MW-B27 11/18/2009 N | | | MW-C14 11/16/2009 N | | | MW-C15 11/16/2009 N | | | MW-C19 11/17/2009 N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 244 | | 5 | 238 | | 5 | 122 | | 5 | 171 | | 5 | 2010 | | 5 | 49.6 | | 5 | < 5 | U | 5 |
| Chloride | mg/l | 122 | | 5 | 89.9 | | 5 | 78.2 | | 5 | 78.2 | | 5 | 105 | | 5 | 72.9 | | 5 | 95 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | 0.12 | | 0.1 | 0.26 | | 0.1 | < 0.1 | U | 0.1 | 1.3 | | 0.1 | < 0.1 | U | 0.1 |
| Sulfate | mg/l | < 5 | U | 5 | < 5 | U | 5 | 29.5 | | 10 | 17 | | 5 | 1 | J | 5 | 32.1 | | 10 | 0.9 | J | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 47.7 | | 1 | 4.5 | J | 1 | 1.5 | J | 1 | 5.6 | | 1 | 3440 | | 50 | 1.5 | J | 1 | 7090 | | 100 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 8
## AISB Pilot and O'Connor Drive Area Wells
## Natural Attenuation Parameters
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID | | MW-C20 | | | MW-C21 | | | MW-C22 | | | MW-C23 | | | MW-C24 | | | MW-C28 | | | PZ-C32D | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | 11/16/2009 | | | 11/16/2009 | | | 11/16/2009 | | | 11/16/2009 | | | 11/17/2009 | | | 11/20/2009 | | | 12/8/2009 | | |
| N=Normal, FD=Field Duplicate | | N | | | N | | | N | | | N | | | N | | | N | | | N | | |
| Parameter | Unit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit | Result | Qualifier | ReptLimit |
| Alkalinity, Total | mg/l | 2710 | | 5 | 1690 | | 5 | < 5 | U | 5 | 387 | | 5 | < 5 | U | 5 | 148 | | 5 | 126 | | 5 |
| Chloride | mg/l | 94 | | 5 | 101 | | 5 | 121 | | 5 | 90.1 | | 5 | 94.3 | | 10 | 62.5 | | 5 | 113 | | 5 |
| Nitrate | mg/l | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 | < 0.1 | U | 0.1 |
| Sulfate | mg/l | 3.6 | J | 5 | 2.4 | J | 5 | 8.1 | | 5 | < 5 | U | 5 | 1.4 | J | 5 | 16.3 | | 5 | 11 | | 5 |
| Sulfide | mg/l | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 | < 1 | U | 1 |
| Total Organic Carbon | mg/l | 5720 | | 100 | 3790 | | 50 | 12600 | | 200 | 368 | | 5 | 7950 | | 200 | 3.3 | | 1 | < 1 | R | 1 |

Notes:
mg/l - milligrams per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 9
## Residential Wells
## Contaminants of Concern and Light Hydrocarbons
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID<br>Sample Date<br>N=Normal, FD=Field Duplicate | | 31 Carlos<br>12/8/2009<br>N | | |
|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit |
| 1,1,1-Trichloroethane | ug/l | < 1 | U | 1 |
| 1,1,2-Trichloroethane | ug/l | < 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | < 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | < 1 | U | 1 |
| 1,2-Dichloroethane | ug/l | < 1 | U | 1 |
| Carbon Tetrachloride | ug/l | < 1 | U | 1 |
| Chloroethane | ug/l | < 1 | U | 1 |
| Chloroform | ug/l | < 1 | U | 1 |
| Chloromethane | ug/l | < 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | < 1 | U | 1 |
| Ethane | ug/l | NDR | | |
| Ethene | ug/l | NDR | | |
| Methane | ug/l | NDR | | |
| Methylene Chloride | ug/l | < 1 | U | 1 |
| Tetrachloroethene | ug/l | < 1 | U | 1 |
| Trichloroethene | ug/l | < 1 | U | 1 |
| Vinyl Chloride | ug/l | < 1 | U | 1 |

Notes:
ug/l - micrograms per liter
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

# Table 10
## Residential Wells
## Additional Volatile Organics
## Caldwell Trucking Superfund Site
## Fairfield, NJ

| Sample ID<br>Sample Date<br>N=Normal, FD=Field Duplicate | | 31 Carlos<br>12/8/2009<br>N | | |
|---|---|---|---|---|
| Parameter | Unit | Result | Qualifier | ReptLimit |
| 1,1,2,2-Tetrachloroethane | ug/l | < 1 | U | 1 |
| 1,2,4-Trichlorobenzene | ug/l | < 1 | U | 1 |
| 1,2-Dibromo-3-chloropropane | ug/l | < 1 | U | 1 |
| 1,2-Dibromoethane | ug/l | < 1 | U | 1 |
| 1,2-Dichlorobenzene | ug/l | < 1 | U | 1 |
| 1,2-Dichloropropane | ug/l | < 1 | U | 1 |
| 1,3-Dichlorobenzene | ug/l | < 1 | U | 1 |
| 1,4-Dichlorobenzene | ug/l | < 1 | U | 1 |
| 2-Butanone | ug/l | < 10 | U | 10 |
| 2-Hexanone | ug/l | < 10 | U | 10 |
| 4-Methyl-2-pentanone | ug/l | < 10 | U | 10 |
| Acetone | ug/l | < 10 | U | 10 |
| Benzene | ug/l | < 1 | U | 1 |
| Bromodichloromethane | ug/l | < 1 | U | 1 |
| Bromoform | ug/l | < 1 | U | 1 |
| Bromomethane | ug/l | < 1 | U | 1 |
| Carbon Disulfide | ug/l | < 1 | U | 1 |
| Chlorobenzene | ug/l | < 1 | U | 1 |
| cis-1,3-Dichloropropene | ug/l | < 1 | U | 1 |
| Cyclohexane | ug/l | < 1 | U | 1 |
| Dibromochloromethane | ug/l | < 1 | U | 1 |
| Dichlorodifluoromethane | ug/l | < 1 | U | 1 |
| Ethylbenzene | ug/l | < 1 | U | 1 |
| Freon 113 | ug/l | < 1 | U | 1 |
| Isopropylbenzene | ug/l | < 1 | U | 1 |
| m,p-Xylenes | ug/l | < 2 | U | 2 |
| Methyl Acetate | ug/l | < 2 | U | 2 |
| Methyl tert-Butyl Ether | ug/l | < 1 | U | 1 |
| o-Xylene | ug/l | < 1 | U | 1 |
| Styrene | ug/l | < 1 | U | 1 |
| Toluene | ug/l | < 1 | U | 1 |
| trans-1,2-Dichloroethene | ug/l | < 1 | U | 1 |
| trans-1,3-Dichloropropene | ug/l | < 1 | U | 1 |
| Trichlorofluoromethane | ug/l | < 1 | U | 1 |

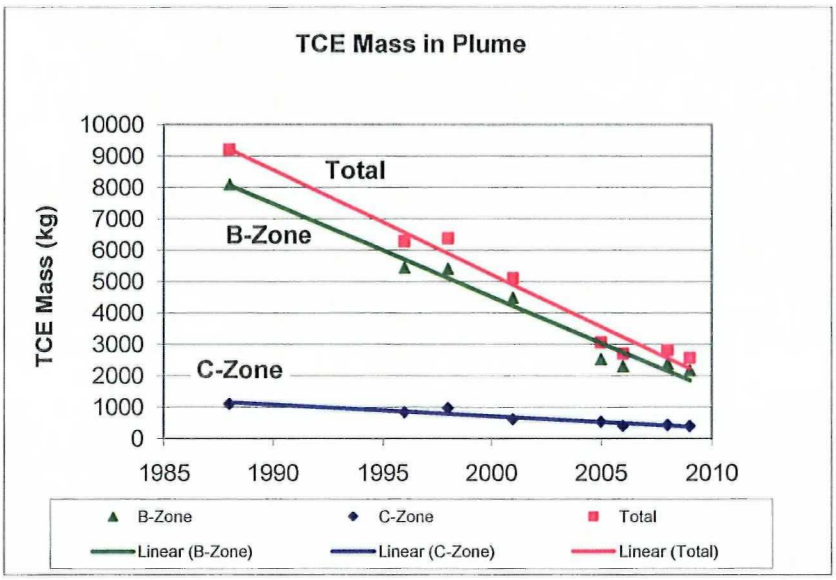
Notes:
ug/l - micrograms per liter.
ReptLimit = Reporting Limit
Qualifiers:
U - The analyte was analyzed for but not detected above the reporting limit.
UJ - The analyte was analzyed for but was not detected. The reporting limit has been qualified for quality control reasons and is considered an estimated value.
J - The analyte was detected below the reporting limit or qualified for quality control reasons and is considered an estimated value.
R - the sample result has been rejected due to deficiencies in the QAQC criteria.
NDR - Sample was not analyzed for the listed parameter.

Checked by: CDL Date: June 10, 2010

Golder Associates

**Table 11**
**Estimates of TCE Mass Contained in Plume, 1988-2009**
**Caldwell Trucking Site**

| | Mass of TCE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TCE (kilograms)** | **1988** | **1996** | **1998** | **2001** | **2005** | **2006** | **2008** | **2009** |
| B-Zone | 8102 | 5451 | 5411 | 4490 | 2530 | 2301 | 2384 | 2172 |
| C-Zone | 1114 | 839 | 970 | 615 | 533 | 402 | 430 | 393 |
| **Total** | 9216 | 6290 | 6381 | 5105 | 3063 | 2703 | 2814 | 2565 |
| | | | | | | | | |
| **TCE (pounds)** | **1988** | **1996** | **1998** | **2001** | **2005** | **2006** | **2008** | **2009** |
| B-Zone | 17824 | 11992 | 11904 | 9878 | 5566 | 5062 | 5246 | 4778 |
| C-Zone | 2451 | 1846 | 2134 | 1353 | 1173 | 884 | 946 | 865 |
| **Total** | 20275 | 13838 | 14038 | 11231 | 6739 | 5946 | 6192 | 5643 |




Note: See section 3.4 for methodology and assumptions used to develop values shown in chart.

**Table 12**
**Summary of Mann-Kendall and Linear Regression Analyses**
**2009 Area Wide Sampling Report**
**Caldwell Trucking Site**

| | | | | "Parent Compounds" | | | | | | | | | | "Daughter Compounds" | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tetrachloroethene | | Trichloroethene | | 1,1,1-TCA | | Chloroform | | | | cis-1,2-DCE | | 1,1-DCA | | 1,1-DCE | | Vinyl Chloride | | Methylene Chloride | | | | totalmolar | |
| WELL ID | Screened Zone | Location | n | M-K | slope ug/L/yr | M-K | slope ug/L/yr | M-K | slope ug/L/yr | M-K | slope ug/L/yr | | | M-K | slope ug/L/yr | M-K | slope ug/L/yr | M-K | slope ug/L/yr | M-K | slope ug/L/yr | M-K | slope ug/L/yr | | | M-K | slope umol/L/yr |
| MW-A1 | A | A zone | 5 | H0 | -1.1 | H0 | - | H0 | -8.0 | H0 | -6.3 | | | H0 | -18.1 | H0 | -0.9 | H0 | - | H0 | -0.4 | H0 | - | | | H0 | -0.3 |
| MW-A2 | A | A zone | 4 | H0 | - | H0 | 0.4 | H0 | - | H0 | - | | | H0 | -1.7 | H0 | - | H0 | - | H0 | - | H0 | 0.0 | | | H0 | 0.0 |
| MW-A3 | A | A zone | 8 | H0 | - | H0 | - | H0 | 0.0 | H0 | - | | | H0 | - | H0 | - | H0 | - | H0 | 0.1 | H0 | - | | | H0 | 0.0 |
| MW-A4 | A | A zone | 9 | H1 | 7.8 | H0 | - | H2 | -23.6 | H2 | -63.4 | | | H1 | 175.4 | H0 | 6.6 | H0 | 0.0 | H0 | 1.1 | H0 | - | | | H0 | 3.3 |
| MW-A6 | A | A zone | 6 | H2 | -0.4 | H1 | 0.5 | H1 | 0.7 | H0 | - | | | H1 | 2.5 | H1 | 0.3 | H1 | 0.0 | H0 | 0.0 | H0 | - | | | H1 | 0.0 |
| MW-A9 | A | A zone | 7 | H0 | - | H0 | - | H0 | 0.0 | H0 | - | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| MW-A10 | A | A zone | 9 | H0 | - | H0 | 0.2 | H0 | - | H0 | - | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| MW-A11 | A | A zone | 8 | H0 | - | H0 | -0.1 | H0 | 0.0 | H0 | - | | | H0 | - | H0 | 0.0 | H0 | - | H0 | - | H0 | 0.0 | | | H0 | 0.0 |
| MW-1A | B | Lateral Extent | 7 | H0 | - | H1 | 1.8 | H1 | 0.4 | H1 | 0.1 | | | H1 | 0.6 | H1 | 0.4 | H1 | 0.0 | H0 | - | H0 | - | | | H1 | 0.0 |
| MW-B5 | B | Lateral Extent | 7 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | - | H0 | - | H0 | 0.0 | H0 | - | H0 | - | | | H0 | 0.4 |
| MW-B7 | B | Lateral Extent | 9 | H0 | 0.1 | H1 | 11.1 | H1 | 0.6 | H0 | - | | | H1 | 3.5 | H1 | 1.0 | H1 | 0.0 | H0 | - | H0 | - | | | H1 | 0.1 |
| MW-B10 | B | Lateral Extent | 9 | H0 | 0.0 | H0 | - | H0 | 0.0 | H0 | 0.0 | | | H0 | 0.0 | H0 | 0.0 | H0 | - | H0 | 0.0 | H0 | -0.1 | | | H0 | 0.0 |
| MW-1 | C | Lateral Extent | 9 | H0 | 0.5 | H0 | 28.2 | H0 | - | H0 | 0.7 | | | H0 | 1.4 | H0 | - | H0 | 0.0 | H0 | - | H0 | - | | | H0 | 0.2 |
| MW-C5 | C | Lateral Extent | 8 | H2 | -3.8 | H2 | -83.6 | H2 | -12.0 | H2 | -17.8 | | | H0 | -3.0 | H0 | - | H2 | - | H1 | 5.2 | H0 | -30.0 | | | H0 | -0.4 |
| MW-C7 | C | Lateral Extent | 9 | H0 | - | H0 | - | H2 | -3.9 | H0 | - | | | H0 | 7.3 | H0 | - | H0 | 0.0 | H0 | - | H0 | - | | | H0 | 0.6 |
| MW-C10 | C | Lateral Extent | 9 | H0 | - | H0 | - | H0 | 0.0 | H0 | - | | | H0 | 0.0 | H0 | 0.0 | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| MW-B12 | B | North Lagoon | 7 | H0 | - | H0 | -30.6 | H0 | -28.1 | H0 | - | | | H2 | -312.9 | H0 | - | H0 | 0.0 | H0 | -64.5 | H0 | - | | | H0 | -4.9 |
| MW-B34 | B | North Lagoon | 4 | H0 | 0.4 | H0 | 2.6 | H0 | 0.3 | H0 | - | | | H0 | -0.1 | H0 | - | H0 | - | H0 | - | H0 | 0.1 | | | H0 | 0.0 |
| MW-C13 | C | North Lagoon | 6 | H0 | - | H0 | -30.7 | H0 | -2.7 | H0 | 0.0 | | | H2 | -226.0 | H0 | -4.4 | H0 | - | H2 | -14.2 | H0 | - | | | H0 | -3.1 |
| MW-C33 | C | North Lagoon | 5 | H0 | - | H0 | - | H0 | - | H0 | - | | | H2 | -10764 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | 154 |
| MW-C34 | C | North Lagoon | 4 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| MW-C35 | C | North Lagoon | 5 | H0 | - | H0 | - | H0 | -24.0 | H0 | - | | | H0 | - | H0 | -38.0 | H0 | - | H2 | -3.1 | H0 | 0.1 | | | H0 | -0.7 |
| TW-2 | C | North Lagoon | 7 | H0 | - | H2 | - | H0 | - | H0 | - | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H2 | 0.0 |
| CTMW-1 | B | Plume Core | 10 | H0 | -1.2 | H2 | -5.4 | H0 | -0.8 | H0 | -0.4 | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | -0.1 |
| MW-B1 | B | Plume Core | 9 | H2 | -19.5 | H2 | -629.3 | H2 | -122.4 | H0 | -33.8 | | | H2 | -118.4 | H0 | -4.6 | H0 | - | H0 | - | H0 | - | | | H2 | -3.5 |
| MW-B2 | B | Plume Core | 7 | H0 | - | H0 | - | H0 | -14.4 | H0 | -4.8 | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | 1.1 |
| MW-B4 | B | Plume Core | 9 | H0 | - | H2 | -180.7 | H2 | -36.0 | H2 | -56.0 | | | H0 | - | H0 | - | H0 | - | H1 | 1.3 | H0 | - | | | H0 | 0.0 |
| MW-B6 | B | Plume Core | 9 | H1 | 1.1 | H0 | -25.7 | H0 | -9.3 | H2 | -20.0 | | | H0 | 7.2 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| MW-B11 | B | Plume Core | 5 | H2 | -35.1 | H2 | -275.9 | H0 | -69.2 | H2 | - | | | H0 | - | H0 | -3.1 | H2 | 0.1 | H0 | 0.2 | H0 | 8.5 | | | H2 | -4.3 |
| MW-B30 | B | Plume Core | 5 | H0 | -12.6 | H0 | -153.2 | H0 | -46.6 | H0 | -5.0 | | | H0 | -267.1 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | -4.8 |
| MW-BL1 | B | Plume Core | 10 | H0 | -1.3 | H0 | -17.2 | H2 | -23.4 | H2 | -1357.9 | | | H0 | - | H0 | - | H2 | - | H0 | - | H0 | - | | | H0 | -6.3 |
| MW-BL2 | B | Plume Core | 10 | H2 | -36.6 | H2 | -638.5 | H2 | -144.2 | H2 | -1234.4 | | | H0 | - | H0 | - | H2 | - | H1 | 19.5 | H0 | -5.6 | | | H2 | -5.4 |
| PW-B15 | B | Plume Core | 7 | H2 | -11.8 | H2 | -280.0 | H0 | -63.9 | H2 | -4.5 | | | H2 | -126.9 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | -4.2 |
| CTBR | C | Plume Core | 13 | H0 | - | H0 | - | H0 | -130.9 | H0 | -59.7 | | | H1 | 107.0 | H0 | -130.9 | H0 | - | H0 | - | H0 | -4.0 | | | H0 | -2.0 |
| MW-C6 | C | Plume Core | 9 | H2 | -2.2 | H2 | -42.9 | H2 | -12.4 | H2 | -32.8 | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | -0.3 | | | H0 | 0.1 |
| MW-C11 | C | Plume Core | 7 | H0 | -7.1 | H0 | -164.0 | H2 | -61.1 | H0 | - | | | H0 | -45.4 | H0 | - | H0 | - | H0 | - | H0 | 9.9 | | | H0 | -1.7 |
| MW-C30 | C | Plume Core | 6 | H2 | -133.8 | H2 | -789.6 | H0 | -86.8 | H2 | -40.9 | | | H0 | - | H0 | -9.1 | H0 | - | H0 | - | H0 | - | | | H0 | -8.8 |
| MW-C31 | C | Plume Core/Heisler | 6 | H0 | -170 | H2 | -10205 | H2 | -1789 | H2 | -65 | | | H0 | -6301 | H2 | -1733 | H0 | - | H1 | 32 | H2 | -886 | | | H2 | -186 |
| MW-C37 | C | Plume Core/Heisler | 5 | H0 | - | H0 | -116 | H0 | - | H0 | - | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | -6 |
| MW-C38 | C | Plume Core/Heisler | 4 | H0 | -3 | H2 | -40 | H2 | -14 | H0 | 0 | | | H2 | -148 | H2 | -12 | H0 | 0 | H0 | - | H0 | -2 | | | H0 | -2 |
| P-SC16 | C | Plume Core | 6 | H2 | -33.8 | H2 | -731.2 | H2 | -108.0 | H0 | -11.8 | | | H2 | -253.7 | H0 | -6.7 | H0 | - | H0 | 0.5 | H0 | - | | | H2 | -9.3 |
| P-SC17 | C | Plume Core | 7 | H2 | -11.8 | H2 | -675.8 | H0 | -77.5 | H0 | - | | | H0 | -170.5 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | -6.2 |
| PW-SC15 | C | Plume Core | 8 | H0 | -13.6 | H2 | -257.3 | H2 | -40.7 | H0 | -7.1 | | | H2 | -102.1 | H0 | - | H0 | 0.0 | H0 | - | H0 | 0.0 | | | H2 | -3.0 |
| MWB-1(SeepArea) | B | Pre-Seep Area | 6 | H0 | 6.8 | H2 | -433.8 | H2 | -70.3 | H2 | -105.0 | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H2 | -4.4 |
| MWB-2(SeepArea) | B | Pre-Seep Area | 6 | H0 | -14.9 | H2 | -421.4 | H0 | -68.7 | H0 | -26.2 | | | H0 | -124.3 | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | -4.6 |
| MWC-1(SeepArea) | C | Pre-Seep Area | 7 | H0 | - | H0 | - | H0 | -23.9 | H0 | - | | | H0 | - | H0 | - | H0 | 0.0 | H0 | - | H0 | - | | | H0 | -0.9 |
| MWC-4(SeepArea) | C | Pre-Seep Area | 6 | H0 | - | H0 | -43.5 | H0 | -11.2 | H0 | -7.5 | | | H0 | 53.4 | H0 | 5.8 | H0 | 0.0 | H0 | 1.3 | H0 | - | | | H0 | 0.2 |
| MWC-5(SeepArea) | C | Pre-Seep Area | 6 | H0 | - | H0 | -90.8 | H0 | -15.7 | H0 | -14.5 | | | H0 | 48.4 | H1 | 11.7 | H0 | 0.0 | H0 | 0.6 | H0 | - | | | H0 | -0.3 |
| MW-B16 | B | On Property | 10 | H2 | -6.2 | H2 | -160.9 | H2 | -100.0 | H0 | -1.9 | | | H2 | -75.8 | H0 | -3.1 | H2 | - | H0 | -0.8 | H0 | - | | | H0 | -3.0 |
| MW-C17 | C | On Property | 5 | H0 | - | H0 | -0.7 | H0 | -0.3 | H0 | -2.3 | | | H0 | - | H0 | 0.0 | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| MW-C18 | C | On Property | 5 | H0 | 1.3 | H0 | - | H0 | -0.7 | H0 | -1.3 | | | H2 | -9.1 | H0 | 2.6 | H0 | 0.0 | H0 | - | H0 | 0.0 | | | H0 | 0.0 |
| MW-C16 | C | On Property | 7 | H0 | - | H0 | - | H2 | -209.3 | H2 | -15.3 | | | H2 | -980.1 | H2 | -27.7 | H2 | - | H0 | -132.1 | H0 | -0.1 | | | H2 | -14.4 |
| MW-B3 | B | Toe of Plume | 9 | H0 | -1.0 | H2 | -162.2 | H2 | -26.6 | H0 | -45.4 | | | H0 | - | H0 | -4.7 | H0 | - | H0 | - | H0 | - | | | H2 | -0.9 |
| MW-B9 | B | Toe of Plume | 9 | H0 | - | H0 | - | H0 | 0.0 | H0 | 0.0 | | | H0 | - | H0 | 0.0 | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| MW-C3 | C | Toe of Plume | 9 | H0 | - | H0 | -69.4 | H2 | -20.4 | H0 | -15.0 | | | H0 | -6.1 | H0 | -1.2 | H0 | - | H0 | 0.0 | H0 | - | | | H0 | -0.1 |
| MW-4A | B | Upgradient of Site | 9 | H2 | -0.4 | H0 | - | H2 | -1.7 | H0 | -0.3 | | | H0 | - | H0 | - | H0 | - | H0 | - | H0 | - | | | H0 | 0.0 |
| **SUMMARY COUNTS** | No trend (a) | H0; -10<slope\|<10 | | 47 | 25 | 36 | 9 | 37 | 22 | 46 | 20 | 166 | 76 | 46 | 19 | 55 | 26 | 53 | 15 | 56 | 16 | 60 | 15 | 270 | 91 | 43 | |
| | Falling | H2; <-10 ug/L/yr | | 13 | 11 | 23 | 31 | 22 | 32 | 15 | 21 | 73 | 95 | 11 | 16 | 3 | 5 | 6 | 0 | 2 | 3 | 1 | 3 | 23 | 27 | 10 | |
| | Rising | H1; >+10 ug/L/yr | | 2 | 0 | 3 | 2 | 3 | 0 | 1 | 0 | 9 | 2 | 5 | 4 | 4 | 1 | 3 | 0 | 4 | 2 | 0 | 0 | 16 | 7 | 3 | |

Notes:

M-K (Mann-Kendall) result:

| | |
|---|---|
| H0 | no trend |
| H1 | increasing trend |
| H2 | decreasing trend |

Linear regression results:
regression slope >10 ug/L/yr
regression slope <-10 ug/L/yr
No highlighting is included for Total (molar) data

NA - insufficient data points (<4) to perform analysis
"-" - correlation coefficient of linear regression line is <0.2
(a) linear regression summaries do not include slopes with correlation coefficient <0.2



Golder Associates

**Table 13**
**Proposed Off-Site Groundwater Monitoring Program**
**Caldwell Trucking Superfund Site**

| | | | CURRENT PROGRAM | | | | PROPOSED PROGRAM | | |
|---|---|---|---|---|---|---|---|---|---|
| Well ID | Location or Zone | Screened Zone | Current Primary Program | Current Secondary Program | Analyses | | Analyses | | Rationale for Change |
| | | | | | VOCs | NAPs | VOCs | NAPs | |
| MW-A1 | Plume Core | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A10 | Lateral Extent | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A11 | Lateral Extent | A | AW | - | 1 | 1 | - | - | Lateral extent control redundant with A10 |
| MW-A2 | Plume Core | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A3 | Toe of Plume | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A4 | Plume Core | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A5 | Lateral Extent | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A6 | Lateral Extent | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A7 | Lateral Extent | A | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-A9 | Toe of Plume | A | AW | - | 1 | 1 | - | - | Lateral extent control redundant with A10 |
| MW-1A | Lateral Extent | B | AW | - | 1 | 1 | 1 | - | NAPs discontinued (see text) |
| MW-4A | Upgradient | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B1 | Plume Core | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B2 | Plume Core | B | AW | - | 1 | 1 | 1 | - | Reduce NAPs in core as variation is low |
| MW-B3 | Toe of Plume | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B4 | Plume Core | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B5 | Lateral Extent | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B6 | Plume Core | B | AW | - | 1 | 1 | 1 | - | Reduce NAPs in core as variation is low |
| MW-B7 | Lateral Extent | B | AW | - | 1 | 1 | 1 | - | Reduce NAPs in core as variation is low |
| MW-B9 | Toe of Plume | B | AW | - | 1 | 1 | - | - | B10 provides lateral clean control |
| MW-B10 | Lateral Extent | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B11 | Plume Core | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B12 | NLA | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-B13 | NLA | B | AW | - | 1 | 1 | - | - | Well has been dry since 2001 |
| MW-B16 | On Property | B | AW | P&T | 1 | 1 | 1 | 1 | Background well |
| MW-B34 | NLA | B | AW | - | 1 | 1 | - | - | Low VOCs; B12 is retained |
| MW-B48 | Carlos Drive | B | AW | - | 1 | 1 | - | - | B10 provides lateral clean control |
| MW-B52 | Pet Lovers | B | AW | P&T | 1 | 1 | 1 | 1 | |
| MWB-1 (Seep) | Pre-Seep Area | B | AW | - | 1 | 1 | 1 | 1 | |
| MWB-2 (Seep) | Pre-Seep Area | B | AW | - | 1 | 1 | - | - | Redundant with MWB-1 |
| MW-BL1 | Plume Core | B | AW | P&T | 1 | 1 | 1 | 1 | |
| MW-BL2 | Plume Core | B | AW | P&T | 1 | 1 | 1 | 1 | |
| P-B16 | Plume Core | B | AW | - | 1 | 1 | 1 | 1 | |
| PW-B15 | Plume Core | B | AW | - | 1 | 1 | 1 | 1 | |
| MW-1* | Lateral Extent | C | AW | - | 1 | 1 | 1 | 1 | |
| MW-C3* | Toe of Plume | C | AW | - | 1 | 1 | 1 | 1 | |
| MW-C5 | Lateral Extent | C | AW | | 1 | 1 | 1 | 1 | |
| MW-C6* | Plume Core | C | AW | - | 1 | 1 | 1 | 1 | |
| MW-C7* | Lateral Extent | C | AW | - | 1 | 1 | 1 | 1 | |
| MW-C10* | Lateral Extent | C | AW | - | 1 | 1 | 1 | 1 | |
| MW-C11 | Plume Core | C | AW | P&T | 1 | 1 | 1 | 1 | |
| MW-C13 | NLA | C | AW | NLA | 1 | 1 | 1 | - | NAPs redundant with C34 and C35 |
| MW-C16 | On Property | C | AW | - | 1 | 1 | 1 | 1 | |
| MW-C17 | On Property | C | AW | - | 1 | 1 | 1 | 1 | |
| MW-C18 | On Property | C | AW | - | 1 | 1 | 1 | - | Area of low VOCs, retain for VOCs with NAP background provided by |
| MW-C31 | Heisler Property | C | AW | P&T | 1 | 1 | 1 | 1 | |
| MW-C33 | NLA | C | AW | NLA | 1 | 1 | 1 | 1 | |
| MW-C34 | NLA | C | AW | NLA | 1 | 1 | 1 | 1 | |
| MW-C35 | NLA | C | AW | NLA | 1 | 1 | 1 | - | Redundant for NAPs (background) with C34 |
| MW-C37 | Heisler Property | C | AW | - | 1 | 1 | 1 | 1 | |





Golder Associates

**Table 13**
**Proposed Off-Site Groundwater Monitoring Program**
**Caldwell Trucking Superfund Site**

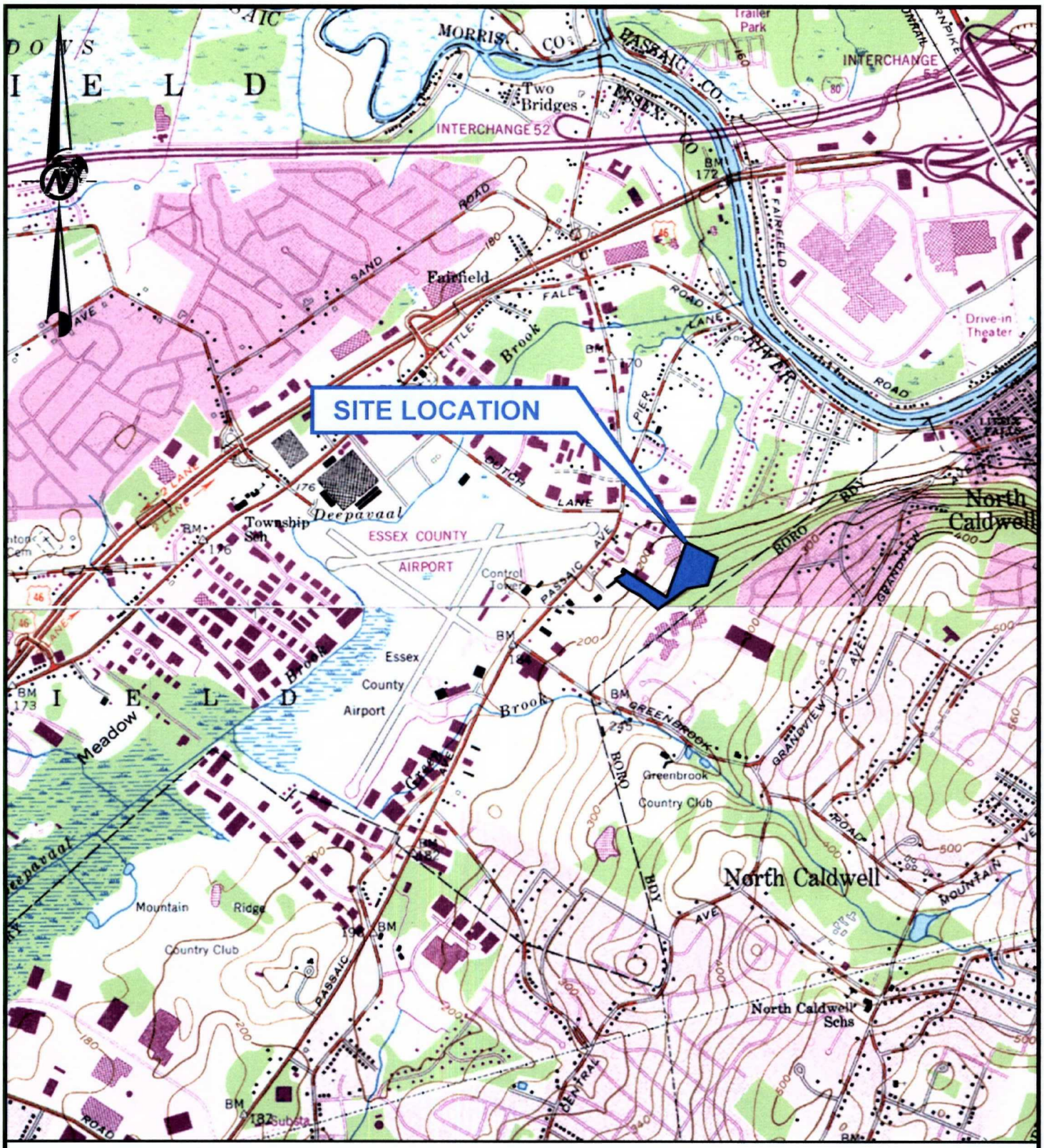
| | | | CURRENT PROGRAM | | | | PROPOSED PROGRAM | | |
|---|---|---|---|---|---|---|---|---|---|
| Well ID | Location or Zone | Screened Zone | Current Primary Program | Current Secondary Program | Analyses | | Analyses | | Rationale for Change |
| | | | | | VOCs | NAPs | VOCs | NAPs | |
| MW-C38 | Heisler Property | C | AW | P&T | 1 | 1 | 1 | - | Area of low VOCs, retain for VOCs with NAP background provided by |
| MW-C41 | NLA/GenHose | C | AW | NLA | 1 | 1 | 1 | 1 | |
| MW-C42 | NLA/GenHose | C | AW | NLA | 1 | 1 | 1 | 1 | |
| MW-C43 | Nat'l Precision Tool | C | AW | P&T | 1 | 1 | 1 | 1 | |
| MW-C44 | Pet Lovers | C | AW | P&T | 1 | 1 | 1 | - | Reduce NAPs in high well density area |
| MW-C47 | NLA/GenHose | C | AW | NLA | 1 | 1 | 1 | - | Reduce NAPs in high well density area |
| MW-C48 | Carlos Drive | C | AW | - | 1 | 1 | - | - | Redundant with C10 for clean lateral control |
| MWC-1 (Seep) | Pre-Seep Area | C | AW | - | 1 | 1 | 1 | 1 | |
| MWC-4 (Seep) | Pre-Seep Area | C | AW | - | 1 | 1 | - | - | Redundant with MWC-5 |
| MWC-5 (Seep) | Pre-Seep Area | C | AW | - | 1 | 1 | 1 | 1 | |
| P-C15 | Plume Core | C | (a) | - | 1 | 1 | - | - | Deep C-zone, VOCs low |
| P-DC15 | Deep C zone | C | (a) | - | 1 | 1 | - | - | Deep C-zone, VOCs low |
| P-SC15 | Plume Core | C | (a) | - | 1 | 1 | 1 | 1 | Review NAP need following NLA investigation |
| P-SC16 | Plume Core | C | AW | - | 1 | 1 | 1 | 1 | Review NAP need following NLA investigation |
| P-SC17 | Plume Core | C | AW | - | 1 | 1 | 1 | 1 | Review NAP need following NLA investigation |
| PW-SC15 | Plume Core | C | AW | - | 1 | 1 | 1 | 1 | Review NAP need following NLA investigation |
| TW-2 | NLA | C | AW | NLA | 1 | 1 | - | - | Redundant with C34 and C35 |
| MW-D1 | Plume Core | D | AW | - | 1 | - | 1 | - | Sample every three years |
| MW-D3 | Toe of Plume | D | AW | - | 1 | - | 1 | - | Sample every three years |
| MW-D5 | Lateral Extent | D | AW | - | 1 | - | 1 | - | Sample every three years |
| MW-D6 | Plume Core | D | AW | - | 1 | - | 1 | - | Sample every three years |
| MW-D7 | Lateral Extent | D | AW | - | 1 | - | 1 | - | Sample every three years |
| MW-D10 | Lateral Extent | D | AW | - | 1 | - | 1 | - | Sample every three years |
| | | | | **Total AW primary wells:** | **73** | **67** | **61** | **37** | |
| CTMW-1 | Plume Core/Oconnor | B | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-B30 | Heisler Property | B | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-B43 | Nat'l Precision Tool | B | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-B45 | Deli | B | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-B46 | Rick's Gym | B | P&T | AW | 1 | 1 | 1 | 1 | |
| CTBR* | Plume Core/Oconnor | C | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-C30 | Heisler Property | C | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-C45 | Deli | C | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-C46 | Rick's Gym | C | P&T | AW | 1 | 1 | 1 | 1 | |
| MW-C53 | NLA/GenHose | C | NLA | - | - | - | 1 | 1 | Retain for 1 year, reassess after 2010 |
| MW-C54 | NLA/GenHose | C | NLA | - | - | - | 1 | - | Retain for 1 year, reassess after 2010 |
| MW-C55 | NLA/GenHose | C | NLA | - | - | - | 1 | - | Retain for 1 year, reassess after 2010 |
| MW-C52 | Pet Lovers | Cc | P&T | AW | 1 | 1 | 1 | 1 | |
| | | | | **Total AW wells:** | **83** | **77** | **74** | **48** | |

Notes:
Cc = C zone and "cobble zone"
* Open hole within bedrock
(a) wells sampled on one-time basis in connection with current former North Lagoon area investigation only





Golder Associates




## REFERENCE

1.) BASE MAP TAKEN FROM U.S.G.S. 7.5 MINUTE QUADRANGLES OF POMPTON PLAINS, NJ, DATED 1955 AND CALDWELL, NJ, DATED 1954.

2000 0 2000
SCALE FEET

Golder Associates
Mt. Laurel, New Jersey

| | |
|---|---|
| SCALE | AS SHOWN |
| DATE | 03/08/11 |
| DESIGN | ACK |
| CADD | AM |
| CHECK | PLL |
| REVIEW | ACK |

TITLE

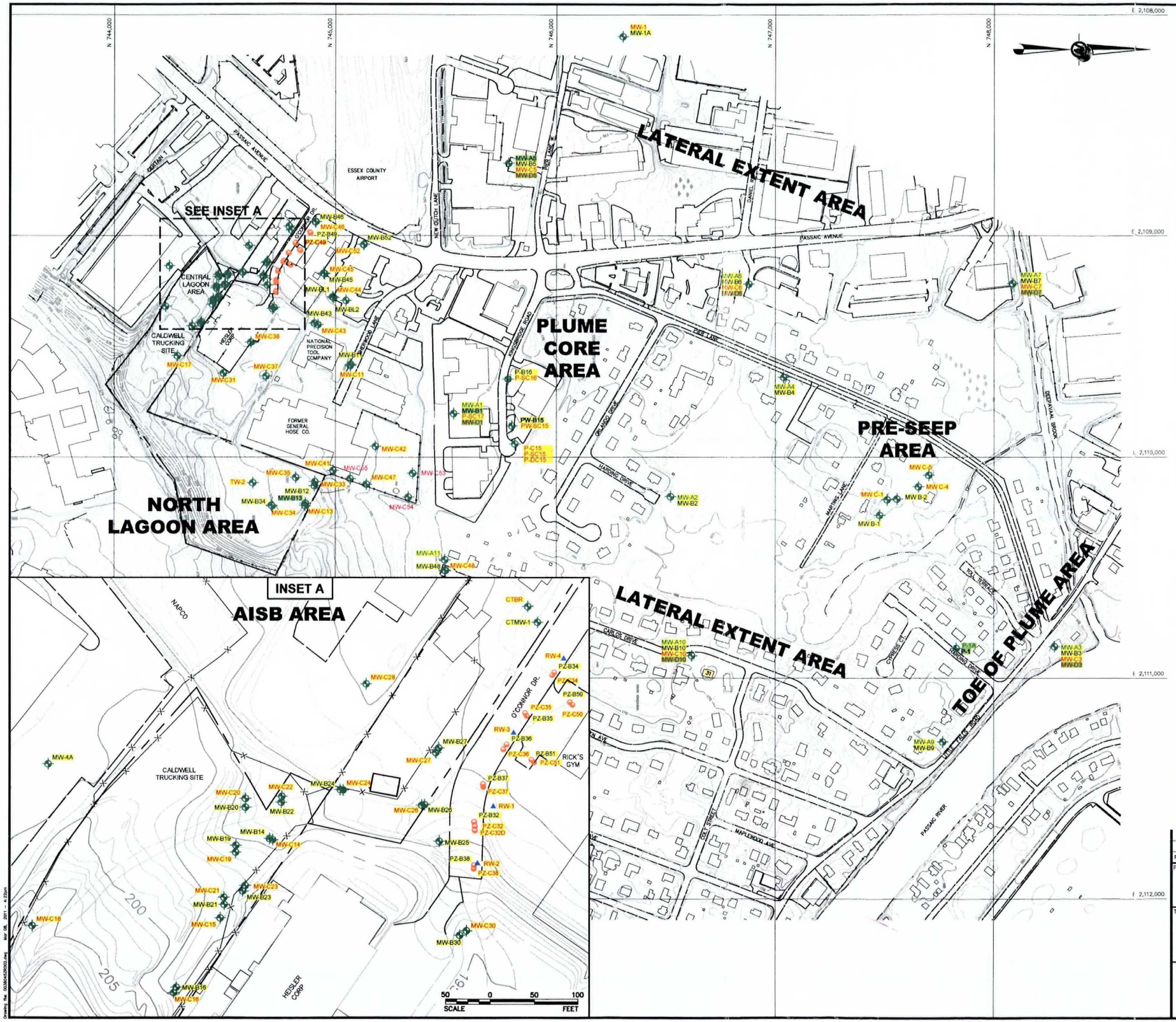
# SITE LOCATION MAP

| | | | |
|---|---|---|---|
| FILE No. | 0036045ZR001 | | |
| PROJECT No. | 003-6045 | REV. | 0 |

CALDWELL TRUCKING COMPANY

FIGURE 1

Drawing file: 0036045ZR001.dwg Mar 08, 2011 - 4:16pm




## LEGEND

| | |
|---|---|
| | EXISTING MONITORING WELL |
| MW-A1 | A ZONE MONITORING WELL |
| MW-B5 | B ZONE MONITORING WELL |
| MW-C7 | C ZONE MONITORING WELL |
| MW-D10 | D ZONE MONITORING WELL |
| | PIEZOMETER |
| | REMEDIATION WELL |
| | WELLS SAMPLED IN 2009 EVENT |
| | NOVEMBER 2009 WATER LEVEL ONLY |
| | RESIDENTIAL SAMPLING LOCATION |

## NOTE

1.) ALL EXISTING MONITORING WELLS SHOWN WERE MEASURED FOR WATER LEVEL.

## REFERENCE

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C25, MW-C27, MW-C28 AND TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-D32, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) LOCATIONS MW-B48, MW-B52, MW-C47, MW-C48, MW-C52, PZ-B49, PZ-B50, PZ-B51, PZ-C49, PZ-C50, AND PZ-C51 FROM MONITORING WELL CERTIFICATION FORM B – LOCATION CERTIFICATION PREPARED BY VARGO ASSOCIATES, DATED OCTOBER 23, 2008.

6.) WELL LOCATIONS MW A-1, MW A-3, MW B-1, MW B-2, MW B-3, MW B-4, MW C-1, MW C-3, MW C-4, AND MW C-5 WERE TAKEN FROM DIGITAL CAD FILE 97033.DWG, ENTITLED "WETLANDS SURVEY," PROVIDED BY VARGO ASSOCIATES.

7.) LOCATIONS MW-C1, P-B15, P-C15, AND P-DC15 FROM FILES 1995 BASE MODEL.PDF, ENTITLED "SITE PLAN," DATED JANUARY 13, 1995, PROVIDED BY MCLAREN HART.

8.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

9.) MONITORING WELLS MW-C53, MW-C54, MW-C55 FROM MONITORING WELL CERTIFICATION FORM B – LOCATION CERTIFICATION PREPARED BY VARGO ASSOCIATES, DATED MARCH 30, 2010.

200 0 200 400
SCALE FEET

| REV | DATE | DES | REVISION DESCRIPTION | CADD | CHK | RVW |
|---|---|---|---|---|---|---|

PROJECT

CALDWELL TRUCKING SITE
2009 AREA-WIDE GROUNDWATER REPORT
FAIRFIELD, NEW JERSEY

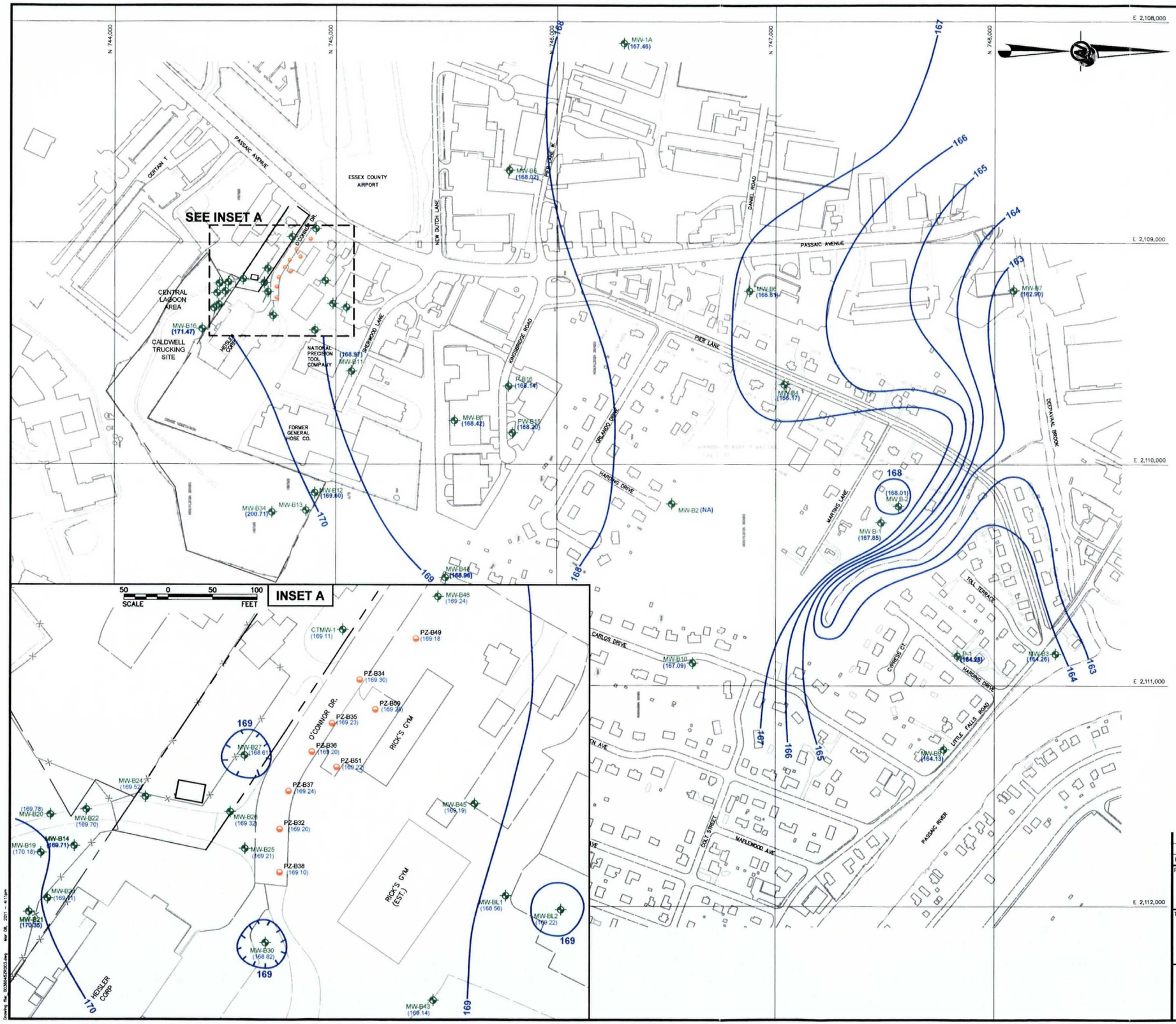
TITLE

# MONITORING WELL LOCATION MAP

NJ Authorization #24GA28029100

Golder Associates
Mt. Laurel, New Jersey

| | | | | | |
|---|---|---|---|---|---|
| PROJECT No. | | 003-6045 | FILE No. | 00360045ZR002 | |
| DESIGN | PLL | 03/08/11 | SCALE | AS SHOWN | REV. 0 |
| CADD | AM | 03/08/11 | | | |
| CHECK | PLL | 03/08/11 | FIGURE 2 | | |
| REVIEW | ACK | 03/08/11 | | | |




## LEGEND

| | |
|---|---|
| ⊕ | EXISTING MONITORING WELL |
| ● | PIEZOMETER |
| —— 164 | GROUNDWATER CONTOUR (FT MSL) |
| (162.90) | GROUNDWATER ELEVATION |

## NOTES

1.) DATA COLLECTED ON NOVEMBER 30, 2009.

## REFERENCE

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28 AND TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B35, PZ-C35, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-D32, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

200 0 200 400
SCALE FEET

| REV | DATE | DES | REVISION DESCRIPTION | CADD | CHK | RVW |
|---|---|---|---|---|---|---|

PROJECT

CALDWELL TRUCKING SITE
2009 AREA-WIDE GROUNDWATER REPORT
FAIRFIELD, NEW JERSEY

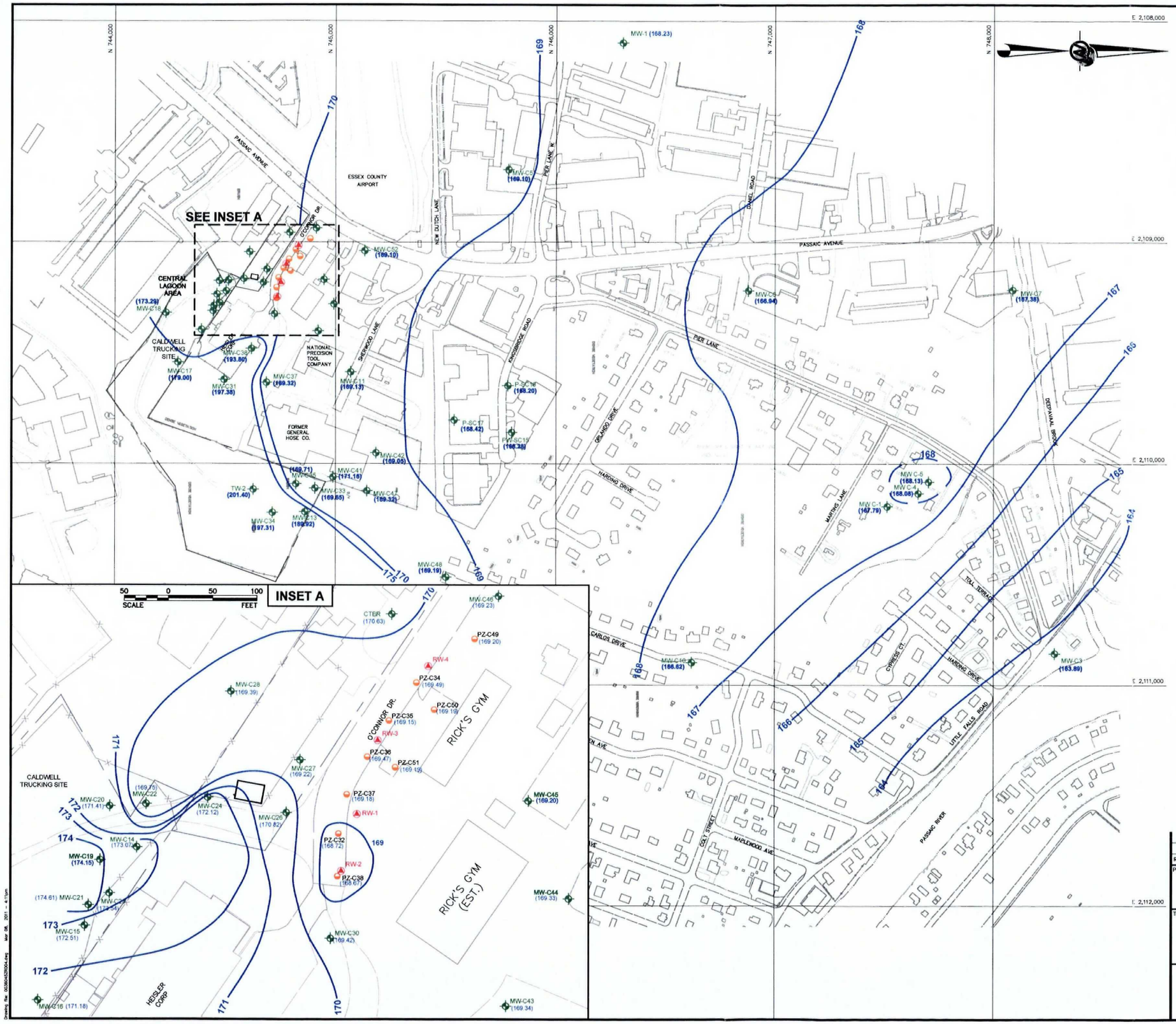
TITLE

# GROUNDWATER EQUIPOTENTIALS IN THE B-ZONE

NJ Authorization #24GA28029100

Golder Associates
Mt. Laurel, New Jersey

| | | | | |
|---|---|---|---|---|
| PROJECT No. | | 003-6045 | FILE No. | 0036045ZR003 |
| DESIGN | ACK | 03/08/11 | SCALE AS SHOWN | REV. 0 |
| CADD | YPW | 03/08/11 | | |
| CHECK | PLL | 03/08/11 | FIGURE 3 | |
| REVIEW | ACK | 03/08/11 | | |




## LEGEND

| | |
|---|---|
| | EXISTING MONITORING WELL |
| | PIEZOMETER LOCATION |
| | EXTRACTION WELL |
| 164 | GROUNDWATER CONTOUR (FT MSL) |
| (163.92) | GROUNDWATER ELEVATION |

## NOTES

1.) DATA COLLECTED ON NOVEMBER 30, 2009.

2.) MW-C6 NOT USED IN CONTOURING.

## REFERENCE

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28 AND TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B35, PZ-C35, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-D32, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

200 0 200 400
SCALE FEET

| REV | DATE | DES | REVISION DESCRIPTION | CADD | CHK | RVW |
|---|---|---|---|---|---|---|

PROJECT
CALDWELL TRUCKING SITE
2009 AREA-WIDE GROUNDWATER REPORT
FAIRFIELD, NEW JERSEY

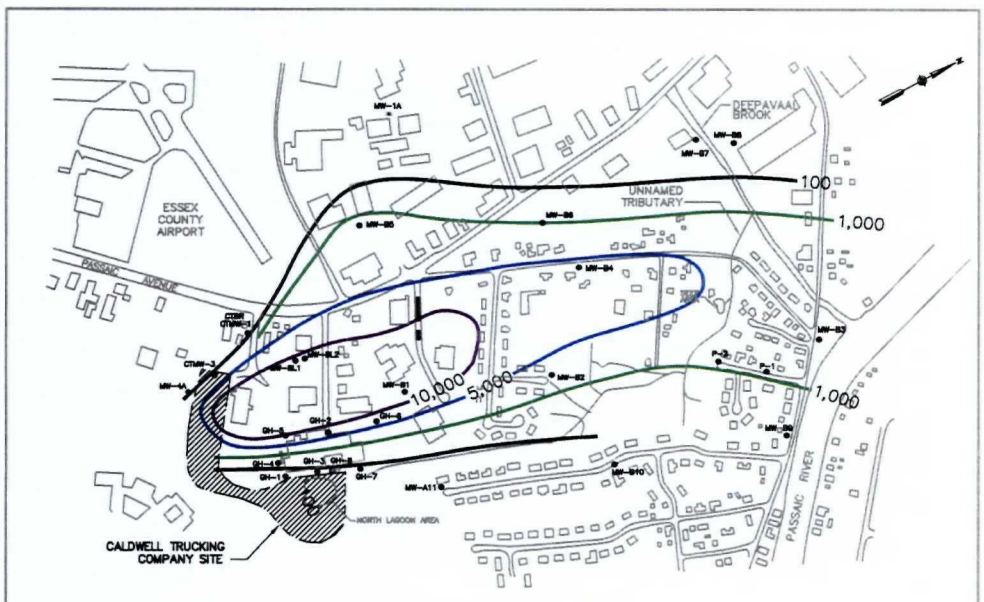
TITLE
# GROUNDWATER EQUIPOTENTIALS IN THE C-ZONE

NJ Authorization #24GA28029100
Golder Associates
Mt. Laurel, New Jersey

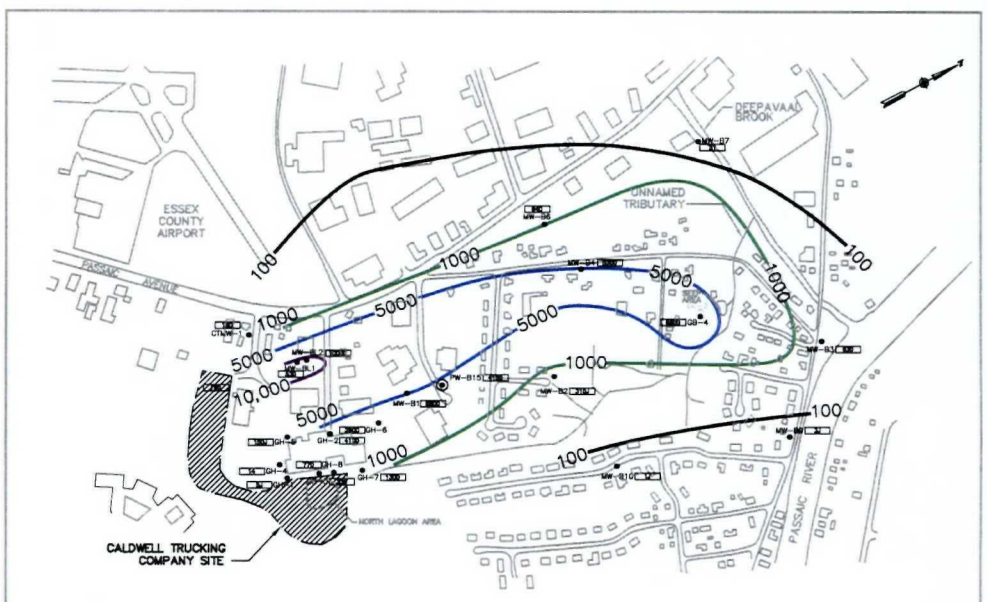
| | | | | |
|---|---|---|---|---|
| PROJECT No. | | 003-6045 | FILE No. | 0036045ZR004 |
| DESIGN | ACK | 03/08/11 | SCALE AS SHOWN | REV. 0 |
| CADD | YPW | 03/08/11 | | |
| CHECK | PLL | 03/08/11 | | |
| REVIEW | ACK | 03/08/11 | | |

FIGURE 4

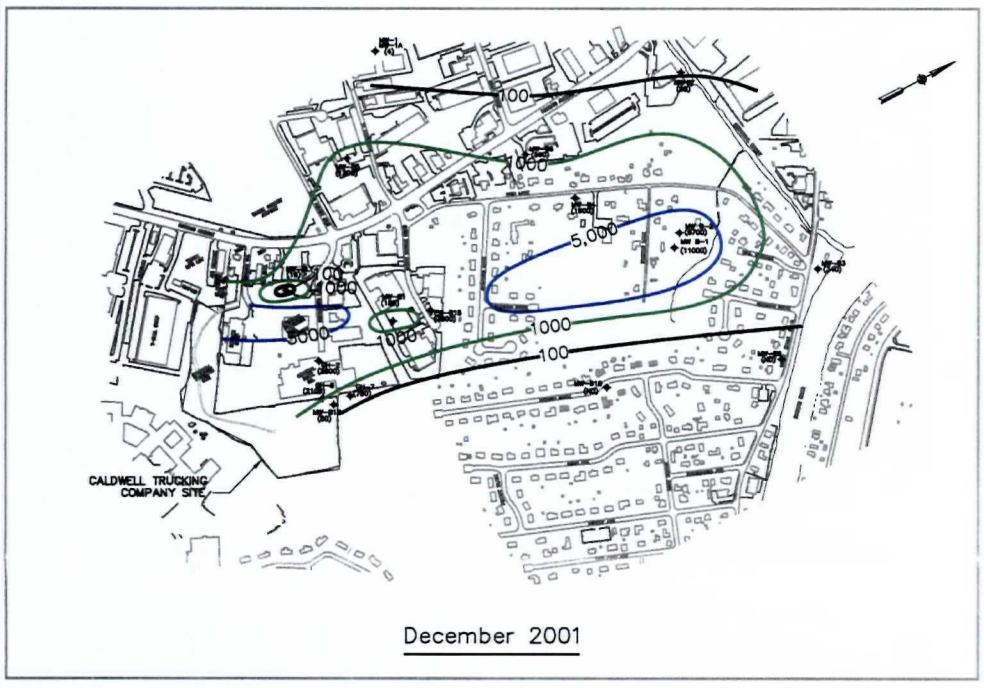
Drawing file: 0036045ZR005.dwg Mar 08, 2011 - 4:19pm



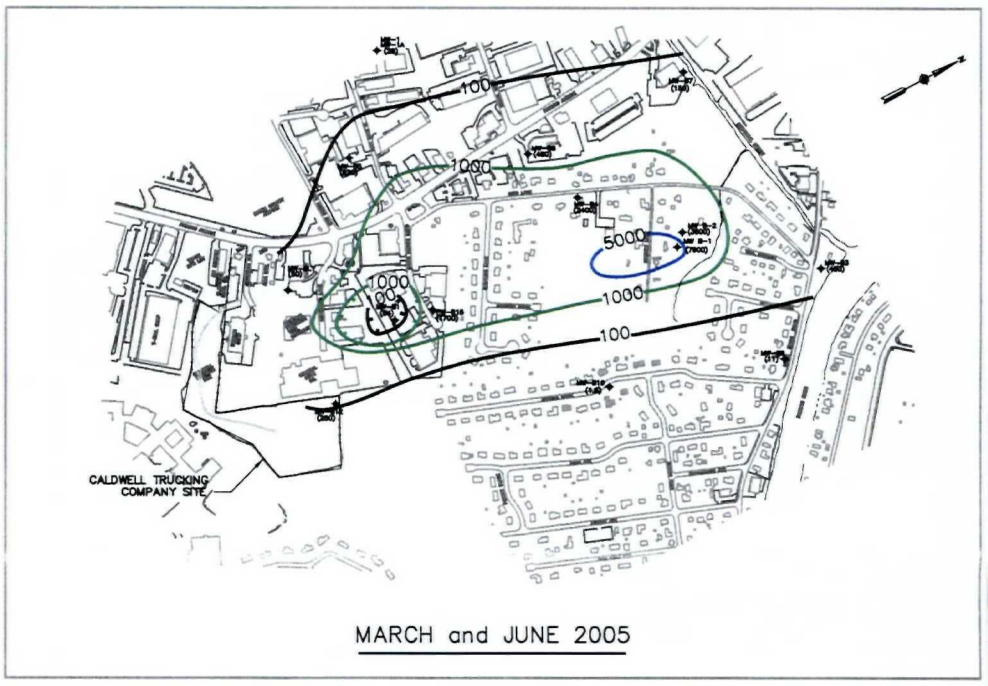

June 1988 (NUS 1989)



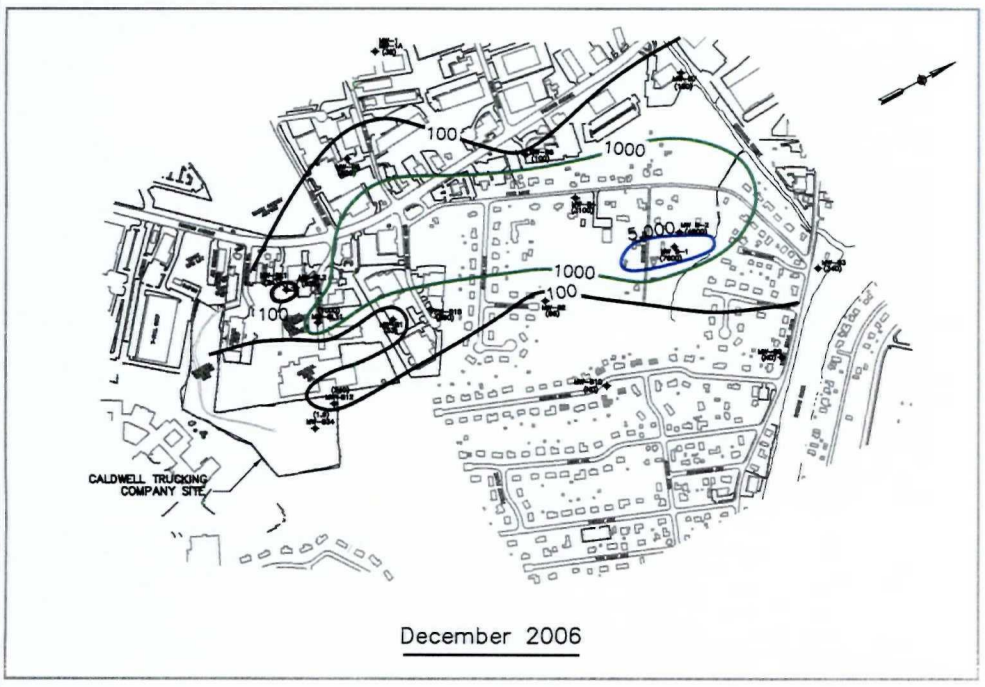

November 1998



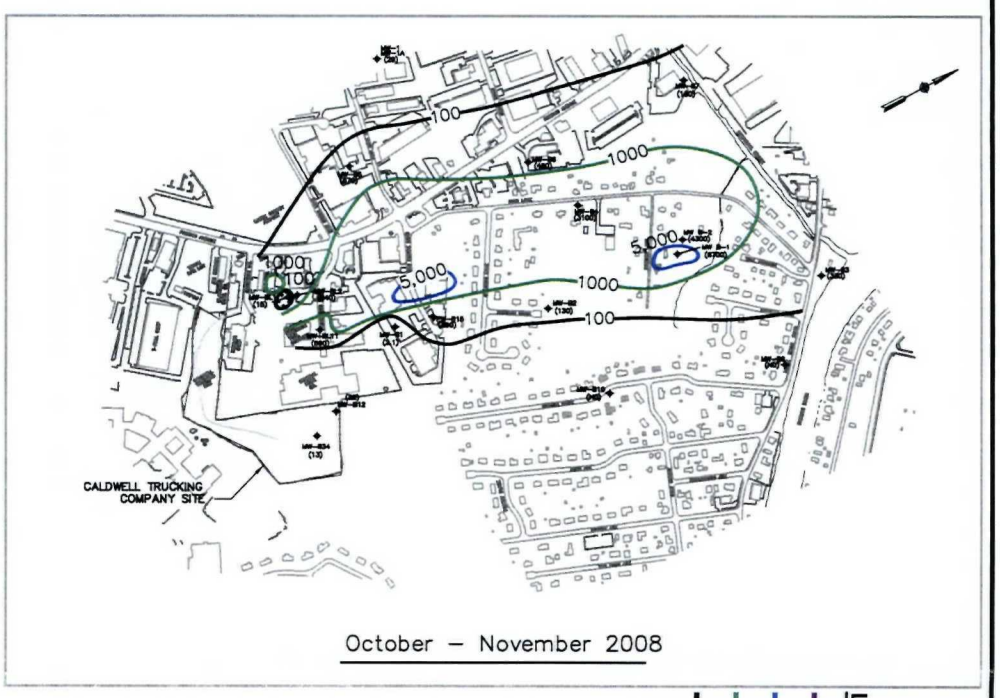

December 2001




MARCH and JUNE 2005




December 2006




October – November 2008

**LEGEND**

- 10,000 ppb TCE ISOCONCENTRATION CONTOUR
- 5,000 ppb TCE ISOCONCENTRATION CONTOUR
- 1,000 ppb TCE ISOCONCENTRATION CONTOUR
- 100 ppb TCE ISOCONCENTRATION CONTOUR

APPROXIMATE SCALE 600 0 600 1200 FEET

| | | | |
|---|---|---|---|
| PROJECT No. | 003-6045 | | |
| FILE No. | 0036045ZR005 | | |
| REV. 0 | SCALE | AS SHOWN | |
| DESIGN | ACK | 03/08/11 | |
| CADD | AM | 03/08/11 | |
| CHECK | PLL | 03/08/11 | |
| REVIEW | ACK | 03/08/11 | |

FIGURE 5

TITLE

**INTERPRETED TCE ISOCONCENTRATION CONTOURS IN THE B-ZONE - 1988 TO 2008**

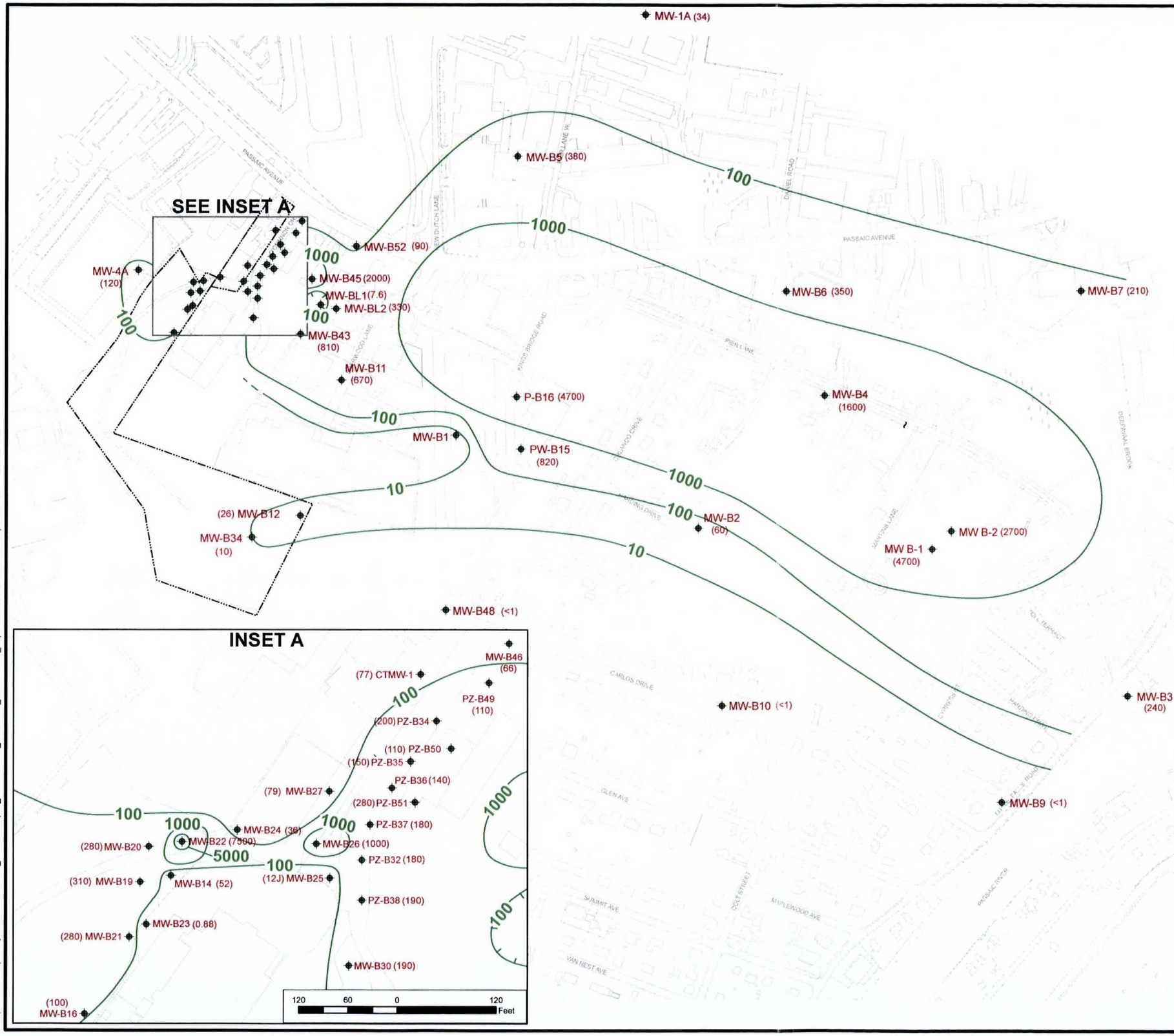
PROJECT

CALDWELL TRUCKING SITE
2009 AREA-WIDE GROUNDWATER REPORT
FAIRFIELD, NEW JERSEY

| REV | DATE | DES | REVISION DESCRIPTION | CADD | CHK | RVW |
|---|---|---|---|---|---|---|

NJ Authorization #24GA28029100

Golder Associates
Mt. Laurel, New Jersey




## LEGEND

- MONITORING WELL
- TCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (480) — MONITORING WELL ID AND TCE CONCENTRATION (ug/L)

## NOTE

1.) MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT).

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

Golder Associates
Mt. Laurel, New Jersey

CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

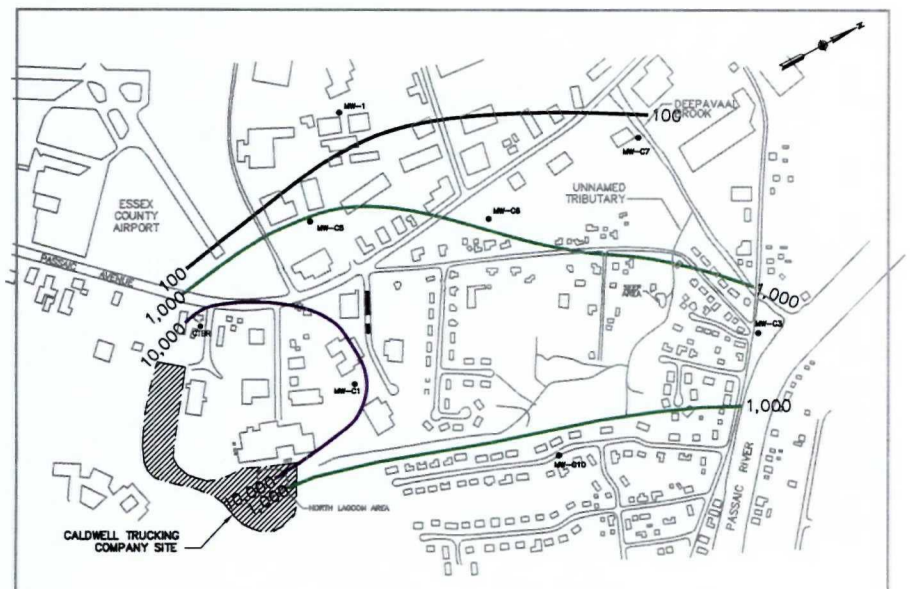
B-ZONE TCE CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR006 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

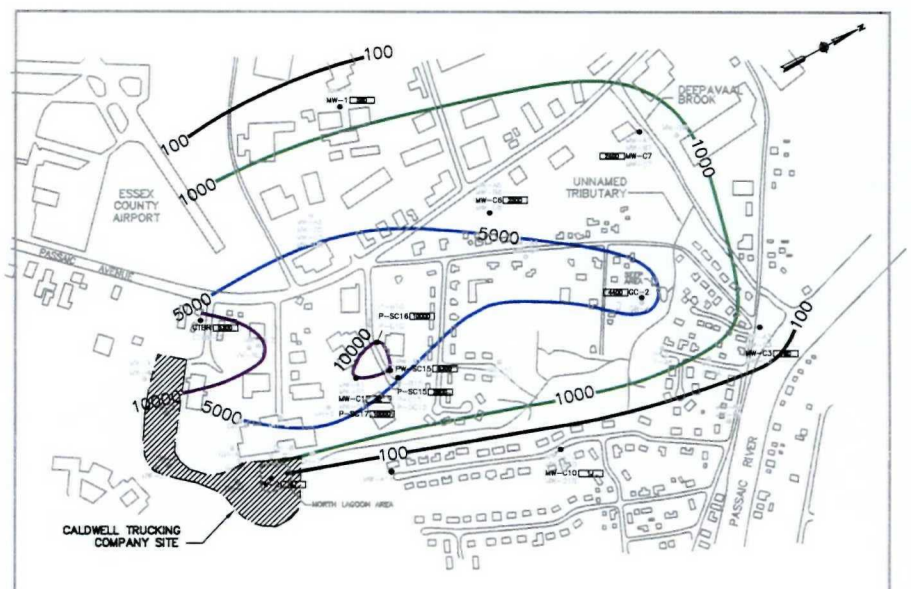
FIGURE 6

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM

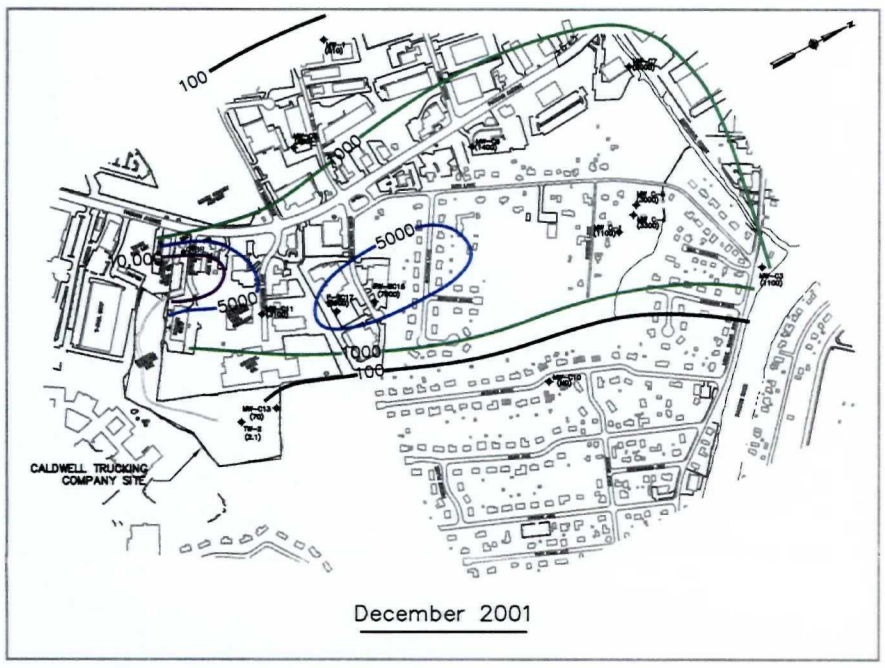
Drawing file: 0036045ZR007.dwg Mar 08, 2011 - 4:20pm



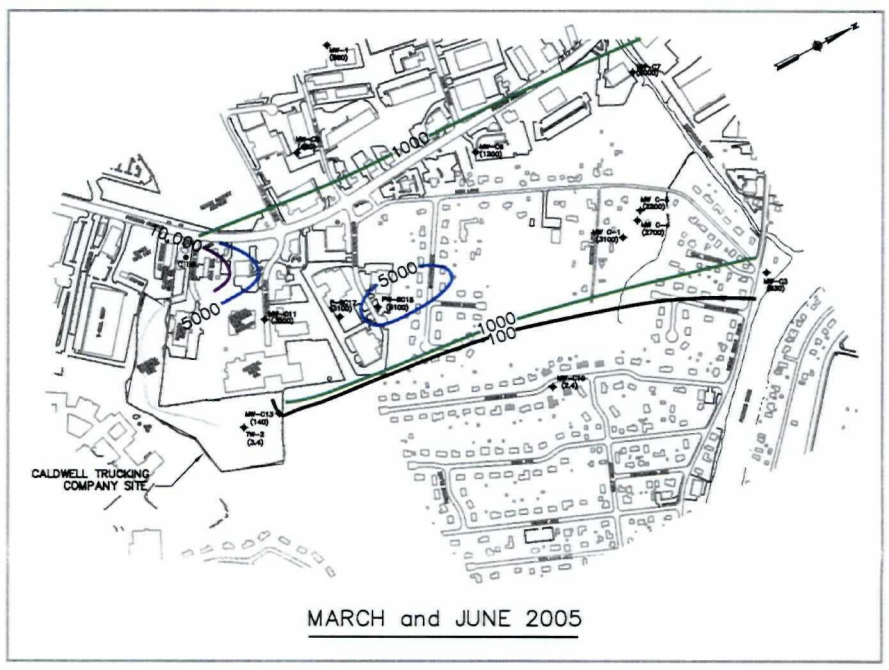

June 1988 (NUS 1989)



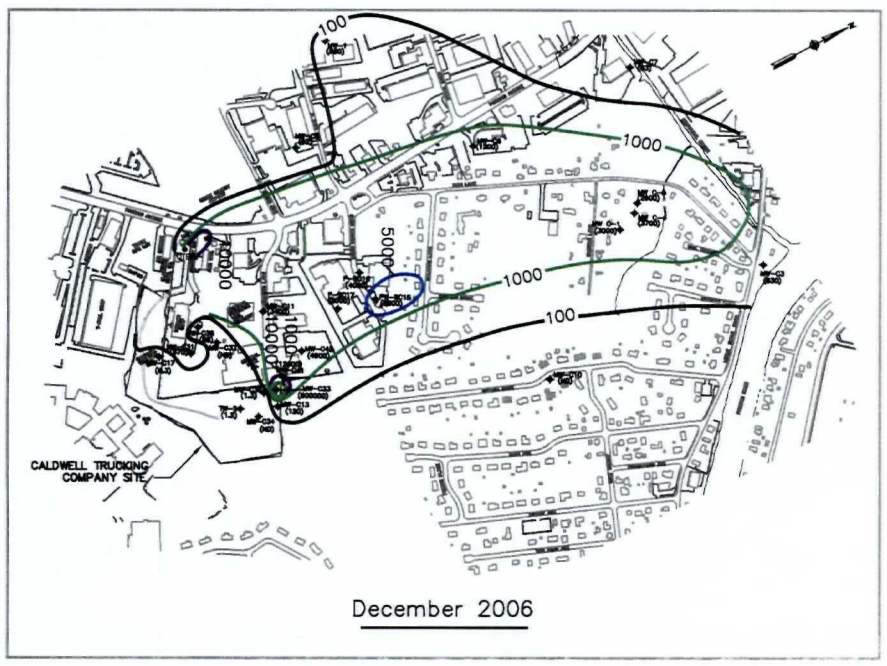

November 1998



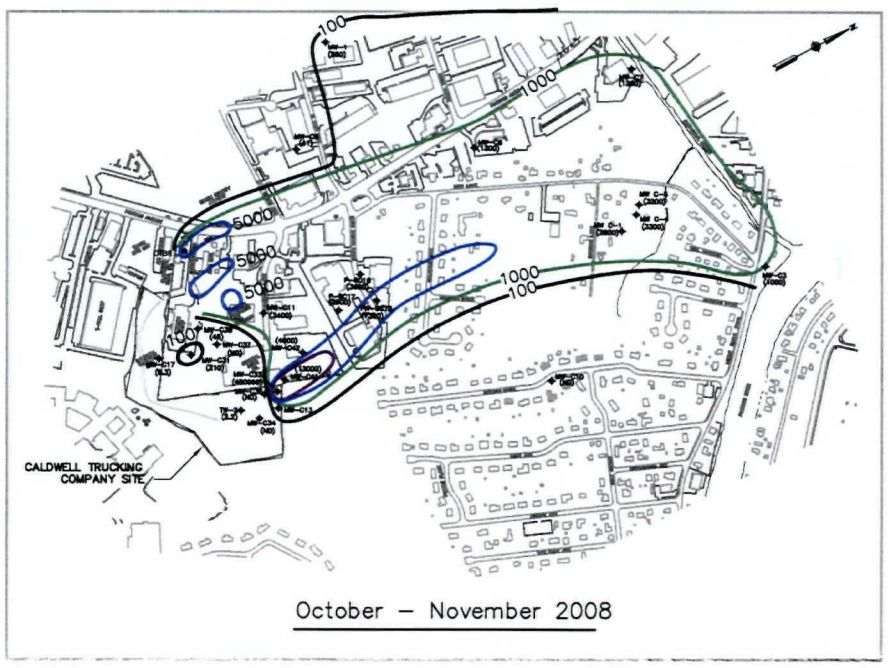

December 2001




MARCH and JUNE 2005




December 2006




October – November 2008

**LEGEND**

- 10,000 ppb TCE ISOCONCENTRATION CONTOUR
- 5,000 ppb TCE ISOCONCENTRATION CONTOUR
- 1,000 ppb TCE ISOCONCENTRATION CONTOUR
- 100 ppb TCE ISOCONCENTRATION CONTOUR

APPROXIMATE SCALE 600 0 600 1200 FEET

| | |
|---|---|
| PROJECT No. | 003-6045 |
| FILE No. | 0036045ZR007 |
| REV. 0 SCALE | AS SHOWN |
| DESIGN | ACK 03/08/11 |
| CADD | AM 03/08/11 |
| CHECK | PLL 03/08/11 |
| REVIEW | ACK 03/08/11 |

FIGURE 7

TITLE

**INTERPRETED TCE ISOCONCENTRATION CONTOURS IN THE C-ZONE - 1988 TO 2008**

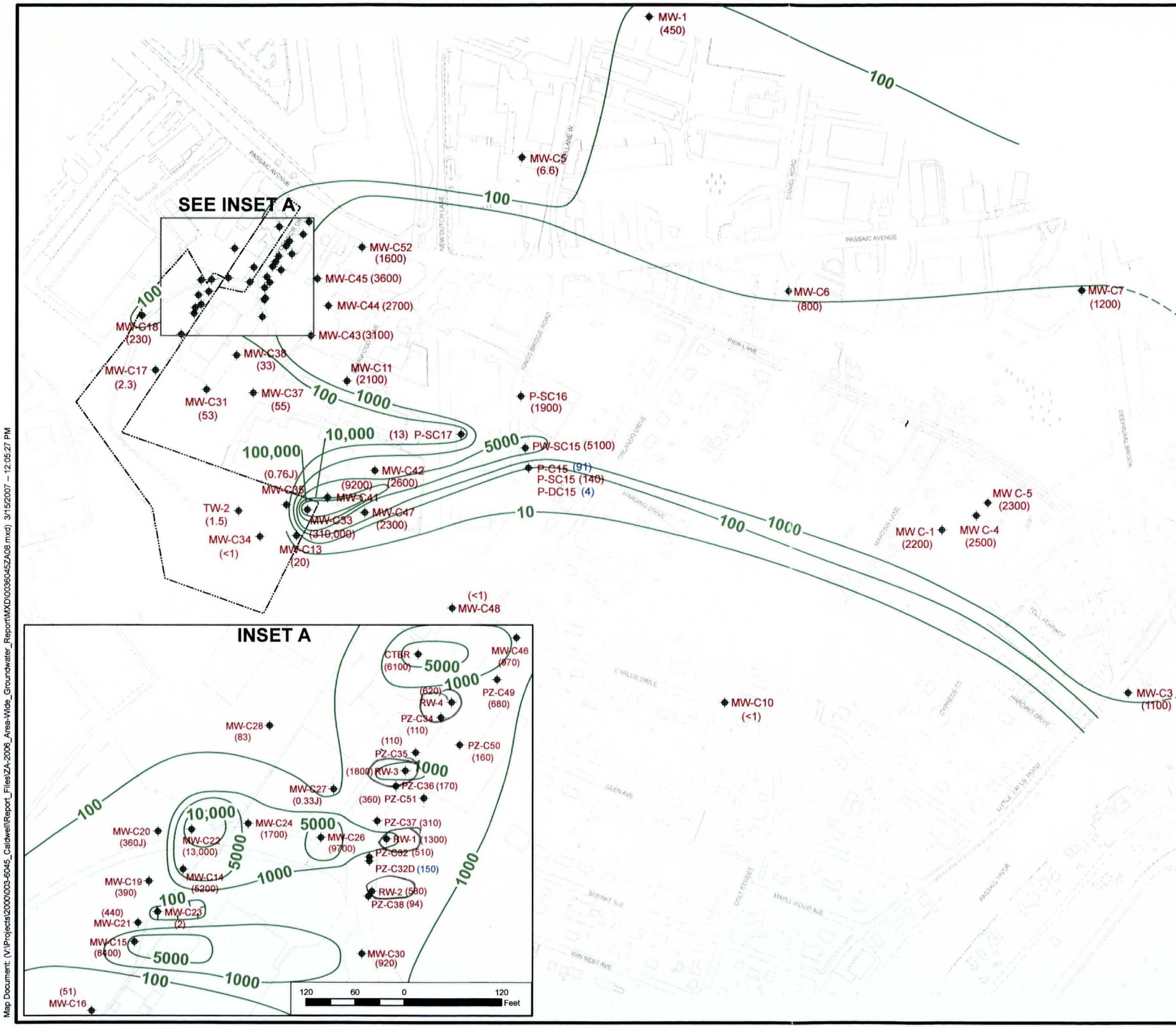
PROJECT

CALDWELL TRUCKING SITE
2009 AREA-WIDE
GROUNDWATER REPORT
FAIRFIELD, NEW JERSEY

| REV | DATE | DES | REVISION DESCRIPTION | CADD | CHK | RVW |
|---|---|---|---|---|---|---|

NJ Authorization #24GA28029100

Golder Associates
Mt. Laurel, New Jersey




Z

## LEGEND

- MONITORING WELL
- TCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (1200) (150) — MONITORING WELL ID AND TCE CONCENTRATION (ug/L) SEE NOTE 1

## NOTE

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

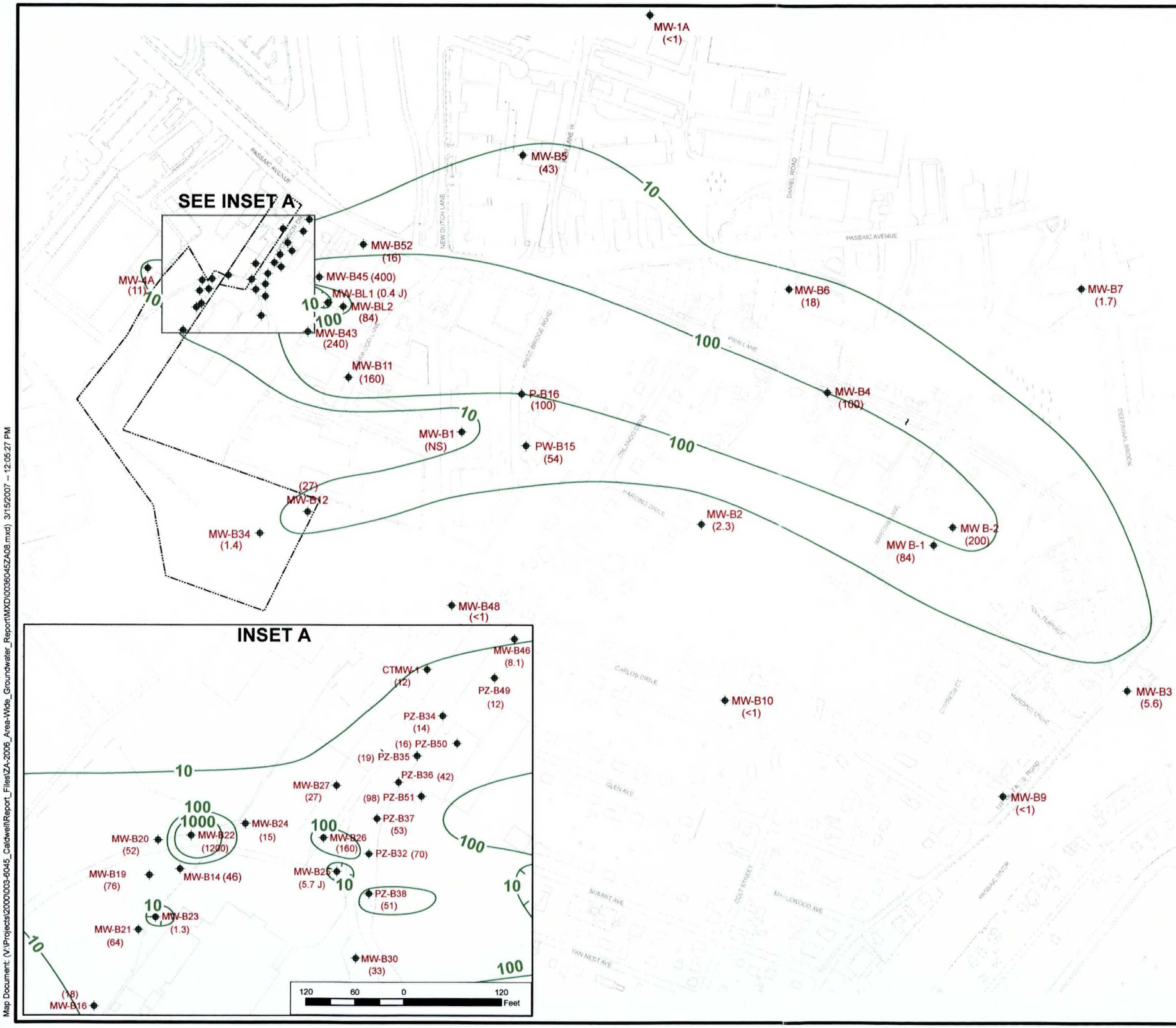
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE TCE CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR008 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 8

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- PCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (1.7) MONITORING WELL ID AND PCE CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

Golder Associates
Mt. Laurel, New Jersey

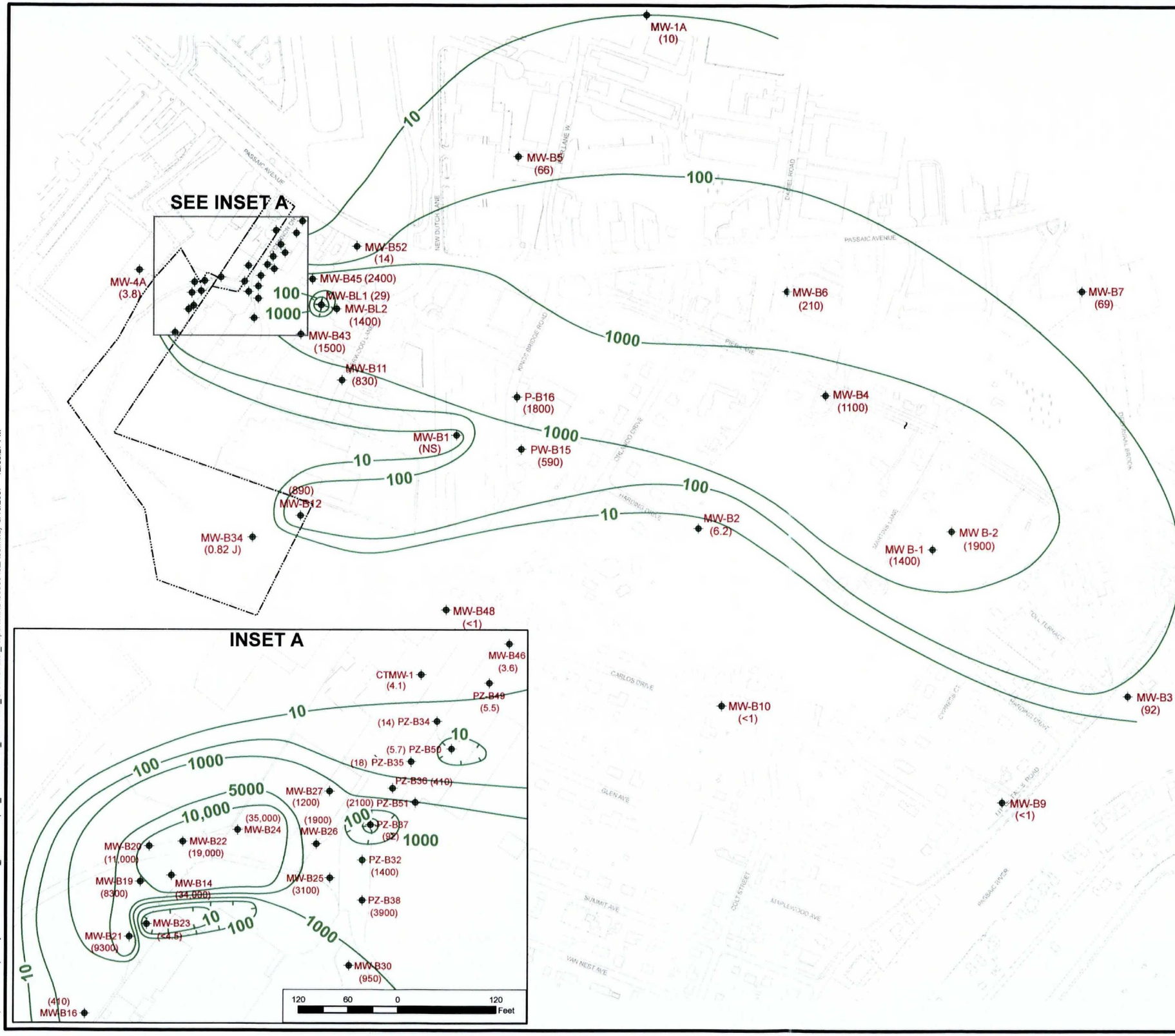
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE PCE CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR009 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 9

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- CIS-1,2-DCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (90) MONITORING WELL ID AND CIS-1,2-DCE CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

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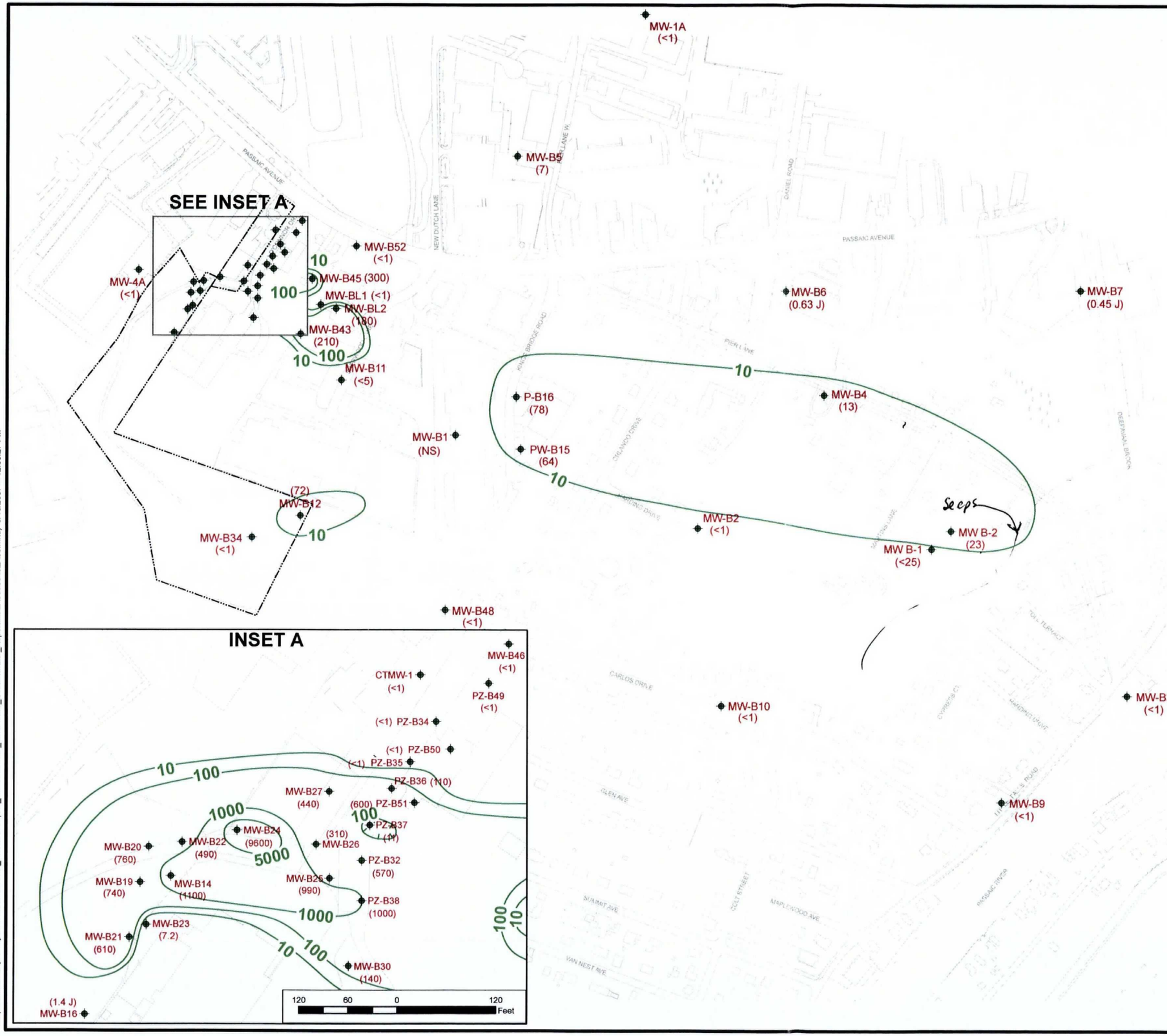
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE CIS-1,2-DCE CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR010 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 10

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




INSET A

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM

N

## LEGEND

- MONITORING WELL
- VINYL CHLORIDE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (7) — MONITORING WELL ID AND VINYL CHLORIDE CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

400 200 0 400 Feet

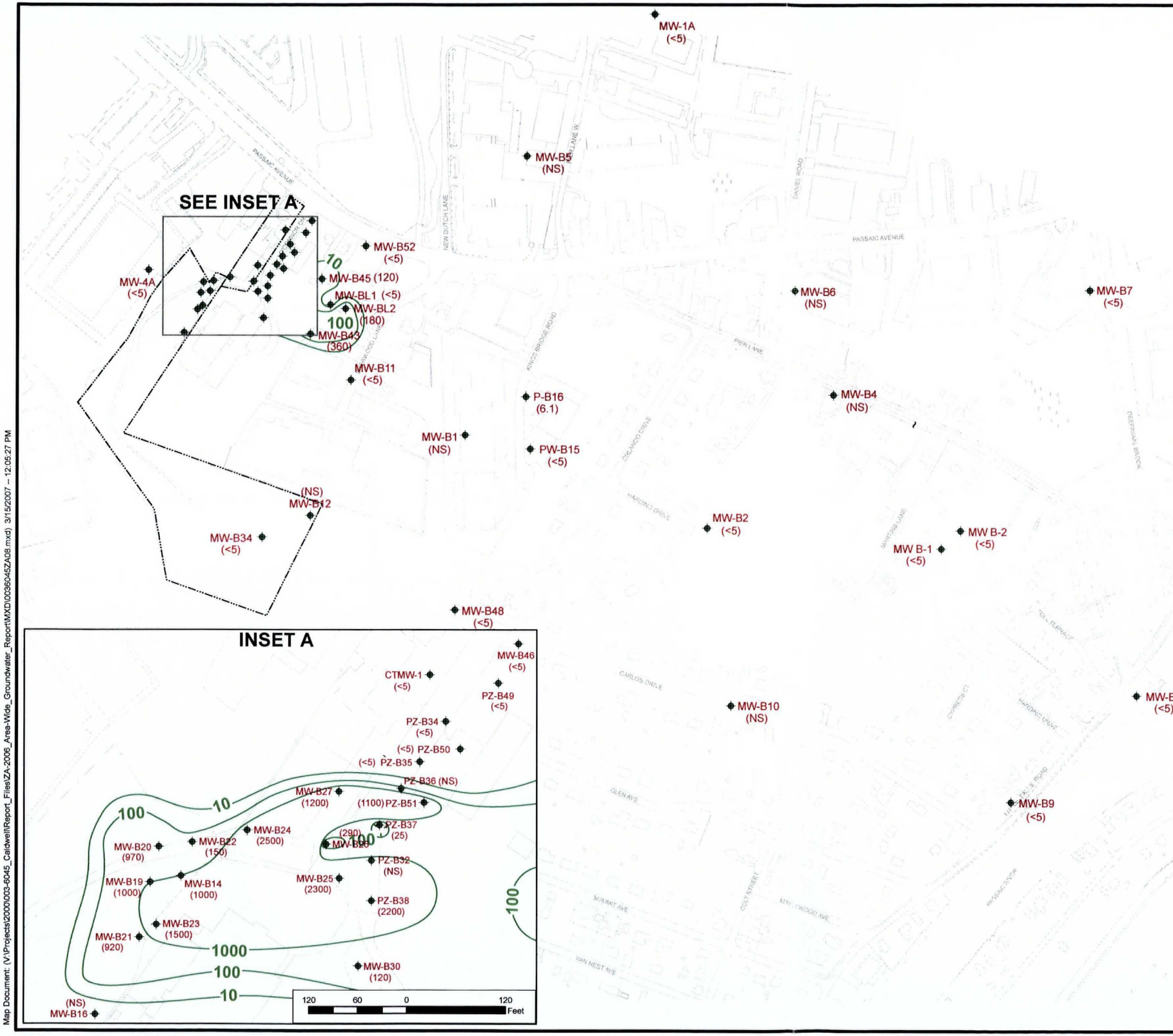
Golder Associates
Mt. Laurel, New Jersey

CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE VINYL CHLORIDE CONCENTRATION (µg/L) CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR011 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 11

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N

## LEGEND

- MONITORING WELL
- ETHENE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (ND) — MONITORING WELL ID AND ETHENE CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

400 200 0 400 Feet

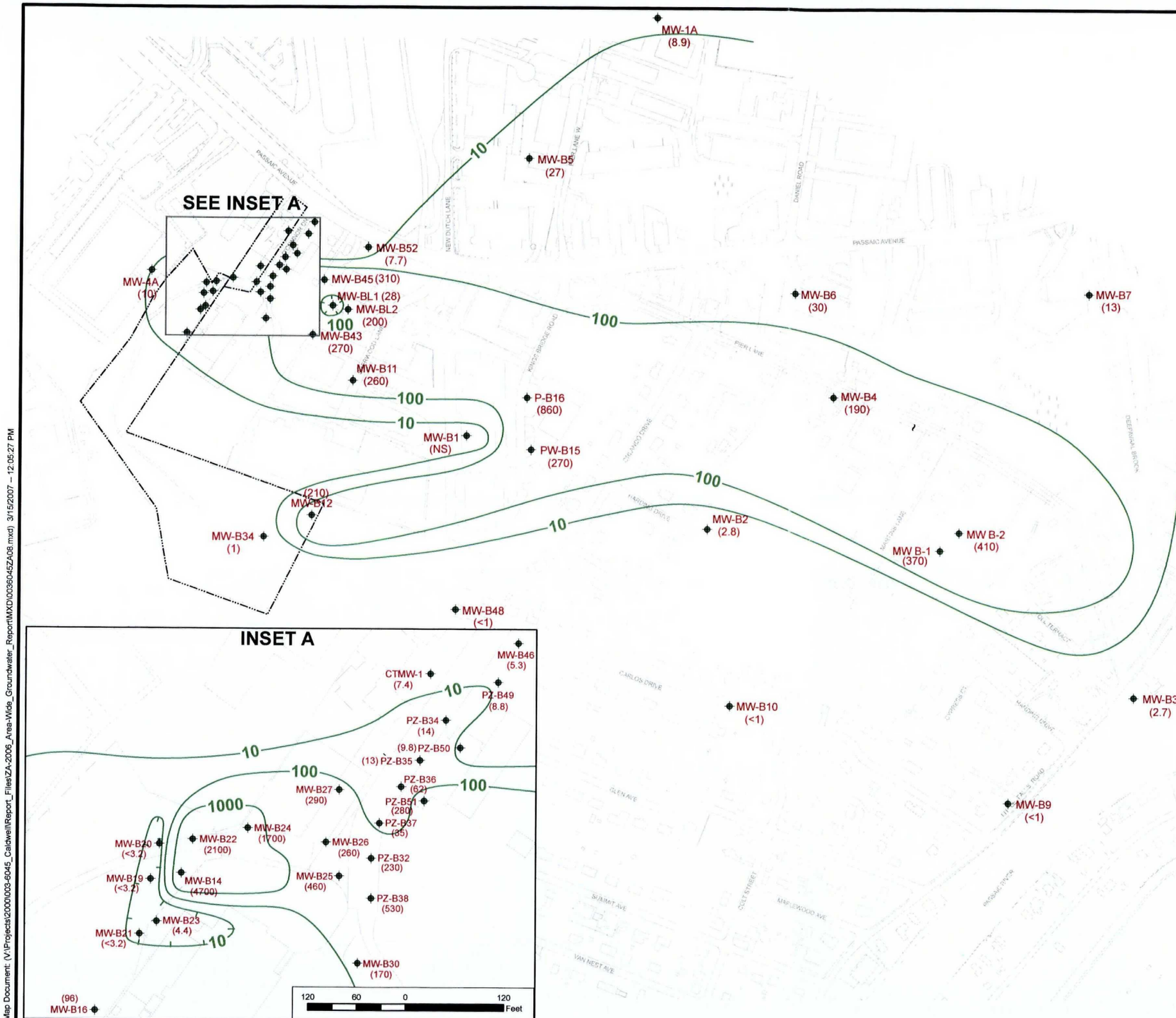
Golder Associates
Mt. Laurel, New Jersey

CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE ETHENE CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR012 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 12




## LEGEND

- MONITORING WELL
- 1,1,1-TCA CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (28) MONITORING WELL ID AND 1,1,1-TCA CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, FROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4 ) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

Golder Associates
Mt. Laurel, New Jersey

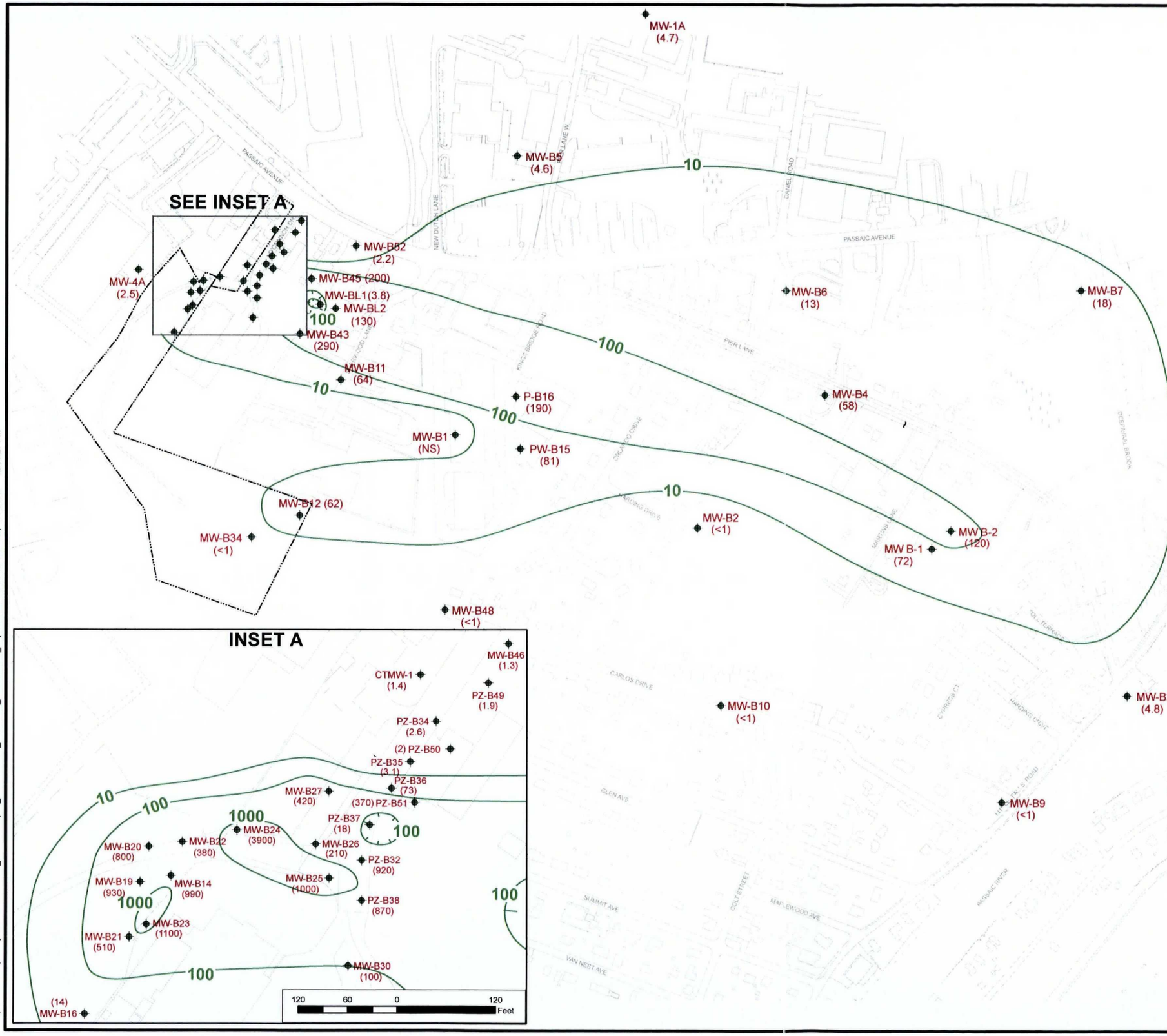
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE 1,1,1-TCA CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR013 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 13

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- 1,1-DCA CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (13) MONITORING WELL ID AND 1,1-DCA CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, FZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

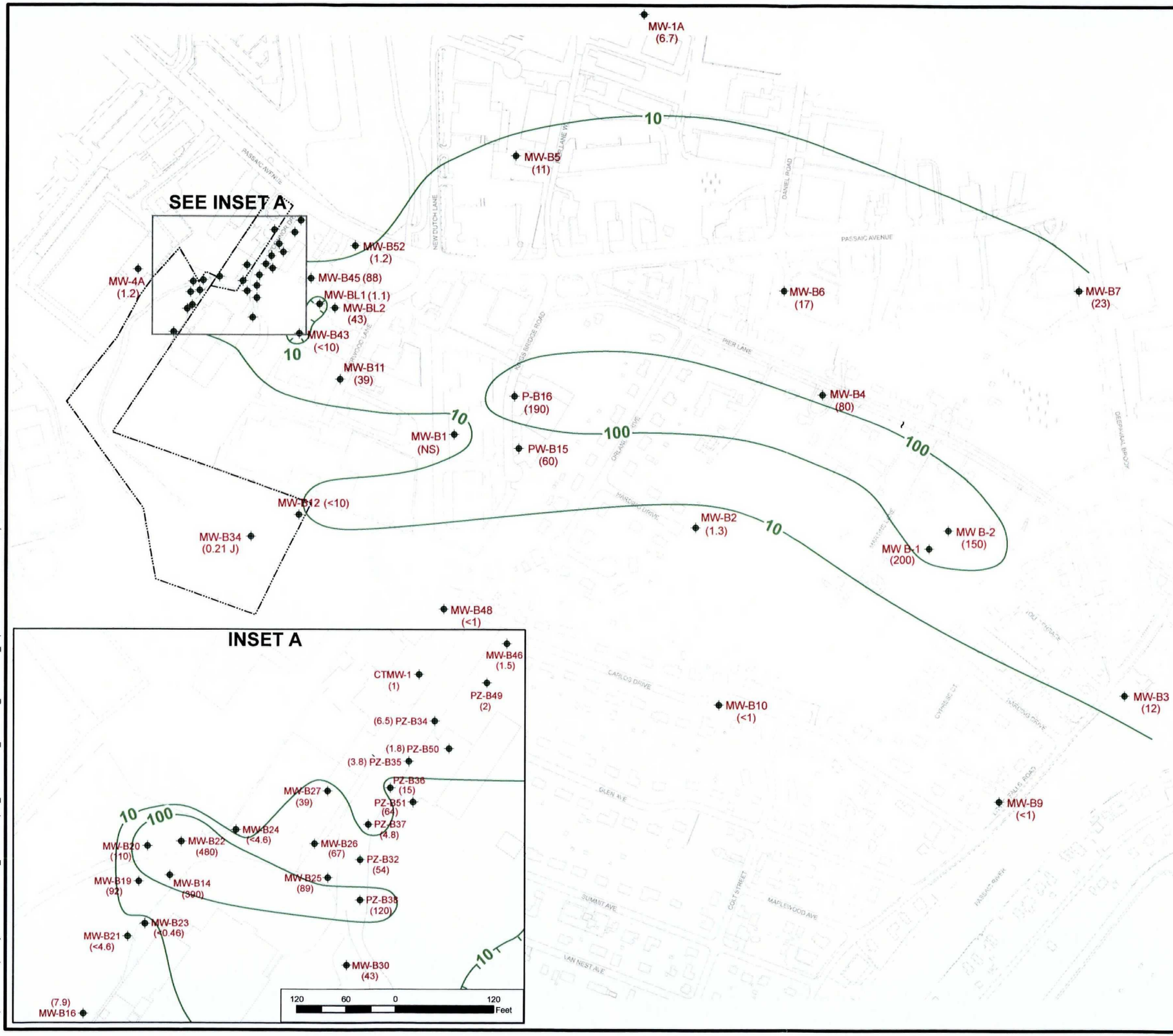
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE 1,1-DCA CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR014 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 14

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- 1,1-DCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (23) MONITORING WELL ID AND 1,1-DCE CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

Golder Associates
Mt. Laurel, New Jersey

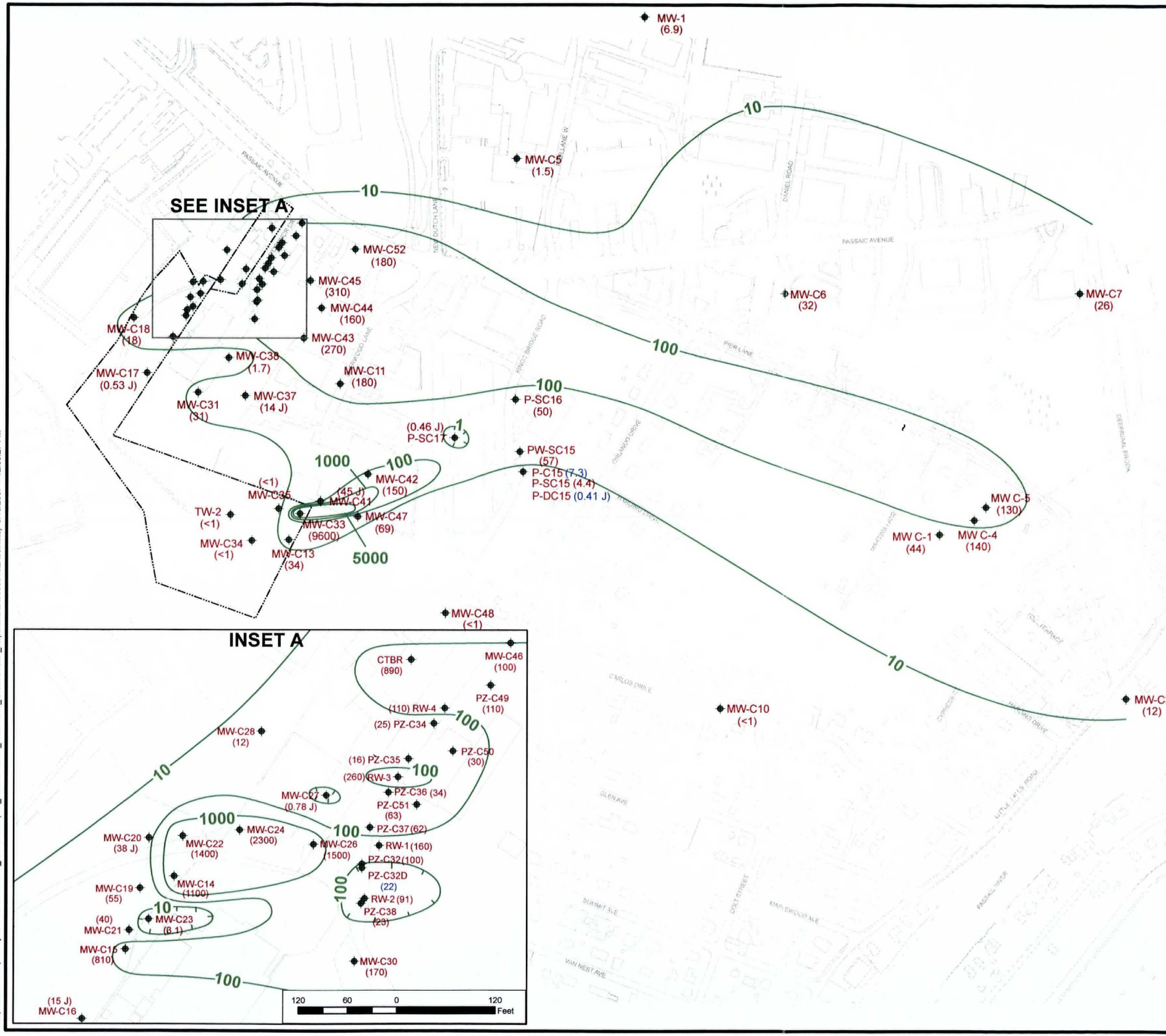
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE 1,1-DCE CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR015 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 15

Map Document: (V:\Projects\20001\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




N

## LEGEND

- MONITORING WELL
- PCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (26) (22) — MONITORING WELL ID AND PCE CONCENTRATION (ug/L) SEE NOTE 1

## NOTE

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

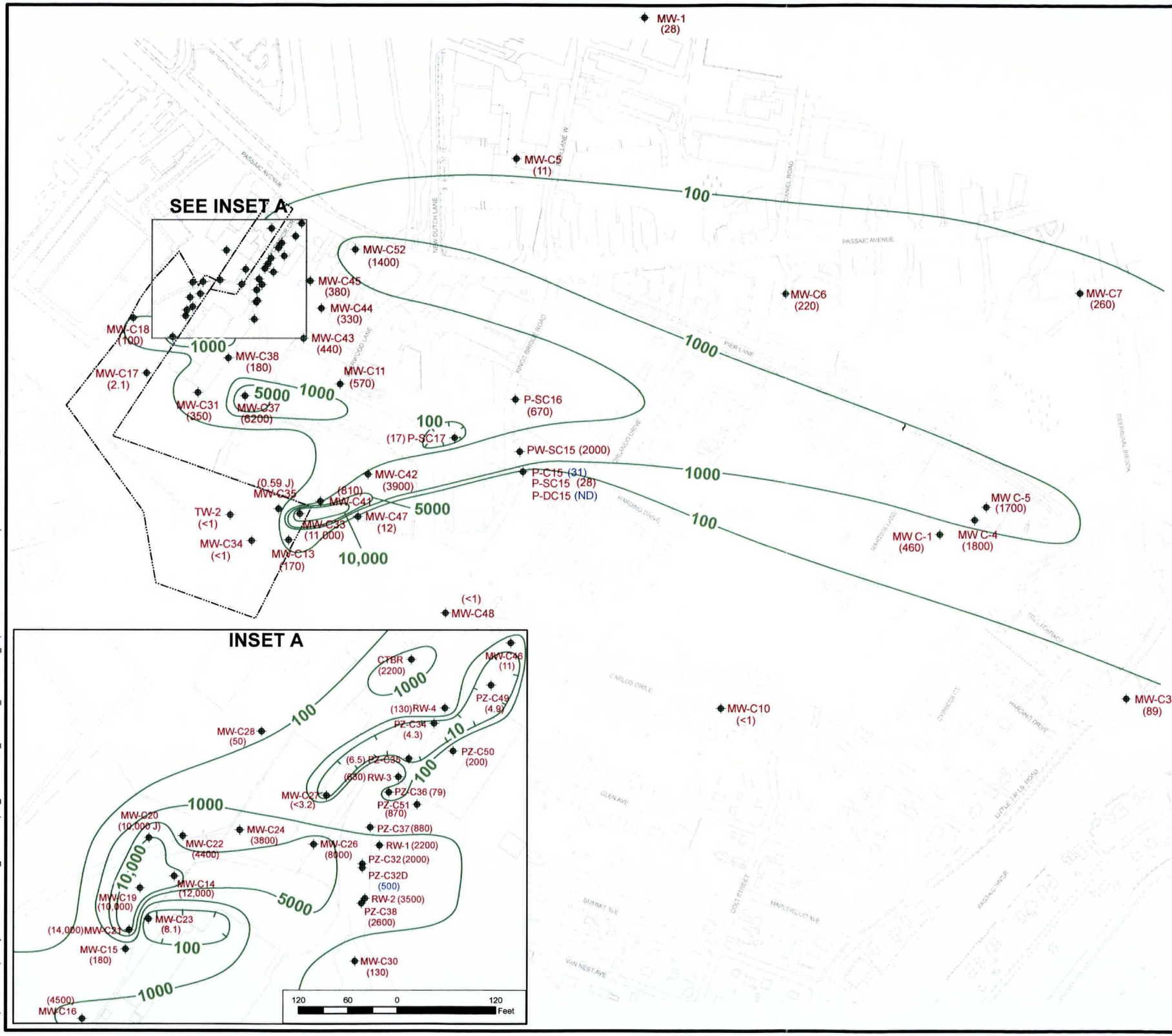
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE PCE CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR016 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 16

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- CIS-1,2-DCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (28) (500) — MONITORING WELL ID AND CIS-1,2-DCE CONCENTRATION (ug/L) SEE NOTE 1

## NOTE

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

Golder Associates
Mt. Laurel, New Jersey

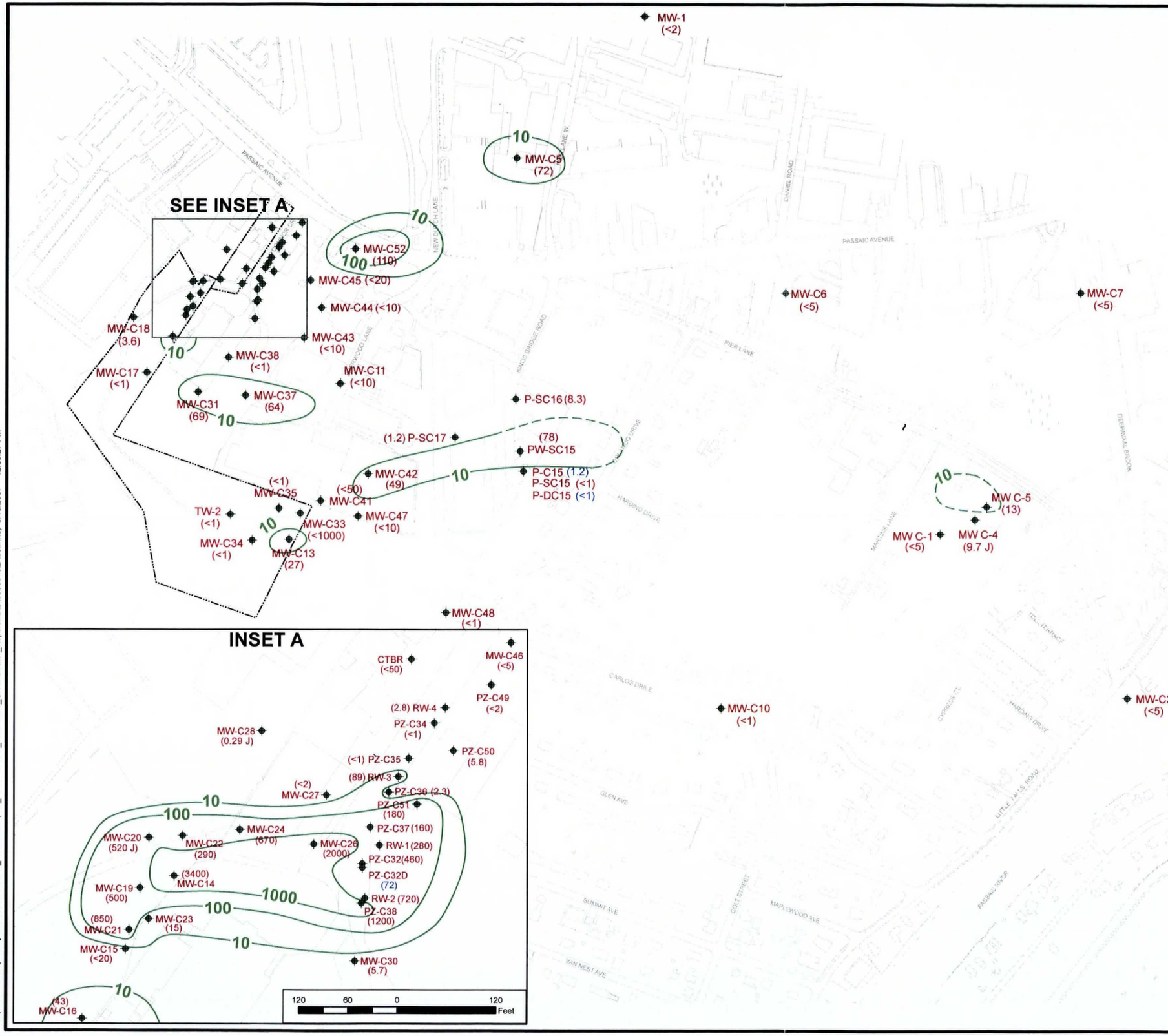
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE CIS-1,2-DCE CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR017 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 17

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- VINYL CHLORIDE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (ND) — MONITORING WELL ID AND VINYL CHLORIDE CONCENTRATION (ug/L)
- (72) — SEE NOTE 1

## NOTES

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

2.) WHERE NO DATA WAS AVAILABLE, OR REPORTING LIMITS WERE HIGH, CONTOURS WERE INTERPRETED FROM HISTORICAL DATA.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

Golder Associates
Mt. Laurel, New Jersey

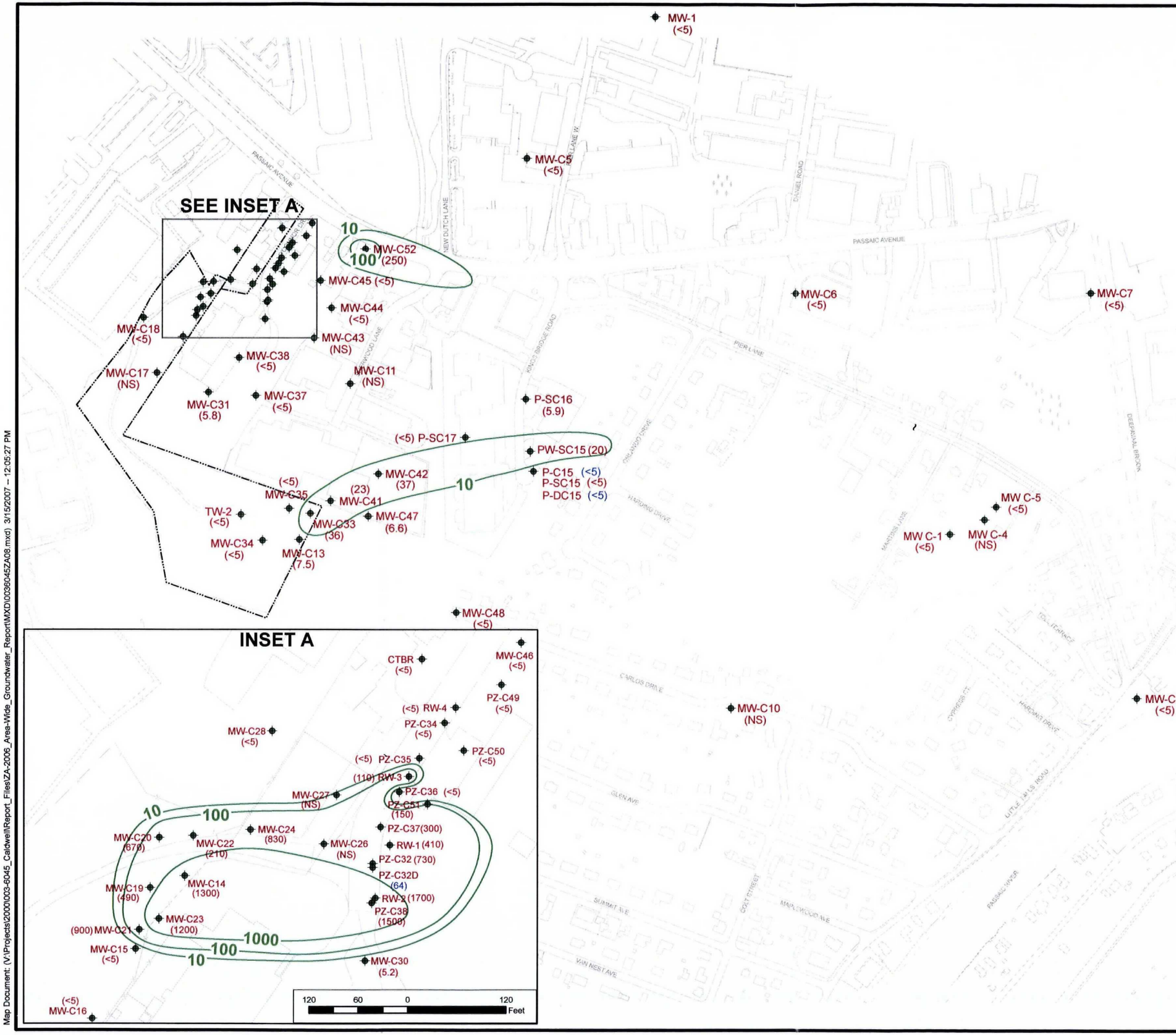
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE VINYL CHLORIDE CONCENTRATION (ug/L) CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR018 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 18

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- ETHENE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (1200) (64) — MONITORING WELL ID AND ETHENE CONCENTRATION (ug/L) SEE NOTE 3

## NOTES

1.) NS = NOT SAMPLED

2.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

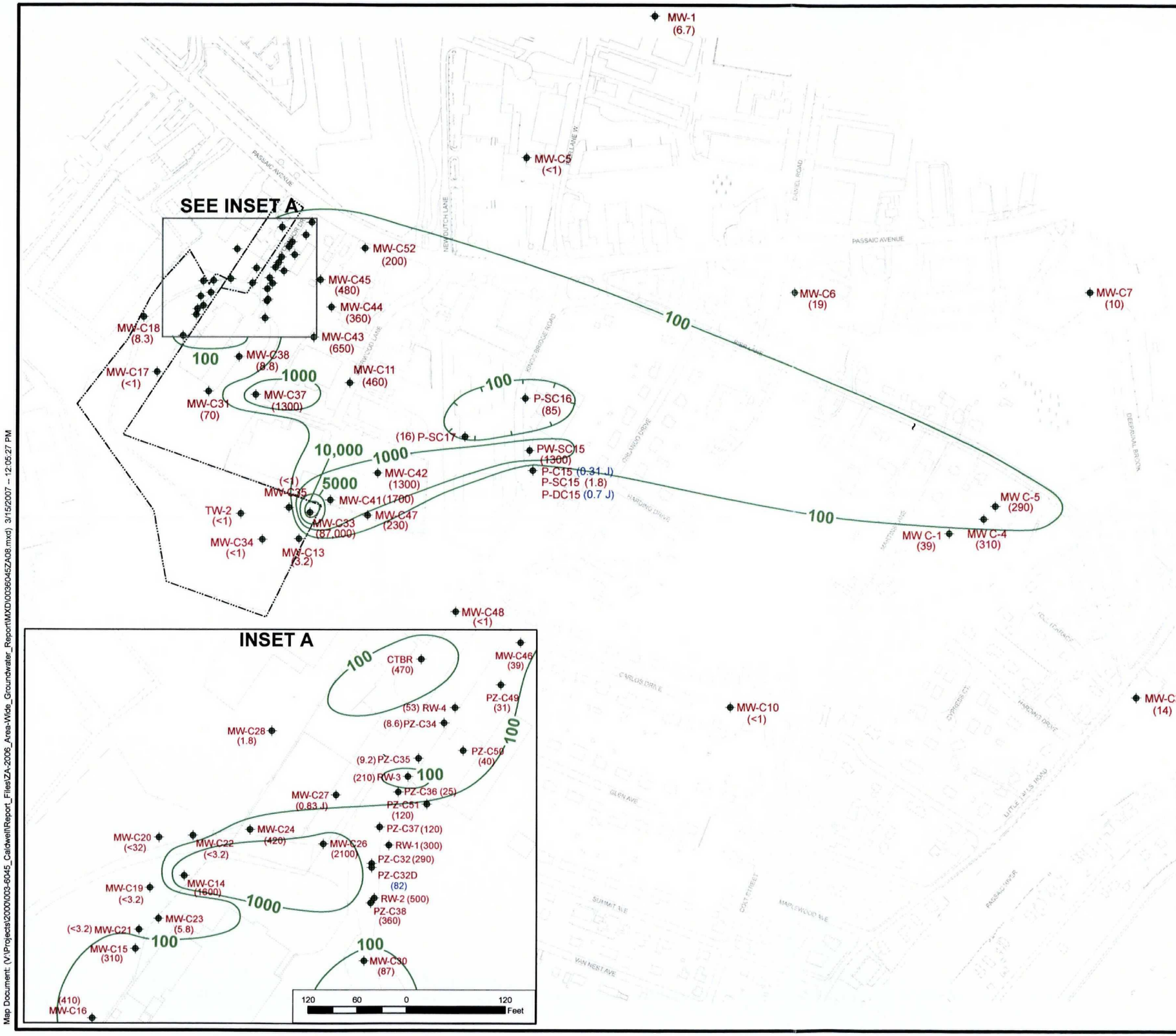
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE ETHENE CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR019 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 19

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




Z

## LEGEND

- MONITORING WELL
- 1,1,1-TCA CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (1200) (82) — MONITORING WELL ID AND 1,1,1-TCA CONCENTRATION (ug/L) SEE NOTE 1

## NOTES

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

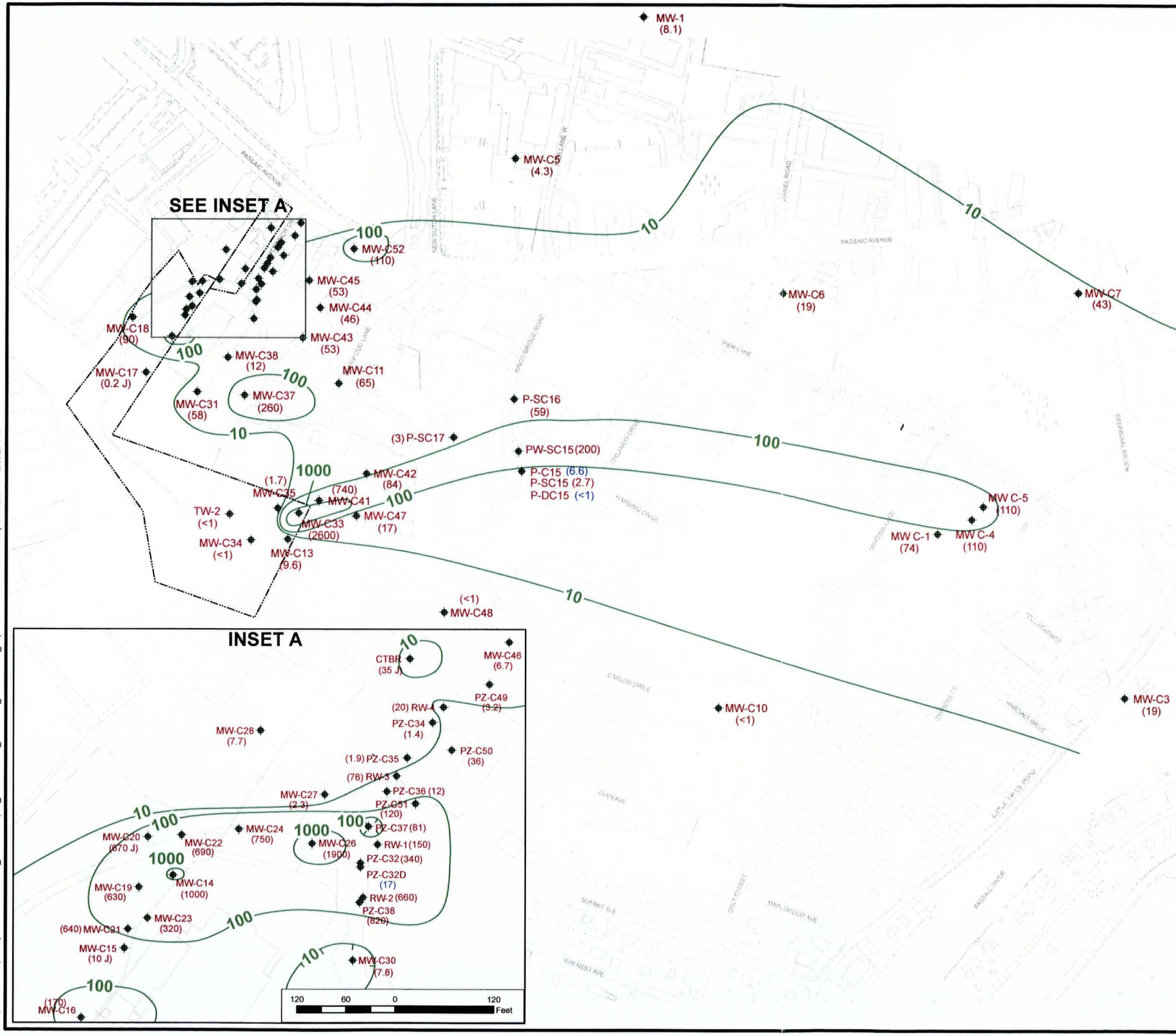
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE 1,1,1-TCA CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR020 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 20

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- 1,1-DCA CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (1200) (17) — MONITORING WELL ID AND 1,1-DCA CONCENTRATION (ug/L) SEE NOTE 1

## NOTES

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

Golder Associates
Mt. Laurel, New Jersey

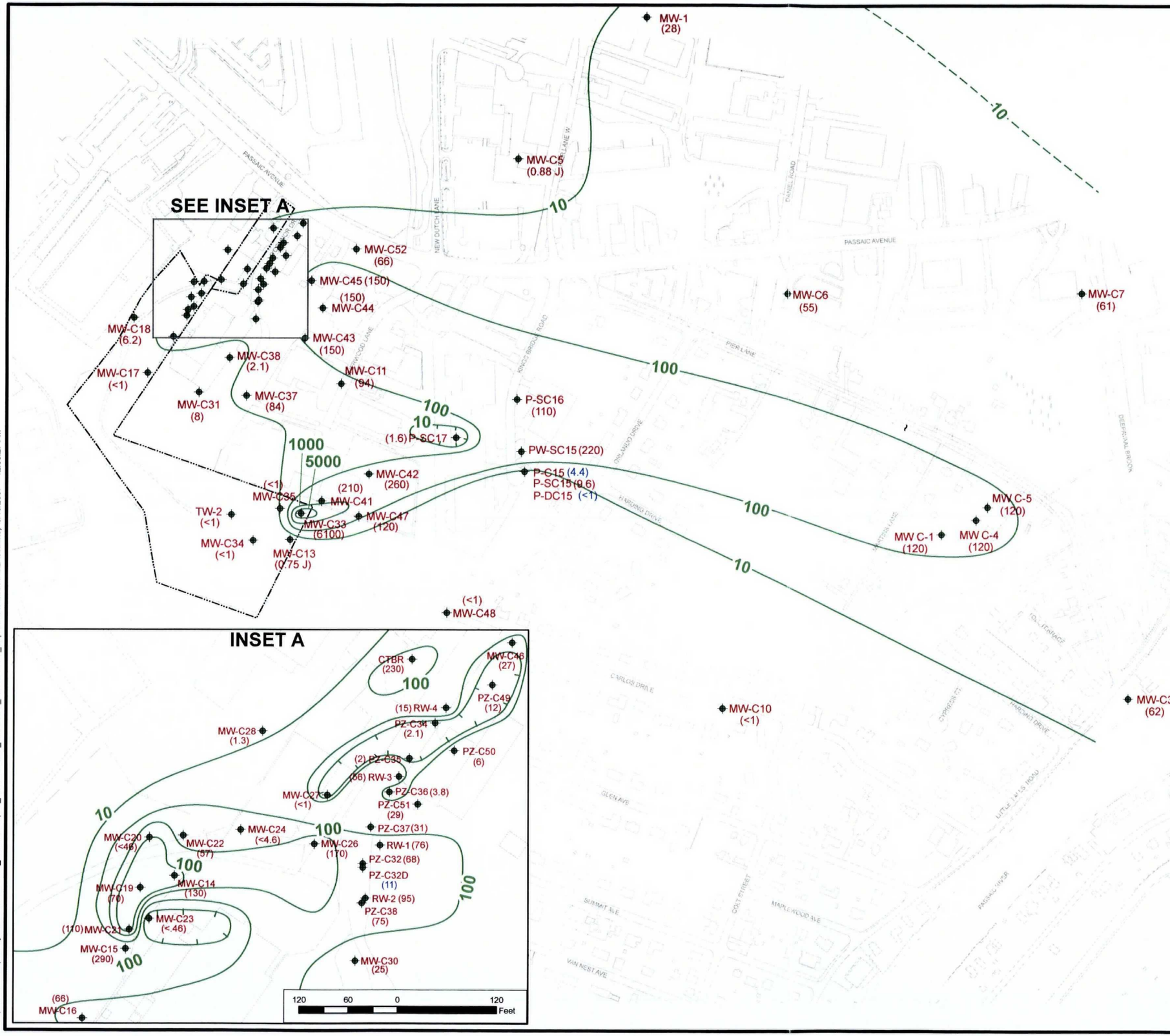
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE 1,1-DCA CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR021 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 21

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




N

## LEGEND

- MONITORING WELL
- 1,1-DCE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (1200) (11) — MONITORING WELL ID AND 1,1-DCE CONCENTRATION (ug/L) SEE NOTE 1

## NOTES

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

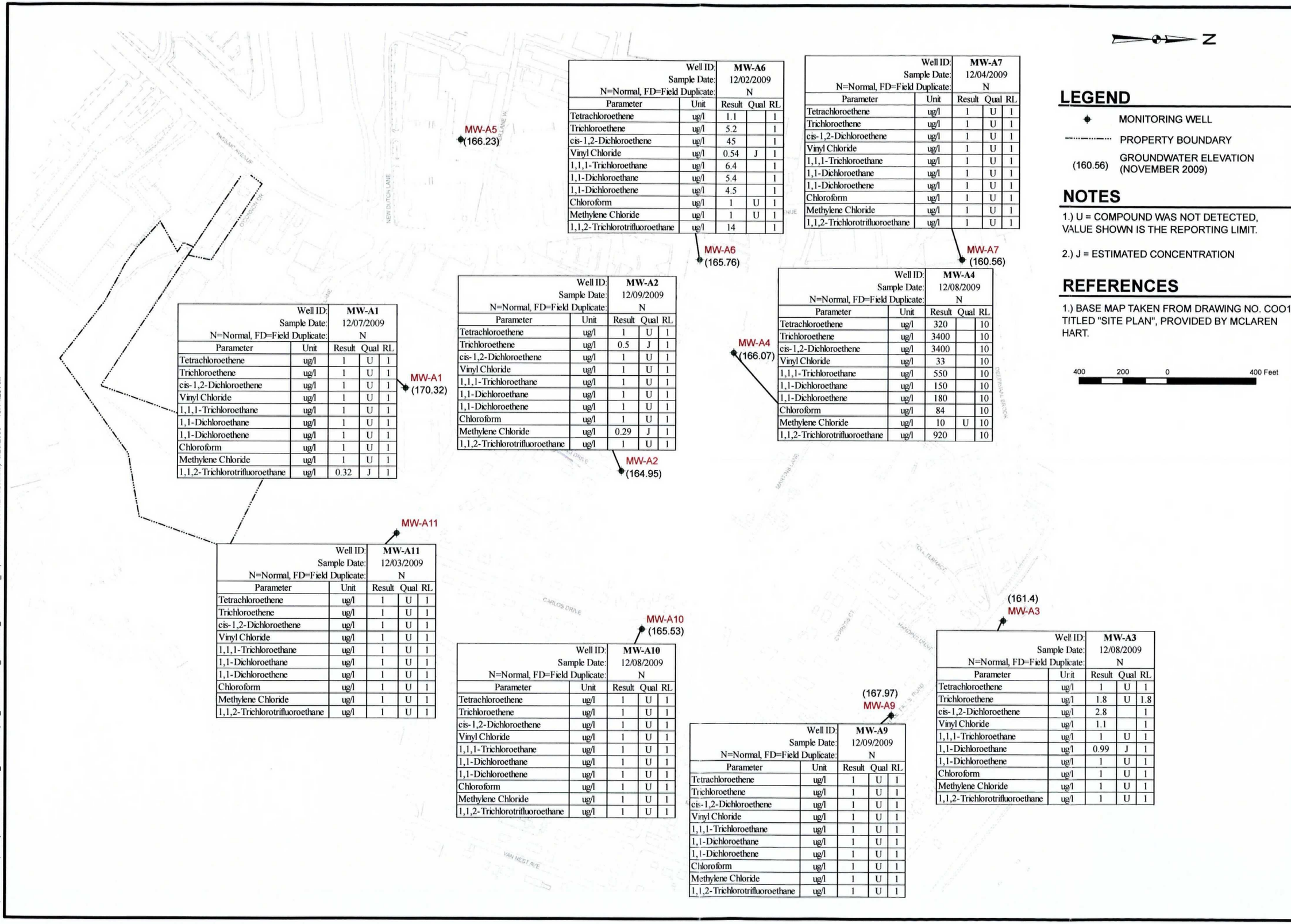
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE 1,1-DCE CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR022 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 22

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




| Well ID: | MW-A1 | | |
|---|---|---|---|
| Sample Date: | 12/07/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1 | U | 1 |
| Trichloroethene | ug/l | 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 1 | U | 1 |
| Vinyl Chloride | ug/l | 1 | U | 1 |
| 1,1,1-Trichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 1 | U | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 1 | U | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 0.32 | J | 1 |

| Well ID: | MW-A2 | | |
|---|---|---|---|
| Sample Date: | 12/09/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1 | U | 1 |
| Trichloroethene | ug/l | 0.5 | J | 1 |
| cis-1,2-Dichloroethene | ug/l | 1 | U | 1 |
| Vinyl Chloride | ug/l | 1 | U | 1 |
| 1,1,1-Trichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 1 | U | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 0.29 | J | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 1 | U | 1 |

| Well ID: | MW-A6 | | |
|---|---|---|---|
| Sample Date: | 12/02/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1.1 | | 1 |
| Trichloroethene | ug/l | 5.2 | | 1 |
| cis-1,2-Dichloroethene | ug/l | 45 | | 1 |
| Vinyl Chloride | ug/l | 0.54 | J | 1 |
| 1,1,1-Trichloroethane | ug/l | 6.4 | | 1 |
| 1,1-Dichloroethane | ug/l | 5.4 | | 1 |
| 1,1-Dichloroethene | ug/l | 4.5 | | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 1 | U | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 14 | | 1 |

| Well ID: | MW-A7 | | |
|---|---|---|---|
| Sample Date: | 12/04/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1 | U | 1 |
| Trichloroethene | ug/l | 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 1 | U | 1 |
| Vinyl Chloride | ug/l | 1 | U | 1 |
| 1,1,1-Trichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 1 | U | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 1 | U | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 1 | U | 1 |

| Well ID: | MW-A4 | | |
|---|---|---|---|
| Sample Date: | 12/08/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 320 | | 10 |
| Trichloroethene | ug/l | 3400 | | 10 |
| cis-1,2-Dichloroethene | ug/l | 3400 | | 10 |
| Vinyl Chloride | ug/l | 33 | | 10 |
| 1,1,1-Trichloroethane | ug/l | 550 | | 10 |
| 1,1-Dichloroethane | ug/l | 150 | | 10 |
| 1,1-Dichloroethene | ug/l | 180 | | 10 |
| Chloroform | ug/l | 84 | | 10 |
| Methylene Chloride | ug/l | 10 | U | 10 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 920 | | 10 |

| Well ID: | MW-A11 | | |
|---|---|---|---|
| Sample Date: | 12/03/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1 | U | 1 |
| Trichloroethene | ug/l | 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 1 | U | 1 |
| Vinyl Chloride | ug/l | 1 | U | 1 |
| 1,1,1-Trichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 1 | U | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 1 | U | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 1 | U | 1 |

| Well ID: | MW-A10 | | |
|---|---|---|---|
| Sample Date: | 12/08/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1 | U | 1 |
| Trichloroethene | ug/l | 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 1 | U | 1 |
| Vinyl Chloride | ug/l | 1 | U | 1 |
| 1,1,1-Trichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 1 | U | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 1 | U | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 1 | U | 1 |

| Well ID: | MW-A9 | | |
|---|---|---|---|
| Sample Date: | 12/09/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1 | U | 1 |
| Trichloroethene | ug/l | 1 | U | 1 |
| cis-1,2-Dichloroethene | ug/l | 1 | U | 1 |
| Vinyl Chloride | ug/l | 1 | U | 1 |
| 1,1,1-Trichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethene | ug/l | 1 | U | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 1 | U | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 1 | U | 1 |

| Well ID: | MW-A3 | | |
|---|---|---|---|
| Sample Date: | 12/08/2009 | | |
| N=Normal, FD=Field Duplicate: | N | | |
| Parameter | Unit | Result | Qual | RL |
| Tetrachloroethene | ug/l | 1 | U | 1 |
| Trichloroethene | ug/l | 1.8 | U | 1.8 |
| cis-1,2-Dichloroethene | ug/l | 2.8 | | 1 |
| Vinyl Chloride | ug/l | 1.1 | | 1 |
| 1,1,1-Trichloroethane | ug/l | 1 | U | 1 |
| 1,1-Dichloroethane | ug/l | 0.99 | J | 1 |
| 1,1-Dichloroethene | ug/l | 1 | U | 1 |
| Chloroform | ug/l | 1 | U | 1 |
| Methylene Chloride | ug/l | 1 | U | 1 |
| 1,1,2-Trichlorotrifluoroethane | ug/l | 1 | U | 1 |

N

## LEGEND

- MONITORING WELL
- PROPERTY BOUNDARY
- (160.56) GROUNDWATER ELEVATION (NOVEMBER 2009)

## NOTES

1.) U = COMPOUND WAS NOT DETECTED, VALUE SHOWN IS THE REPORTING LIMIT.

2.) J = ESTIMATED CONCENTRATION

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. COO1, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

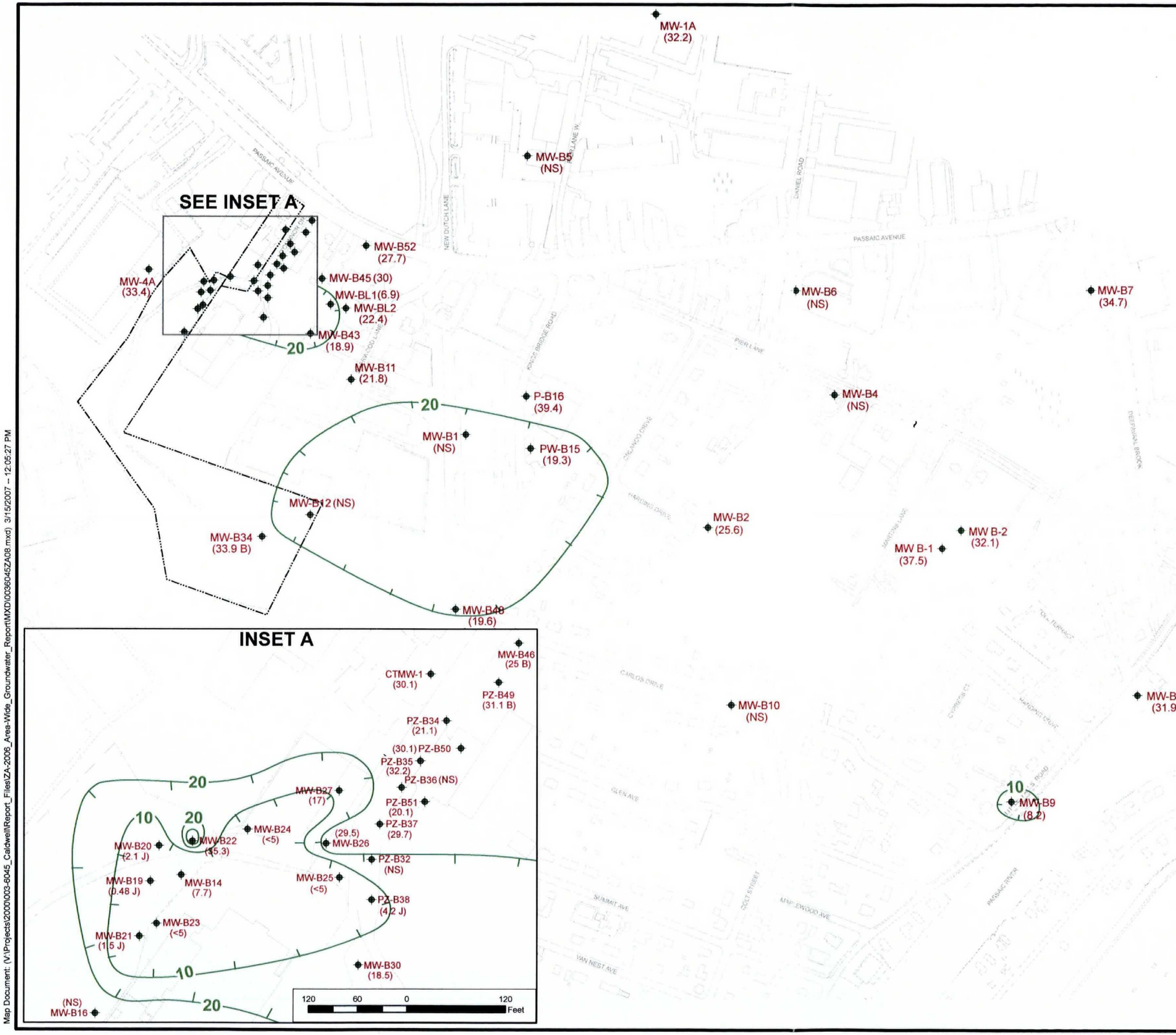
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

A-ZONE VOC SAMPLING RESULTS:
DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | 003-6045 | |
| FILE No. | 0036045ZR023 | |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 23

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZM-2008_Area-Wide_Groundwater_Report\MXD\0036045ZM028.mxd) 5/28/2009 -- 10:14:25 AM




## LEGEND

- MONITORING WELL
- SULFATE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (34.7) MONITORING WELL ID AND SULFATE CONCENTRATION (ug/L)

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

2.) WHERE NO DATA WAS AVAILABLE, OR REPORTING LIMITS WERE HIGH, CONTOURS WERE INTERPRETED FROM HISTORICAL DATA.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

Golder Associates
Mt. Laurel, New Jersey

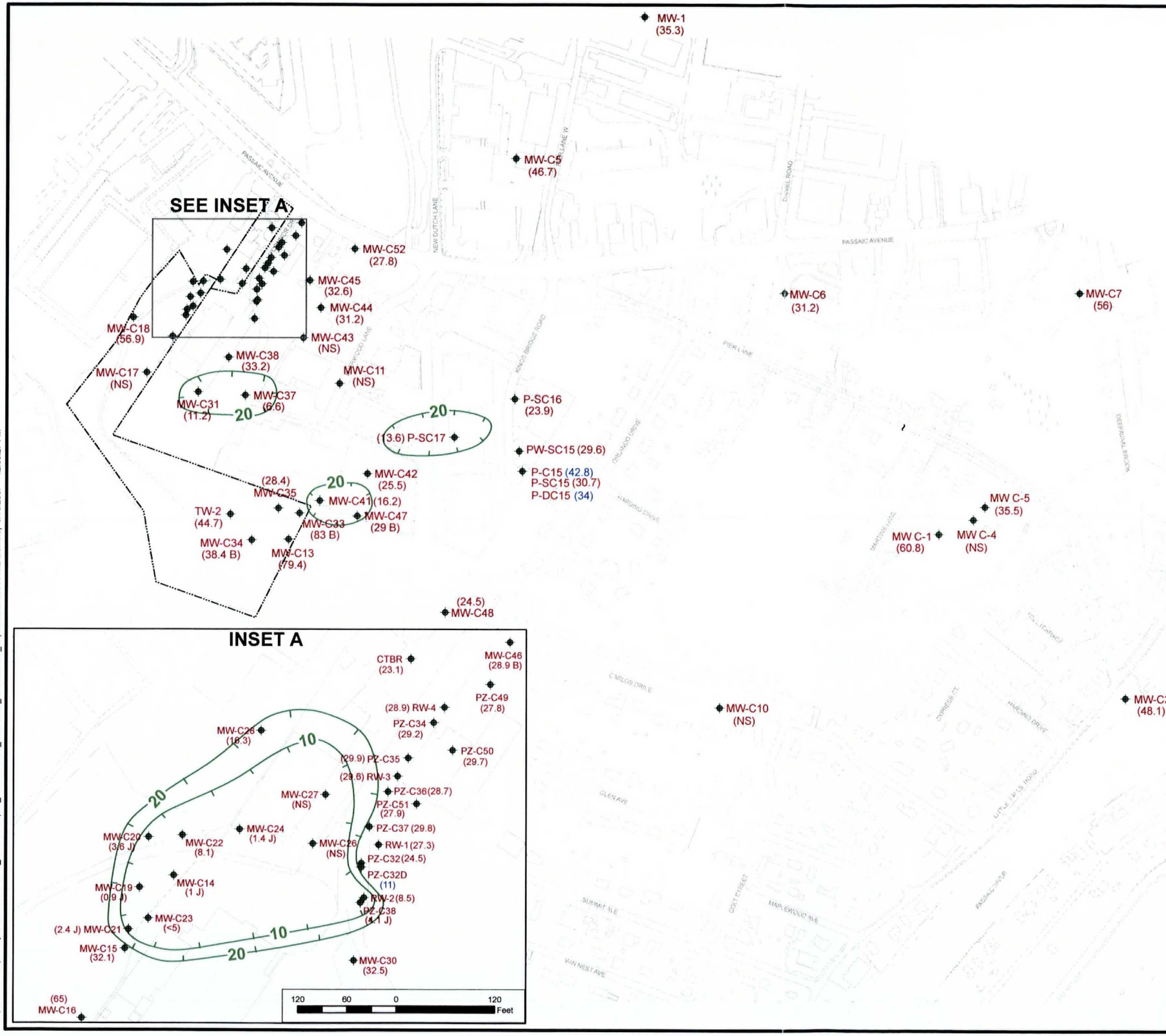
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE SULFATE CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR024 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 24

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2008_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM

## LEGEND

- MONITORING WELL
- SULFATE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM

| | |
|---|---|
| MW-C6 | MONITORING WELL ID AND |
| (31.2) | SULFATE CONCENTRATION (ug/L) |
| (NS) | NOT SAMPLED FOR ANALYTE |
| (34) | SEE NOTE 1 |

## NOTES

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

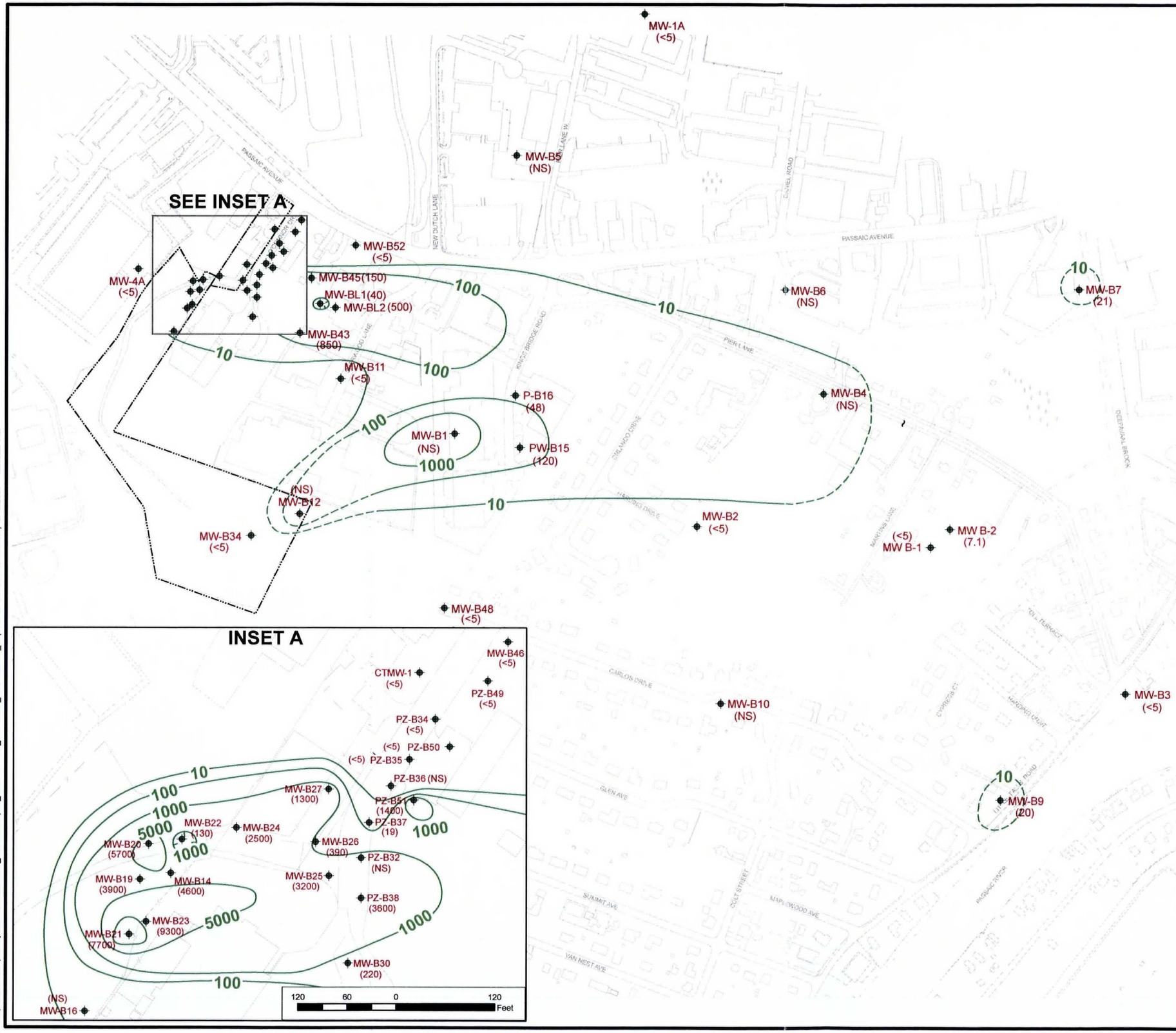
Golder Associates
Mt. Laurel, New Jersey

CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE SULFATE CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR025 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 06/18/10 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 25




N

## LEGEND

- MONITORING WELL
- METHANE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-B6 (30) (NS) — MONITORING WELL ID AND METHANE CONCENTRATION (ug/L); NOT SAMPLED FOR ANALYTE

## NOTE

1.) NS = NOT SAMPLED; MW-B1 IS CONTOURED BASED ON 2008 AREA WIDE SAMPLING (SEE TEXT)

2.) DATA FROM 2008 EVENT WAS USED TO GUIDE CONTOURING.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

Golder Associates
Mt. Laurel, New Jersey

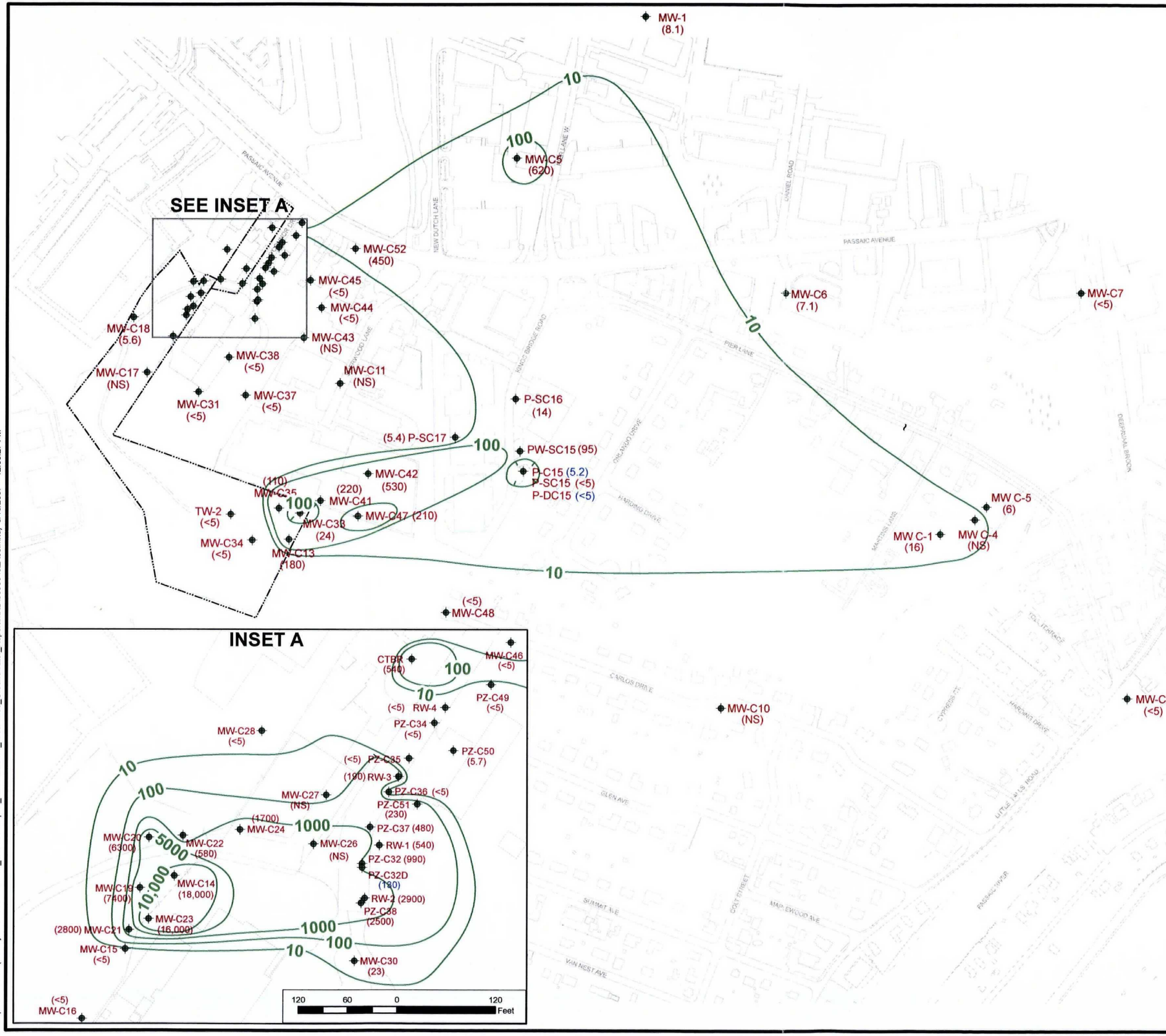
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

B-ZONE METHANE CONCENTRATION (µg/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR026 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 26

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- MONITORING WELL
- METHANE CONTOUR
- BUILDING
- PROPERTY BOUNDARY
- STREAM
- MW-C6 (1200) (130) — MONITORING WELL ID AND METHANE CONCENTRATION (ug/L) SEE NOTE 1

## NOTES

1.) PZ-C32D, P-C15, P-DC15 ARE NOT SCREENED WITHIN THE SHALLOW C-ZONE AND ARE NOT USED IN CONTOURING.

2.) WHERE NO DATA WAS AVAILABLE, OR REPORTING LIMITS WERE HIGH, CONTOURS WERE INTERPRETED FROM HISTORICAL DATA.

## REFERENCES

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28, TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-C32D, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) MONITORING WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) COORDINATE SYSTEM: NAD1927, STATE PLANE FEET, NEW_JERSEY, FIPS_2900

6.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

400 200 0 400 Feet

Golder Associates
Mt. Laurel, New Jersey

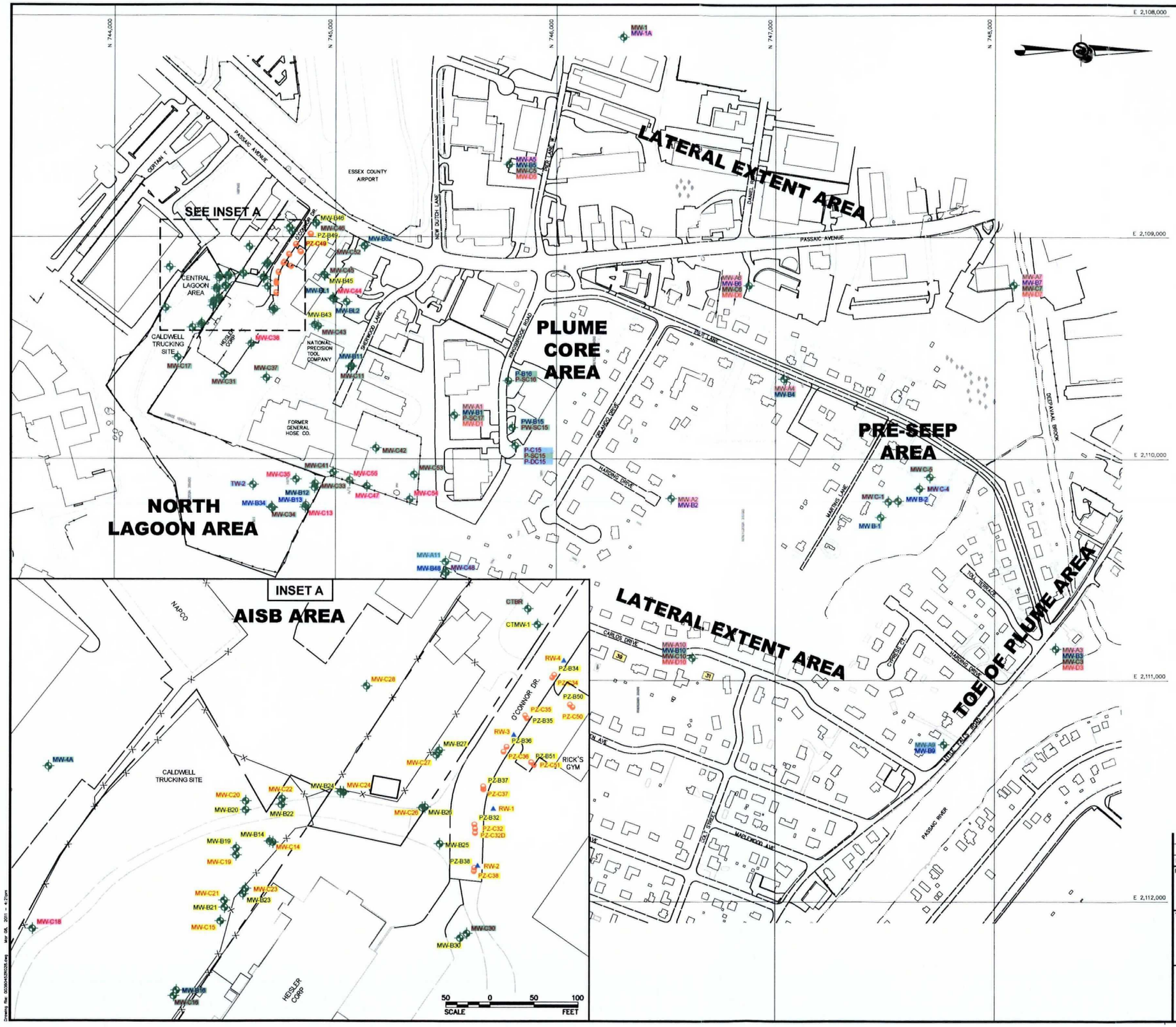
CALDWELL TRUCKING SITE
AREA-WIDE GROUNDWATER EVALUATION
FAIRFIELD, NEW JERSEY

C-ZONE METHANE CONCENTRATION (ug/L)
CONTOURS, NOVEMBER - DECEMBER 2009

| | | |
|---|---|---|
| PROJECT No. | | 003-6045 |
| FILE No. | | 0036045ZR027 |
| REV. 0 | SCALE AS SHOWN | |
| GIS | AM | 03/08/11 |
| CHECK | PLL | 03/08/11 |
| REVIEW | ACK | 03/08/11 |

FIGURE 27

Map Document: (V:\Projects\2000\003-6045_Caldwell\Report_Files\ZA-2006_Area-Wide_Groundwater_Report\MXD\0036045ZA08.mxd) 3/15/2007 -- 12:05:27 PM




## LEGEND

- EXISTING MONITORING WELL
- MW-A1 — A ZONE MONITORING WELL
- MW-B5 — B ZONE MONITORING WELL
- MW-C7 — C ZONE MONITORING WELL
- MW-D10 — D ZONE MONITORING WELL
- PIEZOMETER
- REMEDIATION WELL
- WELLS PART OF THE GROUNDWATER EXTRACTION SYSTEM MONITORING PLAN (P & T)
- NO SAMPLES
- SAMPLES FOR VOCs AND NAP
- SAMPLE FOR VOCs ONLY
- RESIDENTIAL SAMPLING LOCATION

## NOTES

1.) CHANGES TO THE GROUNDWATER EXTRACTION SYSTEM MONITORING PLAN ARE NOT SHOWN.

2.) D-ZONE WELLS TO BE SAMPLED EVERY 3 YEARS.

## REFERENCE

1.) BASE MAP TAKEN FROM DRAWING NO. C001, TITLED "SITE PLAN", PROVIDED BY MCLAREN HART.

2.) MONITORING WELL LOCATIONS MW-B24, MW-B25, MW-B26, MW-B27, MW-C24, MW-C26, MW-C27, MW-C28 AND TW-2 WERE TAKEN FROM DIGITAL CAD FILE NEW-WELLS.DWG, PROVIDED BY VARGO ASSOCIATES.

3.) MONITORING WELL LOCATIONS PZ-B34, PZ-C34, PZ-B36, PZ-C36, PZ-B37, PZ-C37, RW-1, PZ-B32, PZ-C32, PZ-D32, PZ-B34, PZ-B38, PZ-C38, MW-C37 AND MW-C38 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL.DWG, PROVIDED BY VARGO ASSOCIATES.

4.) WELL LOCATIONS RW-2, RW-3, PZ-B35, PZ-C35, RW-4, CTMW-1, CTBR, MW B-46, MW C-46, MW-C45, MW-B45, MW-C44, MW-C42, MW-C41 WERE TAKEN FROM DIGITAL CAD FILE CALDWELL-043007.DWG, PROVIDED BY VARGO ASSOCIATES.

5.) LOCATIONS MW-B48, MW-B52, MW-C47, MW-C48, MW-C52, PZ-B49, PZ-B50, PZ-B51, PZ-C49, PZ-C50, AND PZ-C51 FROM MONITORING WELL CERTIFICATION FORM B – LOCATION CERTIFICATION PREPARED BY VARGO ASSOCIATES, DATED OCTOBER 23, 2008.

6.) WELL LOCATIONS MW A-1, MW A-3, MW B-1, MW B-2, MW B-3, MW B-4, MW C-1, MW C-3, MW C-4, AND MW C-5 WERE TAKEN FROM DIGITAL CAD FILE 97033.DWG, ENTITLED "WETLANDS SURVEY," PROVIDED BY VARGO ASSOCIATES.

7.) LOCATIONS MW-C1, P-B15, P-C15, AND P-DC15 FROM FILES 1995 BASE MODEL.PDF, ENTITLED "SITE PLAN," DATED JANUARY 13, 1995, PROVIDED BY MCLAREN HART.

8.) P-C15, P-DC15 AND P-SC15 CLUSTER RELOCATED PER FIELD OBSERVATION BY GOLDER PERSONNEL.

9.) LOCATIONS MW-C53, MW-C54 AND MWC-55 FROM MONITORING WELL CERTIFICATION FORM B – LOCATION CERTIFICATION PREPARED BY VARGO ASSOCIATES, DATED MARCH 30, 2010.

SCALE 200 0 200 400 FEET

| REV | DATE | DES | REVISION DESCRIPTION | CADD | CHK | RVW |
|---|---|---|---|---|---|---|

PROJECT

CALDWELL TRUCKING SITE
2009 AREA-WIDE GROUNDWATER REPORT
FAIRFIELD, NEW JERSEY

TITLE

# PROPOSED OFF-SITE GROUNDWATER MONITORING PLAN

NJ Authorization #24GA28029100

Golder Associates
Mt. Laurel, New Jersey

| | | | | |
|---|---|---|---|---|
| PROJECT No. | | 003-6045 | FILE No. | 00360452R028 |
| DESIGN | HAL | 03/08/11 | SCALE AS SHOWN | REV. 0 |
| CADD | RG | 03/08/11 | | |
| CHECK | PLL | 03/08/11 | FIGURE 28 | |
| REVIEW | ACK | 03/08/11 | | |

Drawing file: 00360452R028.dwg Mar 08, 2011 - 4:21pm

# APPENDIX A

# DATA USABILITY SUMMARY REPORT

**Appendix A**
**Data Review Summary**
**Caldwell Trucking Company Superfund Site**
**Fairfield, New Jersey**

This report presents the findings of the data quality assessment performed on the analyses of groundwater samples collected November 16th, 2009 through December 09th, 2009 at the Caldwell Trucking Superfund Site (Site) in Fairfield, New Jersey. Select sample locations were re-sampled March 3rd, 2010, and March 24th, 2010. The chemical data for samples collected at the Site were validated to identify quality issues which could affect the use of the data for decision making purposes.

Measurements for pH, specific conductance, temperature, turbidity, oxidation/reduction potential, dissolved oxygen, and ferrous iron (i.e. "field parameters") were made in the field by Golder field personnel (NJDEP Certification #04016) prior to analytical sample collection. One hundred and twenty-one (121) primary groundwater samples were collected during the monitoring event. Groundwater samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) by $S_2C_2$, (NJDEP Certification #18015) and TestAmerica Edison (NJDEP Certification #12028) , natural attenuation parameters[1] (NAPs) by TestAmerica Edison (NJDEP Certification #12028), and light hydrocarbons (methane, ethane, and ethene), by Microseeps (NELAC Certification # PA026). Samples were analyzed following USEPA method guidelines:

- VOCs following USEPA SW846[2] Method 8260B Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (December, 1996);
- Chloride, Nitrate, and Sulfate following USEPA Methods for Chemical Analysis of Water and Wastes[3] (MCAWW) Method 300.0;
- Alkalinity following USEPA MCAWW Method 310.2;
- Sulfide following Standard Method[4] 4500S2-F Sulfide by Iodometry;
- TOC following Standard Method 5310B Total Organic Carbon by High-Temperature Combustion; and,
- Methane, Ethane, Ethene (MEE) following Microseeps Standard Operating Procedure (SOP) AM20GAX.

---

[1] NAPs included chloride, nitrate, sulfate, alkalinity, sulfide, and total organic carbon (TOC).

[2] USEPA, 1996, Test methods for evaluating solid waste, physical/chemical methods (SW-846): 3rd edition, Environmental Protection Agency, National Center for Environmental Publications, Cincinnati, Ohio, accessed at URL http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm

[3] USEPA, 1983, Methods for Chemical Analysis of Water and Wastes, EPA600/4-79-20, Office of Research and Development, Washington, D.C.

[4] Standard Methods for the Examination of Water and Wastewater.

Since some wells contained elevated levels of target VOCs, associated samples required significant dilutions to bring them within the range of the instrument calibration. Therefore, $S_2C_2$ analyzed samples from these monitoring wells twice – once at a high dilution level to quantify concentrated levels of VOCs, and once at a lower dilution level to achieve lower reporting limits (RLs) for compounds not detected at the higher dilution levels. The lower level dilution results were reported, except in cases where a result exceeded the linear range of the instrument calibration as identified by the laboratory. In these instances, the result from the secondary, or higher dilution was reported.

In addition to the primary samples, six (6) field duplicate samples and eight (8) rinsate blanks, were collected at a ratio of 1 per 20 primary samples. Additionally, fifteen (15) trip blanks were shipped along with the samples for Quality Control (QC) purposes. Information regarding the sample point identifications, analytical parameters, QC samples, sampling dates, and contract laboratory sample delivery group (SDG) designations are summarized in Table B1-1.

The data review of the organic fractions was performed in accordance with the *USEPA Region II Standard Operating Procedure (SOP) No. HW-24, Revision 1 – Validation of Organic Data Acquired Using SW-846 Method 8260B* (June 1999), where applicable to SW-846 Method 8260B or AM20GAX. The NAP analytical data review was performed in accordance with the *USEPA Region II Standard Operating Procedure (SOP) No. HW-2, Revision 13 Evaluation of Metals Data for the Contract Laboratory Program (CLP) based on Statement of Work (SOW) – ILM05.3*. Where there was a conflict between the Region II guidelines and the analytic methodology, method-specific criteria and professional judgment were used.

Chemical results for the samples collected at the Site were qualified on the basis of outlying precision or blank contamination, or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data during the data validation process.

**J** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

**U** The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

**R** The sample results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

In general, the data generated as part of the groundwater sampling event met the QC criteria established in the respective USEPA methods and Region II Data Validation SOPs. The following bulleted items

highlight qualifications to specific parameters and/or samples. Table B1-2 summarizes all qualifications applied to the data, with applicable qualifier codes.

- Groundwater VOC results were rejected (**R**) when reported non-detect when sample analysis were outside of holding times.
- Groundwater VOC and nitrate results were qualified estimated (**J**) when reported detect when sample analysis were outside of holding times.
- Groundwater results for methylene chloride were qualified estimated (**J**) when reported detect due to lack of agreement between the primary and field duplicate sample, resulting in a relative percent difference (RPD) above QC limits.
- Groundwater results for 4-methyl-2-pentanone were qualified estimated (**J**) when detected above the instruments upper calibration limits and the diluted result was non-detect.
- Results of samples associated with rinsate blank contamination were qualified as non-detect (**U**) for cis-1,2,-dichloroethene, trichloroethene, chloroform, toluene, methylene chloride, vinyl chloride, and TOC when the sample result was less than the reporting limit (RL).
- Results of samples associated with rinsate blank contamination were qualified as estimated (**J**) for TOC when the sample result was greater than the RL, but less than 10x the blank concentration.
- Results of samples associated with rinsate blank contaminations were rejected (**R**) for TOC when the sample result was between the RL and the method detection limit (MDL), and the blank concentration was greater than the RL.

Based on the data validations and data quality assessment, the analytical data for samples collected at the Site were determined to be acceptable (including estimated data) for their intended use, with the exception of data qualified as rejected. The data were evaluated for general method conformance, gross blank contamination and laboratory precision. The data completeness (i.e. the ratio of the amount of valid data obtained to the amount expected, including estimated (**J/UJ**) data) was 99.2%, which met the project data completeness goal of 85%.

Table A1-1
Sample Analytical Summary
Caldwell Trucking Superfund Site
Fairfield, New Jersey

| Field ID | Matrix | Sample Date | VOC[1] | VOC Dual Analysis[2] | TOC[3] | Sulfide[4] | Total Alkalinity[5] | Chloride, Sulfate, Nitrate[6] | MEE[7] | MS/MSD | Duplicate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 31-CARLOS | GW | 12/8/2009 | 460-8701-1 | | | | | | | | |
| CTBR | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| CTMW-1 | GW | 12/1/2009 | 460-8383-1 | | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | | |
| MW-1 | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-1A | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-4A | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| MW-A1 | GW | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| MW-A10 | GW | 12/8/2009 | 460-8701-1 | | | | | | | | |
| MW-A11 | GW | 12/3/2009 | 460-8471-1 | | | | | | | | |
| MW-A2 | GW | 12/9/2009 | 460-8759-1 | | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | | |
| MW-A3 | GW | 12/8/2009 | 460-8701-1 | | | | | | | | |
| MW-A4 | GW | 12/8/2009 | 460-8701-1 | | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | | |
| MW-A6 | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-A7 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| MW-A9 | GW | 12/9/2009 | 460-8759-1 | | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | X | |
| MWB-1 (SEEP) | GW | 12/3/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-B10 | GW | 12/8/2009 | 460-8701-1 | | | | | | 460-8701-1 | | |
| MW-B11 | GW | 11/20/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| MW-B12 | GW | 11/23/2009 | 460-8245-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | X | |
| MW-B14 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-B16 | GW | 11/30/2009 | 460-8383-1 | | | | | | | | |
| MW-B19 | GW | 11/17/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-B19_FD | GW | 11/17/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | X |
| MW-B2 | GW | 12/9/2009 | 460-8759-1 | | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | | |
| MWB-2 | GW | 3/3/2010 | 460-10880-1 | | 460-10880-1 | 460-10880-1 | 460-10880-1 | 460-10880-1 | 460-10880-1 | | |
| MWB-2 (SEEP) | GW | 12/3/2009 | 460-8471-1 | | | | | | | | |
| MW-B20 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-B21 | GW | 11/18/2009 | 460-8067-1 | A09320/X09320 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| MW-B22 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-B23 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-B24 | GW | 11/17/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-B25 | GW | 11/17/2009 | 460-7989-1 | | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-B26 | GW | 11/17/2009 | 460-7989-1 | | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | X | |
| MW-B27 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| MW-B3 | GW | 12/8/2009 | 460-8701-1 | | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | | |
| MW-B30 | GW | 11/25/2009 | 460-8323-1 | | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | | |
| MW-B34 | GW | 11/23/2009 | 460-8245-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| MW-B4 | GW | 12/8/2009 | 460-8701-1 | | | | | | | | |
| MW-B43 | GW | 11/20/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| MW-B45 | GW | 11/20/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| MW-B46 | GW | 11/24/2009 | 460-8323-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |

Table A1-1
Sample Analytical Summary
Caldwell Trucking Superfund Site
Fairfield, New Jersey

| Field ID | Matrix | Sample Date | VOC[1] | VOC Dual Analysis[2] | TOC[3] | Sulfide[4] | Total Alkalinity[5] | Chloride, Sulfate, Nitrate[6] | MEE[7] | MS/MSD | Duplicate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-B48 | GW | 12/3/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-B5 | GW | 12/8/2009 | 460-8701-1 | | | | | | | | |
| MW-B52 | GW | 12/1/2009 | 460-8383-1 | | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | | |
| MW-B6 | GW | 12/2/2009 | 460-8471-1 | | | | | | | | |
| MW-B7 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| MW-B9 | GW | 12/9/2009 | 460-8759-1 | | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | | |
| MW-B9-FD | GW | 12/9/2009 | 460-8759-1 | | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | | X |
| MW-BL1 | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-BL2 | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MWC-1 (SEEP) | GW | 12/3/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-C10 | GW | 12/8/2009 | 460-8701-1 | | | | | | | | |
| MW-C11 | GW | 11/20/2009 | 460-8134-1 | | | | | | | | |
| MW-C13 | GW | 12/8/2009 | 460-8701-1 | | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | | |
| MW-C14 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C15 | GW | 11/16/2009 | 460-7989-1 | | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C16 | GW | 11/30/2009 | 460-8383-1 | | | | | | | | |
| MW-C17 | GW | 11/20/2009 | 460-8134-1 | | | | | | | | |
| MW-C18 | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-C19 | GW | 11/17/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C20 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C21 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C22 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C23 | GW | 11/16/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C24 | GW | 11/17/2009 | | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | |
| MW-C26 | GW | 11/17/2009 | 460-7989-1 | | | | | | | | |
| MW-C27 | GW | 11/17/2009 | 460-7989-1 | | | | | | | | |
| MW-C28 | GW | 11/20/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| MW-C3 | GW | 12/8/2009 | 460-8701-1 | | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | | |
| MW-C30 | GW | 11/25/2009 | 460-8323-1 | | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | | |
| MW-C31 | GW | 12/1/2009 | 460-8383-1 | | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | X | |
| MW-C33 | GW | 11/23/2009 | 460-8245-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| MW-C34 | GW | 11/23/2009 | 460-8245-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| MW-C34-FD | GW | 11/23/2009 | 460-8245-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | X |
| MW-C35 | GW | 11/25/2009 | 460-8323-1 | | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | | |
| MW-C35_FD | GW | 11/25/2009 | 460-8323-1 | | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | | X |
| MW-C37 | GW | 12/1/2009 | 460-8383-1 | | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | | |
| MW-C37_FD | GW | 12/1/2009 | 460-8383-1 | | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | | X |
| MW-C38 | GW | 12/1/2009 | 460-8383-1 | | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | | |
| MWC-4 (SEEP) | GW | 12/3/2009 | 460-8471-1 | | | | | | | | |
| MW-C41 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| MW-C42 | GW | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |

Table A1-1
Sample Analytical Summary
Caldwell Trucking Superfund Site
Fairfield, New Jersey

| Field ID | Matrix | Sample Date | VOC[1] | VOC Dual Analysis[2] | TOC[3] | Sulfide[4] | Total Alkalinity[5] | Chloride, Sulfate, Nitrate[6] | MEE[7] | MS/MSD | Duplicate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-C42-FD | GW | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | X |
| MW-C43 | GW | 11/20/2009 | 460-8134-1 | | | | | | | | |
| MW-C44 | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-C45 | GW | 11/20/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| MW-C46 | GW | 11/24/2009 | 460-8323-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| MW-C47 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| MW-C47 | GW | 3/24/2010 | 460-11548-1 | | 460-11548-1 | 460-11548-1 | 460-11548-1 | 460-11548-1 | 460-11548-1 | | |
| MW-C48 | GW | 12/3/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-C5 | GW | 12/8/2009 | 460-8701-1 | | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | | |
| MWC-5 (SEEP) | GW | 12/3/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-C52 | GW | 12/1/2009 | 460-8383-1 | | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | 460-8383-1 | | |
| MW-C6 | GW | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| MW-C7 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| P-B16 | GW | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| P-C15 | GW | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| P-DC15 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| P-SC15 | GW | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| P-SC16 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| P-SC17 | GW | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| PW-B15 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| PW-SC15 | GW | 12/4/2009 | 460-8578-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| PZ-B32 | GW | 11/19/2009 | 460-8134-1 | | | | | | | | |
| PZ-B34 | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| PZ-B35 | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| PZ-B36 | GW | 11/19/2009 | 460-8134-1 | | | | | | | | |
| PZ-B37 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| PZ-B38 | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| PZ-B49 | GW | 11/24/2009 | 460-8323-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| PZ-B50 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| PZ-B51 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| PZ-C32 | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| PZ-C32D | GW | 12/8/2009 | 460-8701-1 | | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | 460-8701-1 | | |
| PZ-C34 | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| PZ-C35 | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| PZ-C36 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| PZ-C37 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| PZ-C38 | GW | 11/19/2009 | 460-8134-1 | | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | 460-8134-1 | | |
| PZ-C49 | GW | 11/24/2009 | 460-8323-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| PZ-C50 | GW | 11/24/2009 | 460-8323-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| PZ-C51 | GW | 11/24/2009 | 460-8323-1 | | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | 460-8245-1 | | |
| RW-1 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |

Table A1-1
Sample Analytical Summary
Caldwell Trucking Superfund Site
Fairfield, New Jersey

| Field ID | Matrix | Sample Date | VOC[1] | VOC Dual Analysis[2] | TOC[3] | Sulfide[4] | Total Alkalinity[5] | Chloride, Sulfate, Nitrate[6] | MEE[7] | MS/MSD | Duplicate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-2 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| RW-3 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| RW-4 | GW | 11/18/2009 | 460-8067-1 | | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | 460-8067-1 | | |
| TW-2 | GW | 11/25/2009 | 460-8323-1 | | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | 460-8323-1 | X | |
| RBGW030310 | RB | 3/3/2010 | 460-10880-1 | | 460-10880-1 | 460-10880-1 | 460-10880-1 | 460-10880-1 | 460-10880-1 | | |
| RBGW032410 | RB | 3/24/2010 | 460-11548-1 | | 460-11548-1 | 460-11548-1 | 460-11548-1 | 460-11548-1 | 460-11548-1 | | |
| RBGW-111709 | RB | 11/17/2009 | 460-7989-1 | A09320/X09320 | 460-7989-1 | 460-7989-1 | 460-7989-1 | 460-7989-1 | | | |
| RBGW-113009 | RB | 11/30/2009 | 460-8383-1 | | | | | | | | |
| RBGW-120209 | RB | 12/2/2009 | 460-8471-1 | | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | 460-8471-1 | | |
| RBGW-120709 | RB | 12/7/2009 | 460-8701-1 | | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | 460-8578-1 | | |
| RBGW-120809 | RB | 12/8/2009 | 460-8701-1 | | | | | | | | |
| RBGW-120909 | RB | 12/9/2009 | 460-8759-1 | | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | 460-8759-1 | | |
| TBGW_120309 | TB | 12/3/2009 | 460-8471-1 | | | | | | | | |
| TBGW_120409 | TB | 12/4/2009 | 460-8578-1 | | | | | | | | |
| TBGW030310 | TB | 3/3/2010 | 460-10880-1 | | | | | | | | |
| TBGW032410 | TB | 3/24/2010 | 460-11548-1 | | | | | | | | |
| TBGW-111609 | TB | 11/16/2009 | | A09320/X09320 | | | | | | | |
| TBGW-111709 | TB | 11/17/2009 | 460-7989-1 | | | | | | | | |
| TBGW-111809 | TB | 11/18/2009 | 460-8067-1 | | | | | | | | |
| TBGW-111909 | TB | 11/19/2009 | 460-8134-1 | | | | | | | | |
| TBGW-112009 | TB | 11/20/2009 | 460-8134-1 | | | | | | | | |
| TBGW-112309 | TB | 11/23/2009 | 460-8245-1 | | | | | | | | |
| TBGW-112409 | TB | 11/24/2009 | 460-8323-1 | | | | | | | | |
| TBGW-113009 | TB | 11/30/2009 | 460-8383-1 | | | | | | | | |
| TBGW-120209 | TB | 12/2/2009 | 460-8471-1 | | | | | | | | |
| TBGW-120709 | TB | 12/7/2009 | 460-8701-1 | | | | | | | | |
| TBGW-120909 | TB | 12/9/2009 | 460-8759-1 | | | | | | | | |

**Notes:**

[1] VOCs by USEPA SW846 Method 8260B.
[2] VOC Dual Analysis by SW846 8260B.
[3] TOC by Standard Method 5310B.
[4] Sulfide by Standard Method 4500.
[5] Total Alkalinity by USEPA MCAWW Method 310.2.
[6] Chloride, Sulfate, and Nitrate by USEPA MCAWW Method 300.0.
[7] MEE by Microseeps Standard Operating Procedure (SOP) AM20GAX.
If an analysis was performed, the lab SDG is at the intersection of the method and field ID.

**Abbreviations:**

GW - Groundwater
Lab SDG - Lab Sample Delivery Group
MCAWW - Methods for Chemical Analysis of Water and Waste
MEE - Methane, Ethane, Ethene
RB - Rinsate Blank
TB - Trip Blank
TOC - Total Organic Carbon
VOCs - Volatile Organic Compounds

Table A1-2
Data Qualifications
Caldwell Trucking Company Superfund Site
Fairfield, New Jersey

| Lab SDG | Field ID | Matrix | Analysis | Analyte | New RL | New Result | QUAL | Comments |
|---|---|---|---|---|---|---|---|---|
| A09320_X09320 | MW-C20(1x dilution) | GW | VOCs | All detected compounds | -- | -- | J | Analyzed outside of hold time. |
| A09320_X09320 | MW-C20(1x dilution) | GW | VOCs | All non detected compounds | -- | -- | R | Analyzed outside of hold time. |
| A09320_X09320 | MW-B23 | GW | VOCs | 4-methyl-2-pentanone | -- | -- | J | Detected above instruments calibration range. |
| A09320_X09320 | MW-B23 | GW | VOCs | Cis-1,2-Dichloroethene | 4.5 | -- | U | Rinsate blank contamination. |
| A09320_X09320 | MW-B19 | GW | VOCs | Methylene Chloride | -- | -- | J | Field duplicate RPD above QC limits. |
| A09320_X09320 | MW-B19_FD | GW | VOCs | Methylene Chloride | -- | -- | J | Field duplicate RPD above QC limits. |
| 460-8759-1 | MW-B2 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8759-1 | MW-A9 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8701-1 | MW-B10 | GW | VOCs | Trichloroethene | -- | 1 | U | Rinsate blank contamination. |
| 460-8701-1 | MW-A10 | GW | VOCs | Trichloroethene | -- | 1 | U | Rinsate blank contamination. |
| 460-8701-1 | MW-A1 | GW | VOCs | Trichloroethene | -- | 1 | U | Rinsate blank contamination. |
| 460-8701-1 | MW-A3 | GW | VOCs | Trichloroethene | 1.8 | -- | U | Rinsate blank contamination. |
| 460-8701-1 | MW-C3 | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8701-1 | MW-B3 | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8701-1 | MW-A4 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8701-1 | PZ-C32D | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8701-1 | MW-C13 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8701-1 | MW-C5 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8578-1 | MW-4A | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8578-1 | P-DC15 | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8578-1 | P-SC16 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-BL1 | GW | VOCs | Toluene | -- | 1 | U | Rinsate blank contamination. |
| 460-8471-1 | MW-BL1 | GW | VOCs | Chloroform | -- | 1 | U | Rinsate blank contamination. |
| 460-8471-1 | MW-A6 | GW | VOCs | Chloroform | -- | 1 | U | Rinsate blank contamination. |
| 460-8471-1 | MWB-2 (SEEP) | GW | VOCs | Trichloroethene | -- | 1 | U | Rinsate blank contamination. |
| 460-8471-1 | MWB-1 (Seep) | GW | NAPs | Nitrate | -- | -- | J | Analyzed outside of hold time. |
| 460-8471-1 | MW-1 | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8471-1 | MWC-1 (Seep) | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8471-1 | MW-C6 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-B48 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-C48 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-1A | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MWC-5 (SEEP) | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MWB-1 (SEEP) | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-A6 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-C1 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-BL2 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8471-1 | MW-C44 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |

Table A1-2
Data Qualifications
Caldwell Trucking Company Superfund Site
Fairfield, New Jersey

| Lab SDG | Field ID | Matrix | Analysis | Analyte | New RL | New Result | QUAL | Comments |
|---|---|---|---|---|---|---|---|---|
| 460-8471-1 | MW-BL1 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8383-1 | MW-B16 | GW | VOCs | Toluene | -- | 2 | U | Rinsate blank contamination. |
| 460-8383-1 | MW-C38 | GW | VOCs | Methylene Chloride | -- | 1 | U | Rinsate blank contamination. |
| 460-8383-1 | MW-C52 | GW | VOCs | Methylene Chloride | -- | 5 | U | Rinsate blank contamination. |
| 460-8383-1 | MW-C52 | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8383-1 | CTMW-1 | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8383-1 | MW-B52 | GW | NAPs | TOC | -- | 1 | U | Rinsate blank contamination. |
| 460-8383-1 | MW-C37_FD | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8383-1 | MW-C37 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8383-1 | MW-C38 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8383-1 | MW-C31 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-8383-1 | MW-C16 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |
| 460-79889 | MW-C27 | GW | VOCs | cis-1,2-Dichloroethene | 3.2 | | U | Rinsate blank contamination. |
| 460-79889 | MW-C27 | GW | VOCs | Vinyl Chloride | 2 | | U | Rinsate blank contamination. |
| 460-79889 | MW-B26 | GW | NAPs | TOC | -- | -- | J | Rinsate blank contamination. |
| 460-79889 | MW-C15 | GW | NAPs | TOC | -- | -- | J | Rinsate blank contamination. |
| 460-79889 | MW-B25 | GW | NAPs | TOC | -- | -- | J | Rinsate blank contamination. |
| 460-79889 | MW-B22 | GW | NAPs | TOC | -- | -- | J | Rinsate blank contamination. |
| 460-100880-1 | MWB-2 | GW | NAPs | TOC | -- | -- | R | Rinsate blank contamination. |

**Notes:**
GW = Groundwater
NAPs = Natural Attenuation Parameters
RL = Reporting limit
RPD - Relative Percent Difference
SDG = Sample Delivery Group
TOC = Total Organic Carbon
VOCs - Volatile Organic Compounds

**Qualifiers:**
J = Esimated detect
R - Rejected result
U = Not detected above reporting limit.

# APPENDIX B

# VOC CONCENTRATION-TIME GRAPHS

Figure B1-1
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/1/1985 | **3600** | ND | ND | ND | ND | **2000** | | ND | ND | **1000** | | **19000** | ND | 25600 |
| 9/1/1985 | 6800 | ND | **760** | 800 | ND | 2800 | | ND | **280** | 1900 | | 16000 | ND | 29340 |
| 6/8/1988 | 250 | ND | 60 | 28 | ND | 120 | | ND | ND | 120 | | 2000 | ND | 2578 |
| 3/30/1994 | 750 | ND | ND | 280 | ND | 790 | | 22 | 19 | 890 | | 13000 | ND | 15751 |
| 10/1/1996 | 340 | ND | **15** | 150 | ND | 350 | | **15** | ND | 460 | | 6400 | ND | 7731 |
| 11/1/1998 | **280** | ND | ND | **94** | ND | **300** | ND | ND | ND | **430** | | 5300 | ND | 6404 |
| 12/17/2001 | **690** | ND | ND | ND | ND | **330** | ND | **210** | ND | **810** | ND | 9200 | ND | 11240 |
| 9/17/2003 | 630 | ND | **34** | 210 | ND | 360 | ND | 150 | **12** | 1100 | ND | 10000 | ND | 12496 |
| 6/7/2005 | 1100 | ND | ND | ND | ND | **370** | ND | 1200 | ND | 1400 | ND | 15000 | ND | 19070 |
| 12/13/2006 | 630 | ND | ND | ND | ND | 370 | | 340 | ND | 1200 | ND | 10000 | ND | 12540 |
| 10/22/2008 | 480 | ND | ND | 360 | ND | 370 | ND | 3400 | ND | 1200 | ND | 7700 | ND | 13510 |
| 6/22/2009 | 520 | ND | 45 | 190 | ND | 410 | ND | 3900 | ND | 890 | **16** | 7400 | ND | 13371 |
| 11/19/2009 | 470 | ND | **35** | 230 | ND | 300 | ND | 2200 | **11** | 890 | ND | 6100 | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

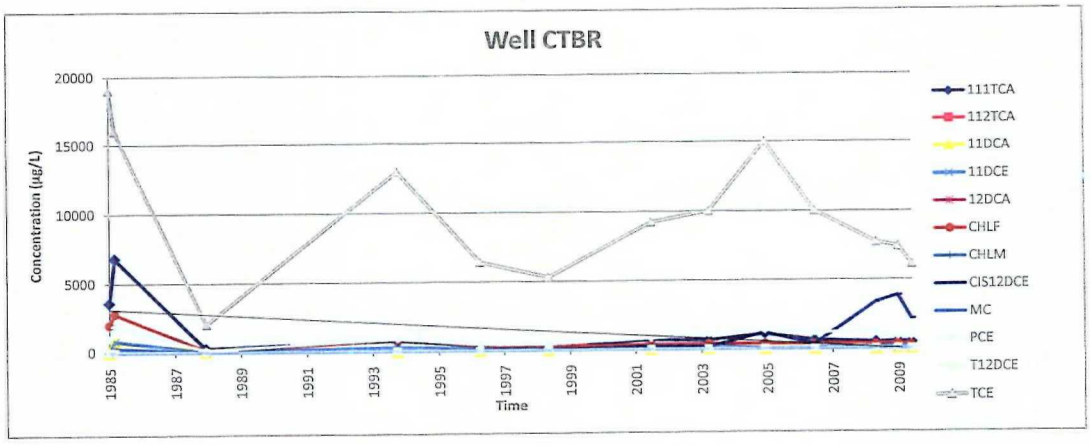







Figure B1-2
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/1/1985 | 44 | ND | ND | ND | ND | ND | | ND | ND | 78 | | 280 | ND | 402 |
| 9/1/1985 | ND | ND | ND | ND | ND | 17 | | ND | ND | 24 | | 180 | ND | 221 |
| 6/1/1988 | 30 | ND | ND | ND | ND | 10 | | ND | ND | 11 | | 100 | ND | 151 |
| 3/1/1994 | 18 | ND | ND | ND | ND | **5.4** | | 35 | ND | **8.7** | | 78 | ND | 145.1 |
| 10/1/1996 | 32 | ND | 10 | ND | ND | 12 | | 72 | ND | 10 | | 110 | ND | 246 |
| 11/5/1998 | 27 | ND | **6** | ND | ND | **7** | ND | **68** | ND | 28 | ND | 160 | ND | 296 |
| 9/17/2003 | **3.4** | ND | ND | ND | ND | ND | ND | 5.9 | ND | 6 | ND | **43** | ND | 58.3 |
| 12/13/2006 | 7.5 | ND | 1.7 | ND | ND | 1.5 | | 5.9 | ND | 8.9 | ND | 71 | ND | 96.6 |
| 10/22/2008 | 8.2 | ND | 1.7 | 2.4 | ND | 1.6 | ND | 5.8 | ND | 13 | ND | 99 | ND | 131.7 |
| 12/1/2009 | 7.4 | ND | 1.4 | 1 | ND | 1.1 | ND | 4.1 | ND | 12 | ND | 77 | ND | 104 |

Values in **bold** have a "J" qualifier
ND = Not Detected

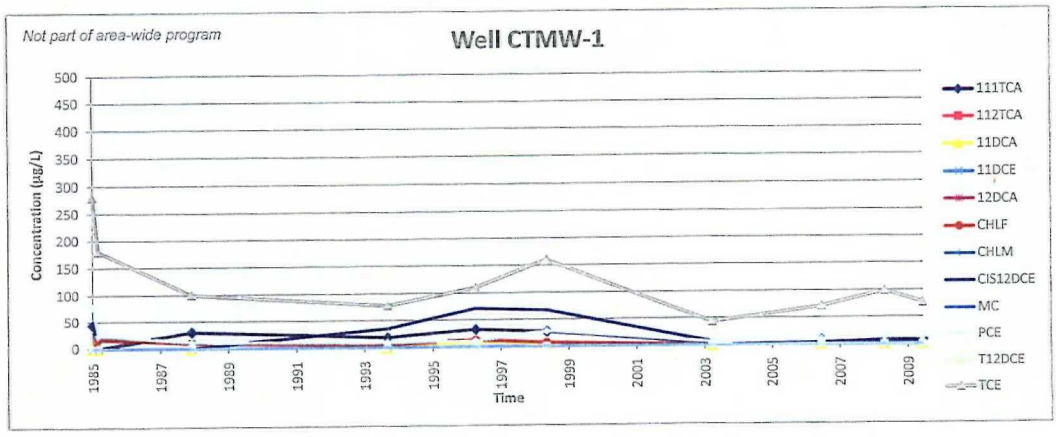


Figure B1-3
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/15/1988 | 3 | ND | 2 | ND | ND | 1 | ND | ND | ND | ND | | **14** | ND | 20 |
| 3/18/1994 | **5.1** | ND | ND | ND | ND | **9.1** | | **5.9** | ND | ND | | 54 | ND | 74.1 |
| 10/1/1996 | 40 | | 12 | 30 | | | | 48 | | **9.2** | | 540 | ND | 679.2 |
| 11/1/1998 | **34** | ND | **11** | **31** | ND | **39** | ND | **50** | ND | **12** | | 580 | ND | 757 |
| 12/12/2001 | **20** | ND | ND | **32** | ND | **26** | ND | **34** | ND | ND | ND | 510 | ND | 622 |
| 6/7/2005 | **18** | ND | ND | **33** | ND | **22** | ND | **42** | ND | **18** | ND | 580 | ND | 713 |
| 12/19/2006 | 15 | ND | 20 | 39 | ND | 24 | | 43 | ND | 13 | ND | 580 | ND | 734 |
| 10/29/2008 | 11 | ND | 9.8 | 31 | ND | 21 | ND | 39 | ND | 12 | ND | 550 | ND | 673.8 |
| 12/2/2009 | 6.7 | ND | 8.1 | 28 | ND | 15 | ND | 28 | ND | 6.9 | ND | 450 | ND | 542.7 |

Values in **bold** have a "J" qualifier
ND = Not Detected

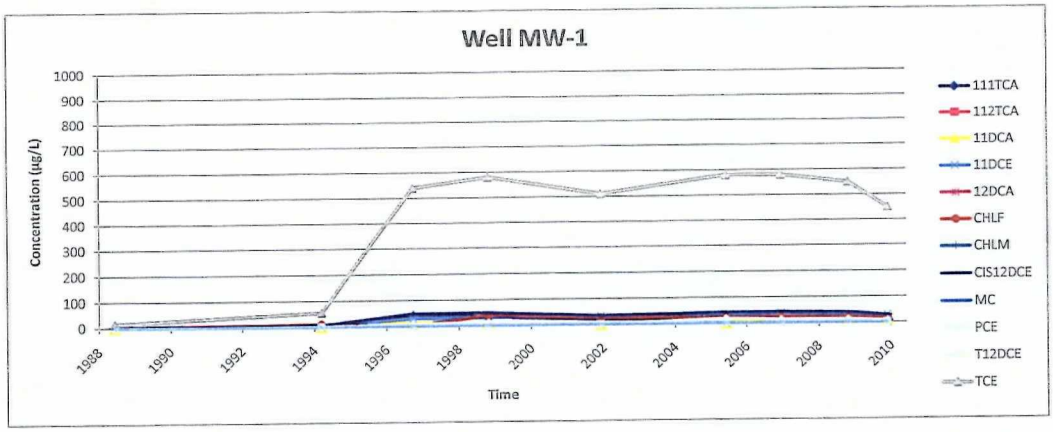







Figure B1-4
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/15/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 3/18/1994 | **5.1** | ND | ND | ND | ND | ND | | ND | ND | ND | | **1.5** | ND | 6.6 |
| 12/12/2001 | 5.1 | ND | **2.7** | **2.8** | ND | **1.2** | ND | **3.2** | ND | ND | ND | 4 | ND | 19 |
| 6/7/2005 | 9.3 | ND | **1.7** | 5.8 | ND | **1.9** | ND | 8.3 | ND | ND | ND | 28 | ND | 55 |
| 12/19/2006 | 11 | ND | 4.8 | 6.1 | ND | 2.3 | | 11 | ND | ND | ND | 38 | ND | 73.2 |
| 10/29/2008 | 10 | ND | 4 | 5.6 | ND | 1.9 | ND | 9.5 | ND | ND | ND | 29 | ND | 60 |
| 12/2/2009 | 8.9 | ND | 4.7 | 6.7 | ND | 2 | ND | 10 | ND | ND | ND | 34 | ND | 66.3 |

Values in **bold** have a "J" qualifier
ND = Not Detected

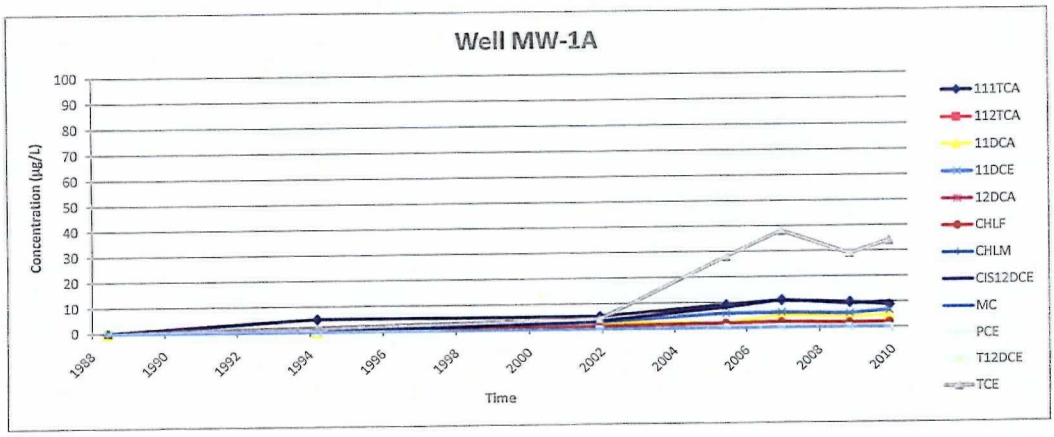


Figure B1-5
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/10/1988 | 62 | ND | 5 | 8 | ND | **11** | ND | ND | ND | 22 | | 150 | ND | 258 |
| 4/7/1994 | 17 | ND | ND | ND | ND | ND | | **3.3** | ND | 19 | | 98 | ND | 137.3 |
| 10/1/1996 | 11 | ND | **2.9** | ND | ND | **2** | | 25 | ND | 20 | | 98 | ND | 158.9 |
| 11/1/1998 | 20 | ND | **2** | ND | ND | **2** | ND | 3 | ND | 16 | | 160 | ND | 203 |
| 12/19/2001 | **13** | ND | ND | ND | ND | ND | ND | ND | ND | **12** | ND | 120 | ND | 145 |
| 6/15/2005 | 11 | ND | **1.7** | **2.1** | ND | **1.2** | ND | **2.9** | ND | 15 | ND | 110 | ND | 143.9 |
| 12/19/2006 | **12** | ND | **3.5** | **1.4** | ND | **1.3** | | 4 | ND | 16 | ND | **120** | ND | 158.2 |
| 11/4/2008 | 12 | ND | 2.2 | 1.8 | ND | 1.1 | ND | 4.4 | ND | 14 | ND | 110 | ND | 145.5 |
| 12/4/2009 | 10 | ND | 2.5 | 1.2 | ND | 1.1 | ND | 3.8 | ND | 11 | ND | 120 | ND | 149.6 |

Values in **bold** have a "J" qualifier
ND = Not Detected

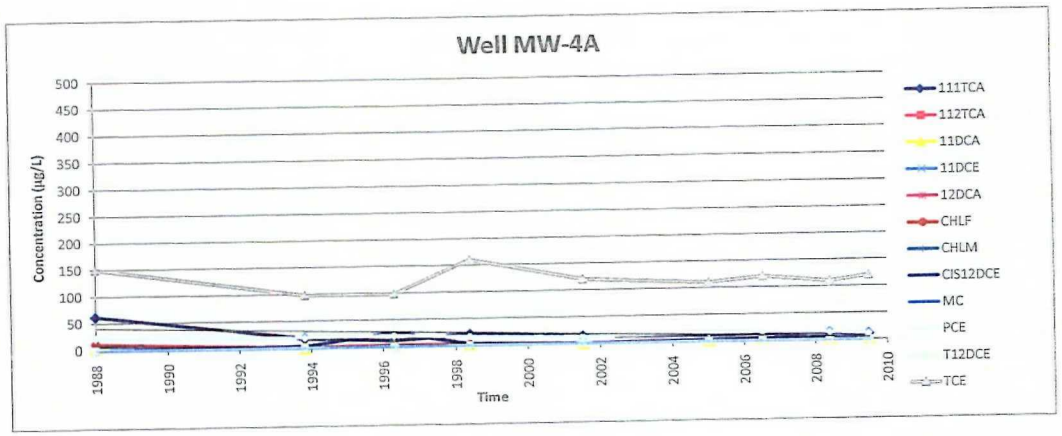







Figure B1-6
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/1/1988 | 230 | ND | 26 | 15 | 2.1 | 180 | | 520 | ND | 31 | | 1300 | ND | 2304.1 |
| 5/1/1988 | 1.2 | ND | 18 | 4.9 | ND | ND | | 85 | ND | ND | | 33 | 11 | 153.1 |
| 6/1/1988 | ND | ND | 20 | 5 | ND | ND | | ND | ND | ND | | 32 | 13 | 70 |
| 3/17/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | |
| 12/18/2006 | ND | ND | ND | ND | ND | ND | | 2.6 | ND | ND | ND | 12 | ND | 14.6 |
| 10/22/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/7/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

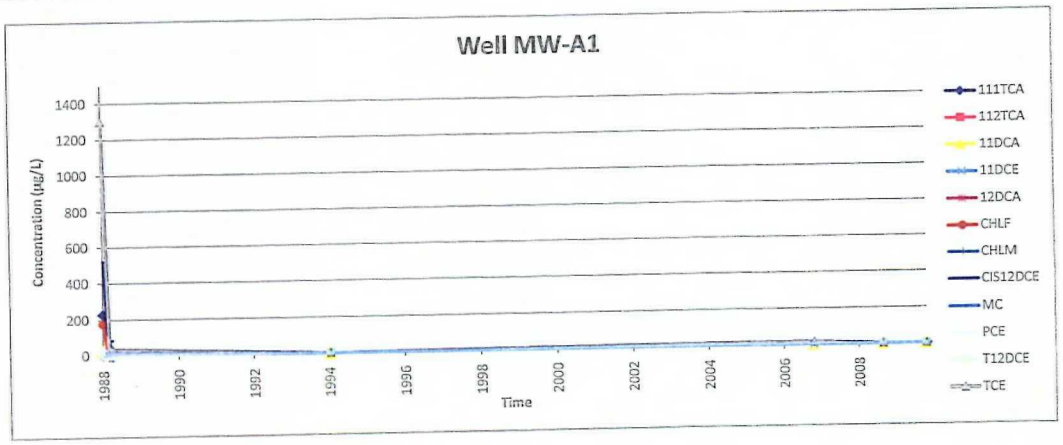


Figure B1-7
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/9/1994 | ND | ND | ND | ND | ND | ND | ND | 30 | ND | ND | | ND | ND | 30 |
| 12/20/2006 | ND | ND | 1.5 | ND | ND | ND | | 18 | ND | ND | ND | 4.7 | 1.4 | 25.6 |
| 10/22/2008 | ND | ND | ND | ND | ND | ND | ND | 22 | ND | ND | ND | 6.1 | ND | 28.1 |
| 12/9/2009 | ND | ND | ND | ND | ND | ND | ND | ND | **0.29** | ND | ND | **0.5** | ND | 0.79 |

Values in **bold** have a "J" qualifier
ND = Not Detected

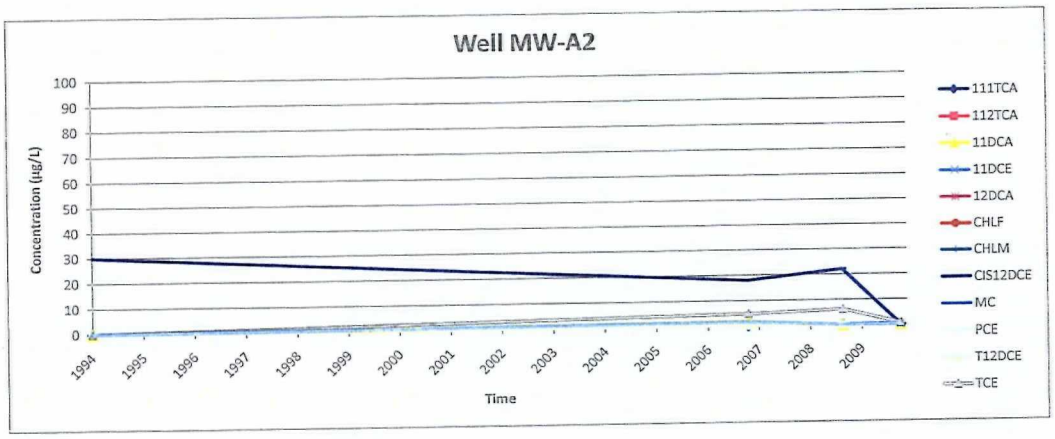







Figure B1-8
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/22/1988 | 1.1 | ND | 1.7 | 0.16 | ND | 0.27 | ND | 3.8 | ND | 0.08 | | 5 | 0.18 | 12.29 |
| 5/16/1988 | 1 | ND | 1.7 | ND | 0.04 | ND | ND | 1.4 | ND | 0.05 | | 0.69 | ND | 4.88 |
| 6/6/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 3/14/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | |
| 10/1/1996 | ND | | ND | ND | | | | ND | | ND | | ND | ND | |
| 12/18/2001 | ND | ND | ND | ND | ND | ND | ND | **2.7** | ND | ND | ND | **1.2** | ND | 3.9 |
| 6/13/2005 | ND | ND | ND | ND | ND | ND | ND | **1.2** | ND | ND | ND | ND | ND | 1.2 |
| 12/15/2006 | ND | ND | 1.6 | ND | ND | ND | | 5.2 | ND | ND | ND | 1.9 | 2.5 | 11.2 |
| 10/24/2008 | ND | ND | 1.3 | ND | ND | ND | ND | 4.8 | ND | 1.1 | ND | 1.5 | 4.3 | 13 |
| 12/8/2009 | ND | ND | **0.99** | ND | ND | ND | ND | 2.8 | ND | ND | ND | ND | 1.1 | 4.89 |

Values in **bold** have a "J" qualifier
ND = Not Detected

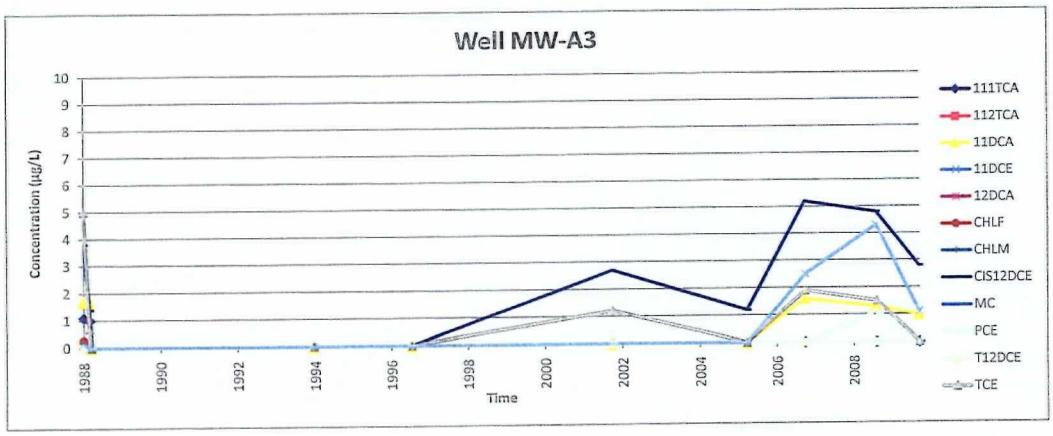


Figure B1-9
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/21/1988 | 1200 | ND | 78 | 160 | 4.2 | 1400 | ND | 660 | ND | 210 | | 4600 | ND | 8312.2 |
| 5/12/1988 | 870 | ND | 48 | 86 | ND | ND | ND | 410 | ND | ND | | 3600 | ND | 5014 |
| 6/7/1988 | 710 | ND | ND | 180 | ND | 1400 | | ND | ND | 140 | | 4300 | ND | 6730 |
| 3/1/1994 | 870 | ND | ND | 160 | ND | 970 | | 1800 | ND | 220 | | 5000 | ND | 9020 |
| 10/1/1996 | 1000 | ND | **160** | **230** | ND | **580** | | 3100 | ND | **290** | | 6100 | ND | 11460 |
| 11/1/1998 | 1400 | ND | **200** | **240** | ND | **490** | ND | 4760 | ND | 380 | | 6300 | ND | 13770 |
| 12/13/2001 | 840 | ND | **160** | **210** | ND | **110** | ND | 3900 | ND | **220** | ND | 4000 | ND | 9440 |
| 6/8/2005 | 900 | ND | **200** | **270** | ND | ND | ND | 5200 | ND | **330** | ND | 4800 | ND | 11700 |
| 12/13/2006 | 790 | ND | 180 | 240 | ND | ND | | 4900 | ND | 380 | ND | 4600 | ND | 11090 |
| 10/27/2008 | 760 | ND | 230 | 320 | ND | 110 | ND | 5200 | ND | 440 | ND | 5100 | 54 | 12214 |
| 12/8/2009 | 550 | ND | 150 | 180 | ND | 84 | ND | 3400 | ND | 320 | **8.6** | 3400 | 33 | 8125.6 |

Values in **bold** have a "J" qualifier
ND = Not Detected

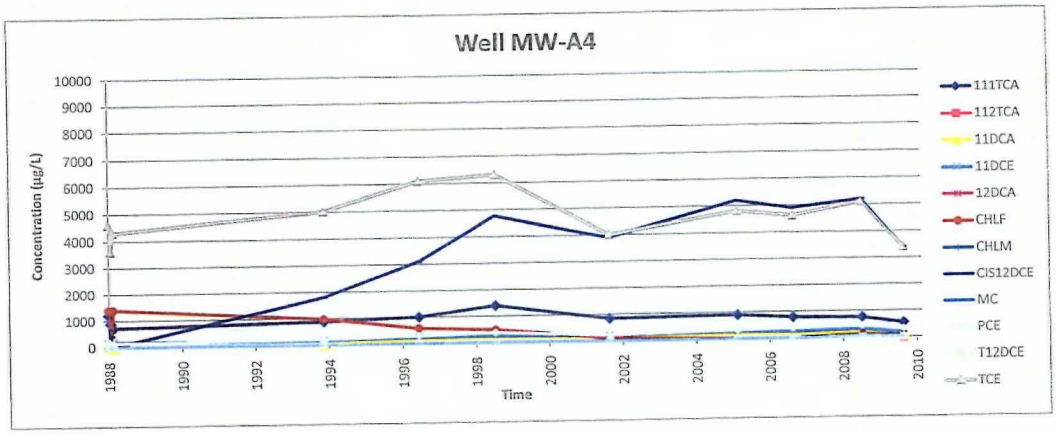







Figure B1-10
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/1/1988 | ND | ND | 1.3 | ND | ND | ND | | 0.95 | ND | 12 | | ND | 0.18 | 14.43 |
| 5/1/1988 | ND | ND | 1.5 | ND | ND | 0.06 | | 0.87 | ND | 11 | | ND | 0.19 | 13.62 |
| 6/1/1988 | ND | ND | 2 | ND | ND | ND | | ND | ND | 21 | | ND | ND | 23 |
| 3/1/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | **4.5** | | **0.3** | ND | 4.8 |
| 10/1/1996 | ND | ND | **2** | ND | ND | ND | | **1.1** | ND | 3.6 | | ND | ND | 6.7 |
| 11/1/1998 | **2** | | **3** | ND | | ND | | | | **3** | | **2** | ND | 10 |
| 12/20/2006 | 2.6 | ND | 3.5 | 1.3 | ND | ND | | 8.6 | ND | 1.1 | ND | 2.2 | ND | 19.3 |
| 10/29/2008 | 17 | ND | 9.8 | 6.9 | ND | ND | ND | 73 | ND | 1.8 | ND | 13 | ND | 121.5 |
| 12/2/2009 | 6.4 | ND | 5.4 | 4.5 | ND | ND | ND | 45 | ND | 1.1 | ND | 5.2 | **0.54** | 68.14 |

Values in **bold** have a "J" qualifier
ND = Not Detected

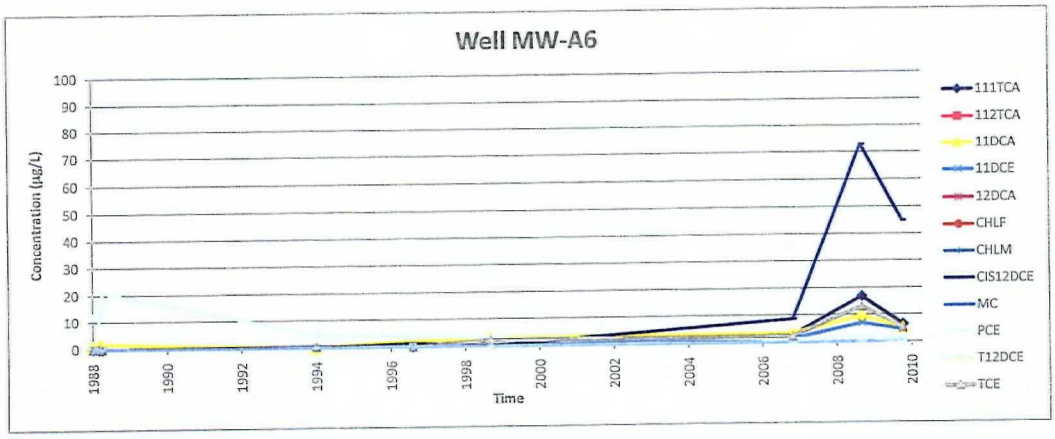


Figure B1-11
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/20/1988 | 0.03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | 0.03 |
| 5/10/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.05 | | ND | ND | 0.05 |
| 6/1/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 3/22/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | |
| 12/18/2001 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 6/8/2005 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | **1.2** | ND | 1.2 |
| 2/6/2007 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | ND | ND | ND | |
| 11/4/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/9/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

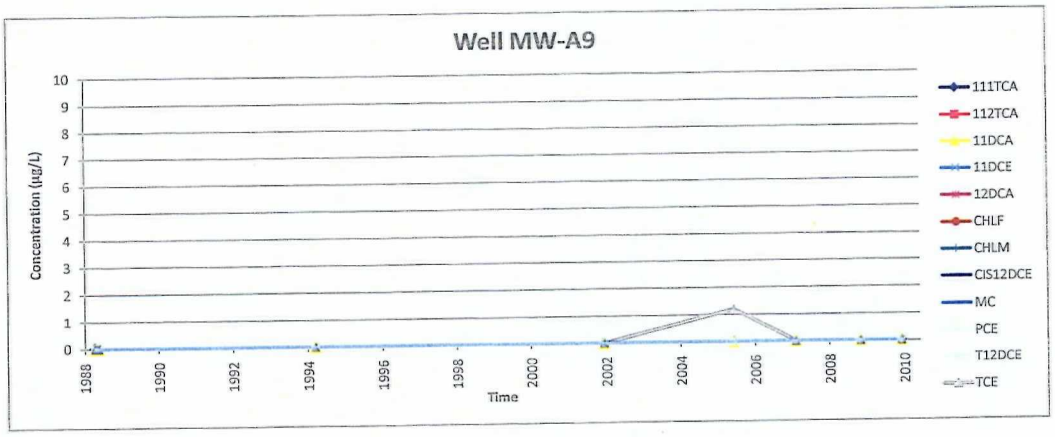







Figure B1-12
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/14/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 5/10/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.07 | | ND | ND | 0.07 |
| 6/10/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 3/11/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | |
| 10/1/1996 | ND | | ND | ND | | | | ND | | ND | | ND | ND | |
| 11/1/1998 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | **6** | ND | 6 |
| 12/11/2001 | ND | ND | ND | ND | ND | ND | ND | **3.7** | ND | ND | ND | ND | ND | 3.7 |
| 6/8/2005 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5.8 | ND | 5.8 |
| 12/15/2006 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | ND | 3.2 | ND | 3.2 |
| 10/27/2008 | ND. | ND | ND | ND | ND | ND | ND | ND | ND | 1.1 | ND | 1 | ND | 2.1 |
| 12/8/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

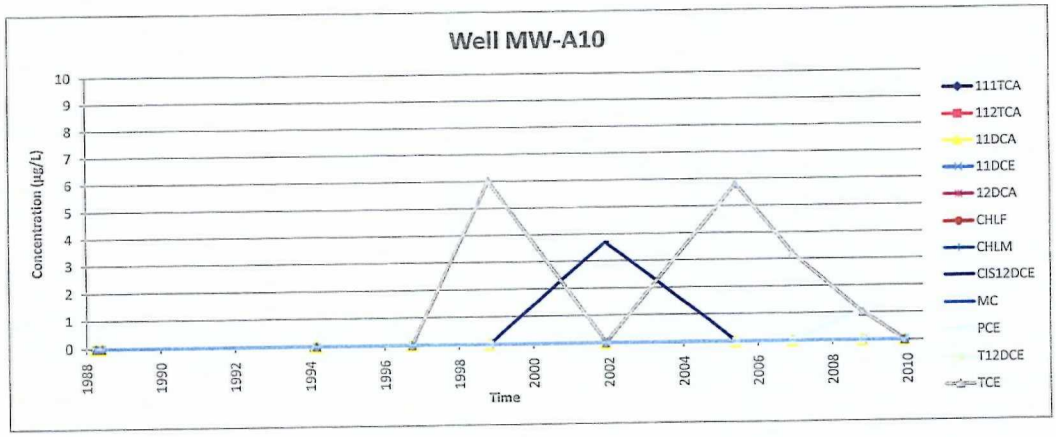


Figure B1-13
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/14/1988 | **0.27** | ND | 0.08 | ND | ND | ND | ND | 0.5 | ND | ND | | **1.6** | ND | 2.45 |
| 5/10/1988 | 0.55 | ND | 0.13 | ND | ND | ND | ND | 1.1 | ND | ND | | 4 | ND | 5.78 |
| 6/10/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 3/11/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | |
| 10/1/1996 | ND | | ND | ND | | | | ND | | ND | | ND | ND | |
| 12/10/2001 | ND | ND | ND | ND | ND | ND | ND | 6.3 | ND | ND | ND | **1.7** | ND | 8 |
| 6/9/2005 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/15/2006 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | ND | ND | ND | |
| 10/22/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/3/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

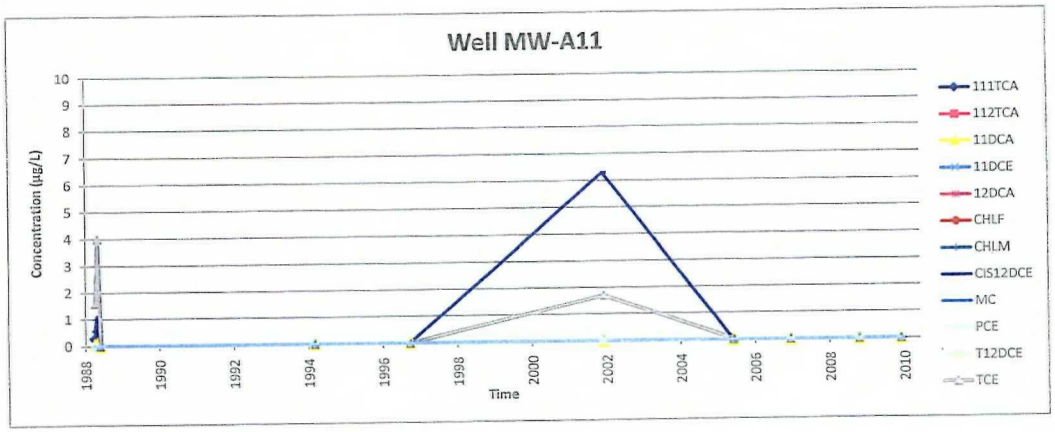







Figure B1-14
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/1/1988 | 3200 | ND | 160 | 240 | 9 | 940 | | 3000 | ND | 340 | | 14000 | 52 | 21941 |
| 5/1/1988 | 3300 | ND | 150 | 240 | ND | 1200 | | 2800 | ND | 580 | | 16000 | ND | 24270 |
| 6/1/1988 | 3300 | 5 | 190 | 330 | 9 | 1100 | | ND | ND | 660 | | 15000 | 58 | 20652 |
| 3/17/1994 | 510 | ND | ND | ND | ND | ND | | 1200 | ND | 100 | | 5700 | ND | 7510 |
| 10/1/1996 | 53 | ND | **2.6** | **6.4** | ND | **3.4** | | 99 | ND | 22 | | 690 | ND | 876.4 |
| 11/1/1996 | 520 | ND | ND | **87** | ND | ND | | 1500 | ND | **120** | | 6700 | ND | 8927 |
| 11/1/1998 | 900 | ND | ND | **77** | ND | ND | ND | 1873 | ND | **110** | | 6800 | **220** | 9980 |
| 12/11/2001 | 32 | ND | 21 | **2.4** | ND | **1.1** | ND | 45 | ND | **2.4** | ND | 150 | 87 | 340.9 |
| 6/14/2005 | 25 | ND | 5.2 | 11 | ND | ND | ND | 38 | ND | ND | ND | 54 | 10 | 143.2 |
| 12/18/2006 | 6.3 | ND | 3 | ND | ND | ND | ND | 17 | ND | ND | ND | 53 | 2.1 | 81.4 |
| 10/22/2008 | ND | ND | ND | ND | ND | ND | ND | 1.9 | ND | ND | ND | 2.1 | ND | 4 |

Values in **bold** have a "J" qualifier
ND = Not Detected

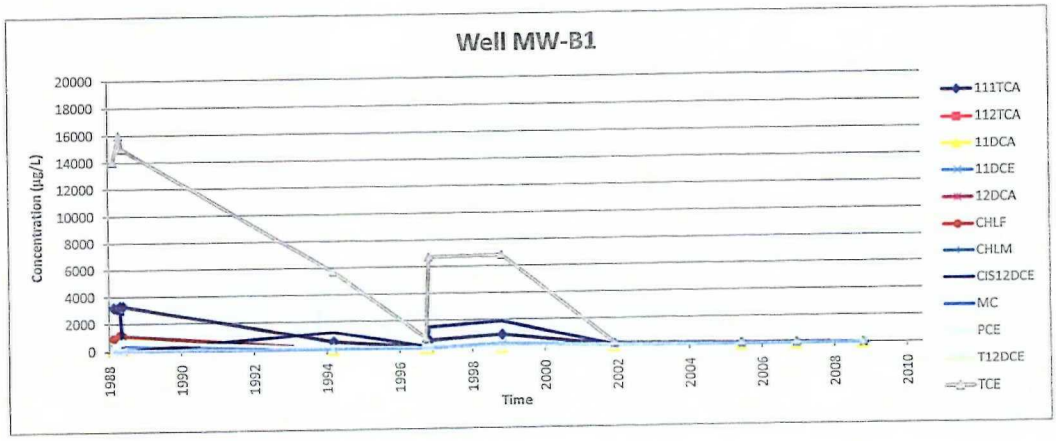


Figure B1-15
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/1/1997 | 1100 | ND | ND | ND | ND | 1400 | | 1200 | ND | ND | | 10000 | ND | 13700 |
| 1/22/2002 | 1100 | ND | **150** | 860 | ND | 1100 | ND | 2700 | ND | **160** | ND | 11000 | ND | 17070 |
| 6/7/2005 | 580 | ND | ND | **370** | ND | **450** | ND | 1900 | ND | **190** | ND | 7900 | ND | 11390 |
| 12/14/2006 | 560 | ND | 94 | 240 | ND | 380 | | 2200 | ND | 130 | ND | 6700 | ND | 10304 |
| 10/29/2008 | 610 | ND | 96 | 250 | ND | 270 | ND | 2000 | ND | 140 | ND | 6700 | ND | 10066 |
| 12/3/2009 | 370 | ND | 72 | 200 | ND | 150 | ND | 1400 | ND | 84 | ND | 4700 | ND | 6976 |

Values in **bold** have a "J" qualifier
ND = Not Detected

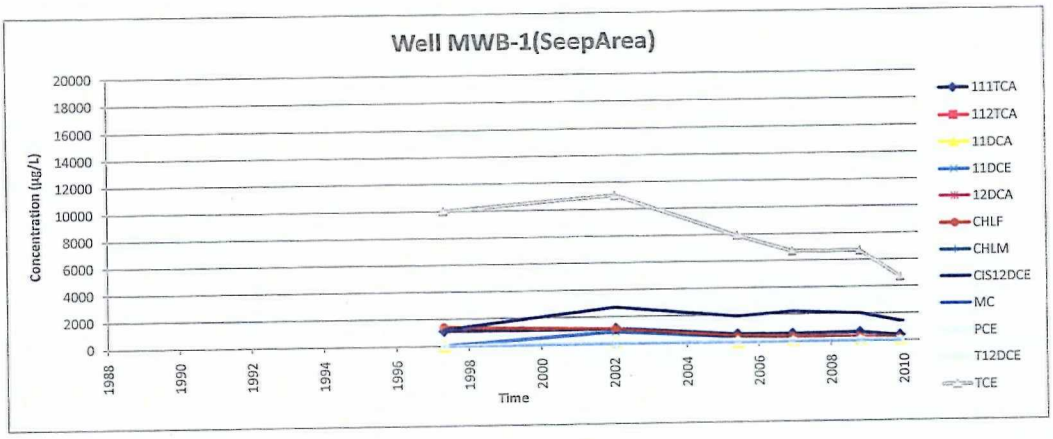







Figure B1-16
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/1/1988 | 280 | ND | 16 | 27 | ND | 84 | | **200** | 110 | 13 | | 940 | ND | 1670 |
| 5/1/1988 | 650 | 2.5 | 31 | 68 | 2.3 | 170 | | ND | 320 | 33 | | 2300 | ND | 3576.8 |
| 6/1/1988 | 660 | ND | ND | 98 | ND | 180 | | ND | ND | 50 | | 2600 | ND | 3588 |
| 3/1/1994 | 43 | ND | ND | **6.6** | ND | 11 | | 69 | ND | **8.9** | | 370 | ND | 508.5 |
| 11/5/1998 | 43 | ND | **5** | **8** | ND | **8** | ND | **95** | ND | **19** | **3** | **310** | ND | 492 |
| 12/20/2006 | 3 | ND | ND | ND | ND | ND | ND | 6.6 | ND | 2.6 | ND | 66 | ND | 78.2 |
| 10/22/2008 | 5.8 | ND | ND | 3.1 | ND | 1.8 | ND | 19 | ND | 7.3 | ND | 130 | ND | 167 |
| 12/9/2009 | 2.8 | ND | ND | 1.3 | ND | 1 | ND | 6.2 | ND | 2.3 | ND | 60 | ND | 73.6 |

Values in **bold** have a "J" qualifier
ND = Not Detected

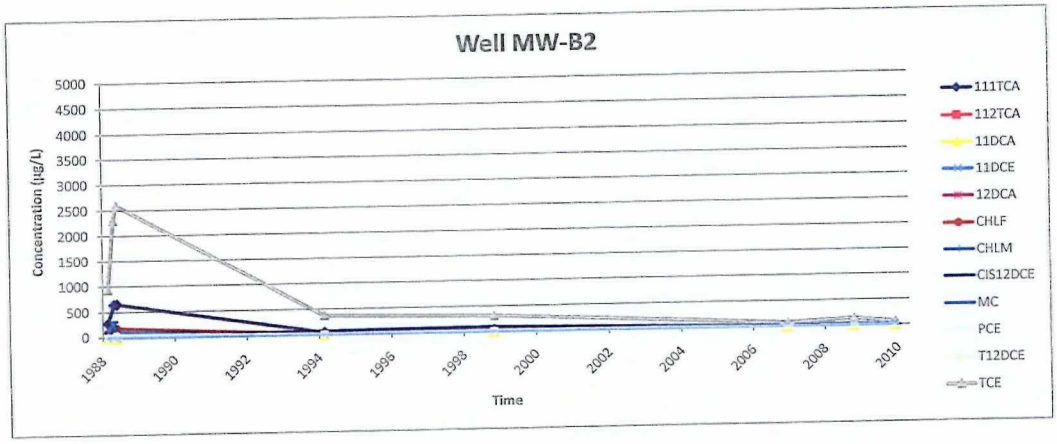


Figure B1-17
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/1/1997 | 1100 | ND | 130 | 270 | ND | 470 | | 2400 | ND | 320 | | 7400 | ND | 12090 |
| 1/22/2002 | 1200 | ND | **220** | **490** | ND | **150** | ND | 4300 | ND | **380** | ND | 6700 | ND | 13440 |
| 6/3/2005 | 510 | ND | **46** | 230 | ND | **20** | ND | 2300 | ND | 240 | ND | 3500 | **30** | 6876 |
| 12/13/2006 | 740 | ND | 150 | 230 | ND | 28 | | 3400 | ND | 290 | ND | 4800 | 25 | 9663 |
| 10/27/2008 | 570 | ND | 170 | 270 | ND | 84 | ND | 3000 | ND | 290 | ND | 4300 | ND | 8684 |
| 3/3/2010 | 410 | ND | 120 | 150 | ND | 60 | ND | 1900 | ND | 200 | **2.7** | 2700 | 23 | 5565.7 |

Values in **bold** have a "J" qualifier
ND = Not Detected

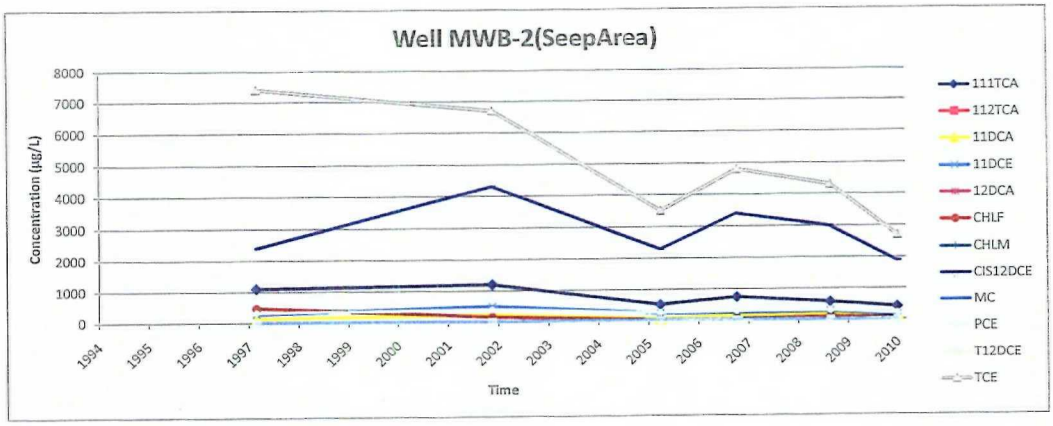







Figure B1-18
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/22/1988 | 650 | ND | 98 | 120 | 6.4 | 890 | ND | 320 | ND | 26 | | 3200 | ND | 5310.4 |
| 5/16/1988 | 870 | 3.3 | 160 | 210 | 4.2 | 1500 | ND | 490 | ND | 40 | | 5400 | ND | 8677.5 |
| 6/6/1988 | 450 | ND | 190 | 220 | ND | 1700 | | ND | ND | 29 | | 3800 | ND | 6389 |
| 3/14/1994 | 19 | ND | ND | ND | ND | ND | | 53 | ND | 8.2 | | 620 | ND | 700.2 |
| 10/1/1996 | **9.3** | ND | 12 | 18 | ND | **1.6** | | 45 | ND | **7.1** | | 480 | ND | 573 |
| 11/1/1998 | 8 | ND | **16** | **18** | ND | ND | ND | 49 | ND | **9** | | 630 | ND | 730 |
| 12/18/2001 | ND | ND | ND | ND | ND | ND | ND | **76** | ND | ND | ND | 340 | ND | 416 |
| 6/13/2005 | ND | ND | ND | ND | ND | ND | ND | 180 | ND | ND | ND | 450 | ND | 630 |
| 12/15/2006 | 8.1 | ND | 9.8 | 20 | ND | ND | ND | 150 | ND | 13 | ND | 340 | ND | 540.9 |
| 10/24/2008 | ND | ND | 7.1 | 14 | ND | ND | ND | 120 | ND | 11 | ND | 330 | ND | 482.1 |
| 12/8/2009 | 2.7 | ND | 4.8 | 12 | **0.25** | **0.72** | ND | 92 | ND | 5.6 | **0.36** | 240 | ND | 358.43 |

Values in **bold** have a "J" qualifier
ND = Not Detected

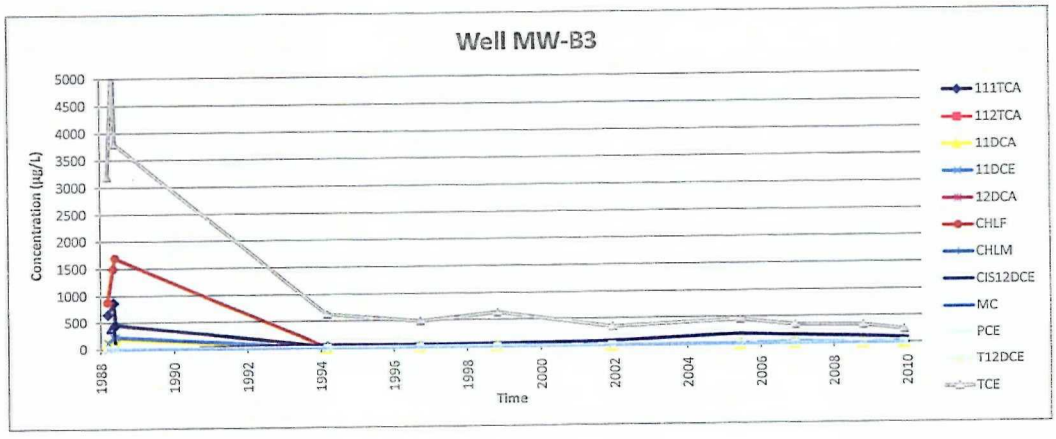


Figure B1-19
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/21/1988 | 370 | ND | 30 | 47 | 1.3 | 440 | ND | 240 | ND | 64 | | 1600 | ND | 2792.3 |
| 5/12/1988 | 1100 | ND | 74 | 130 | ND | 1200 | ND | 660 | ND | 160 | | 4700 | ND | 8024 |
| 6/7/1988 | 890 | ND | ND | 160 | ND | 1300 | ND | ND | ND | 190 | | 5300 | ND | 7840 |
| 3/8/1994 | 880 | ND | ND | 140 | ND | 790 | | 1800 | ND | 230 | | 5400 | ND | 9240 |
| 10/1/1996 | **850** | ND | 110 | 170 | ND | 420 | | 2500 | ND | **240** | | 5200 | ND | 9490 |
| 11/1/1998 | 1300 | ND | **180** | **190** | ND | **400** | ND | 3590 | ND | **370** | | 5300 | ND | 11330 |
| 12/13/2001 | 340 | ND | **58** | **89** | ND | **94** | ND | 1400 | ND | **110** | ND | 1900 | ND | 3991 |
| 6/8/2005 | 330 | ND | **44** | 180 | ND | **64** | ND | 1700 | ND | 160 | ND | 2400 | ND | 4878 |
| 12/13/2006 | 460 | ND | 130 | 150 | ND | 44 | ND | 2000 | ND | 210 | ND | 3000 | 22 | 6016 |
| 10/27/2008 | 460 | ND | 140 | 180 | ND | 75 | ND | 2400 | ND | 250 | ND | 3100 | 40 | 6645 |
| 12/8/2009 | 190 | ND | 58 | 80 | ND | 26 | ND | 1100 | ND | 100 | 8.3 | 1600 | 13 | 3175.3 |

Values in **bold** have a "J" qualifier
ND = Not Detected

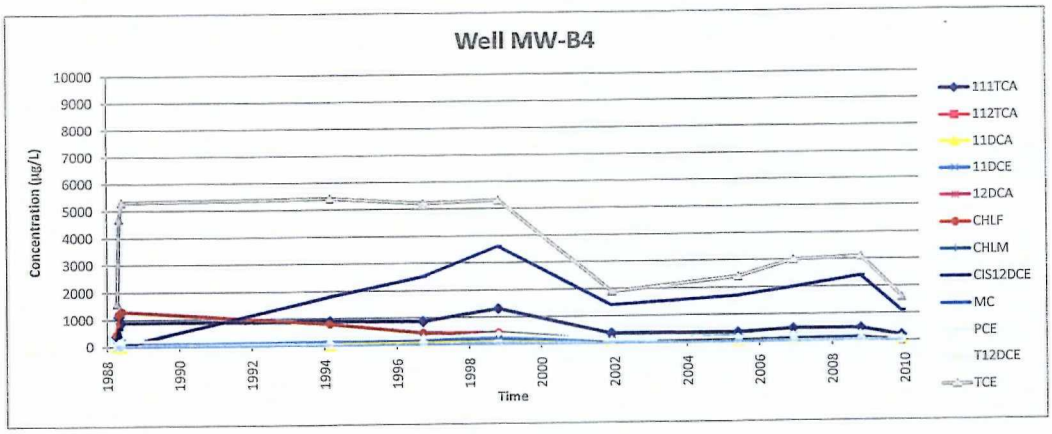







Figure B1-20
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/9/1988 | 210 | ND | ND | 54 | ND | 540 | ND | ND | ND | 28 | | 1500 | ND | 2332 |
| 3/9/1994 | 6.3 | ND | ND | ND | ND | 11 | | **2.6** | ND | **2.2** | | 68 | ND | 90.1 |
| 10/1/1996 | 87 | | 11 | 23 | | | | 79 | | 50 | | 920 | ND | 1170 |
| 12/11/2001 | 110 | ND | **13** | **27** | ND | 75 | ND | 88 | ND | 90 | ND | 1200 | ND | 1603 |
| 6/9/2005 | 83 | ND | ND | **30** | ND | 72 | ND | 160 | ND | 82 | ND | 920 | ND | 1347 |
| 12/14/2006 | 68 | ND | 23 | **25** | ND | 59 | ND | 160 | ND | 66 | ND | 850 | ND | 1251 |
| 10/30/2008 | 61 | ND | 10 | 25 | ND | 42 | ND | 150 | ND | 95 | ND | 870 | ND | 1253 |
| 12/8/2009 | 27 | ND | 4.6 | 11 | ND | 24 | ND | 66 | ND | 43 | **0.2** | 380 | 7 | 562.8 |

Values in **bold** have a "J" qualifier
ND = Not Detected

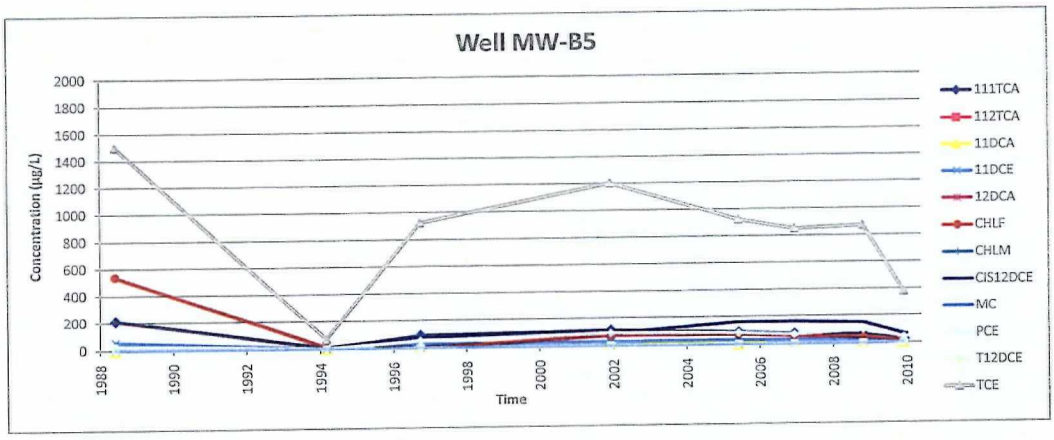


Figure B1-21
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/13/1988 | 280 | ND | 12 | 34 | ND | **500** | ND | 90 | ND | 38 | | **1200** | ND | 2154 |
| 5/13/1988 | 350 | ND | 14 | 38 | ND | 630 | ND | 100 | ND | ND | | 1400 | ND | 2532 |
| 6/13/1988 | **200** | ND | 11 | **40** | ND | **540** | ND | ND | ND | **29** | | **980** | ND | 1800 |
| 3/8/1994 | **8.1** | ND | ND | ND | ND | 12 | | **5.1** | ND | ND | | 82 | ND | 107.2 |
| 10/1/1996 | **7.7** | ND | **1.1** | **2.4** | ND | 21 | | **6.3** | ND | **2** | | 94 | ND | 134.5 |
| 11/1/1998 | 61 | ND | **12** | **15** | ND | 160 | ND | 75 | ND | **17** | | 640 | ND | 980 |
| 12/19/2001 | **40** | ND | ND | ND | ND | **70** | ND | **67** | ND | ND | ND | 560 | ND | 737 |
| 6/10/2005 | 30 | ND | ND | **19** | ND | **21** | ND | 90 | ND | **20** | ND | 480 | ND | 660 |
| 12/20/2006 | 9.9 | ND | 4.6 | 4.4 | ND | 2.7 | ND | 54 | ND | 4.2 | ND | 100 | ND | 179.8 |
| 10/29/2008 | 40 | ND | 18 | 16 | ND | ND | ND | 270 | ND | 24 | ND | 480 | ND | 848 |
| 12/2/2009 | 30 | ND | 13 | 17 | ND | 2.7 | ND | 210 | ND | 18 | **0.22** | 350 | **0.63** | 641.55 |

Values in **bold** have a "J" qualifier
ND = Not Detected

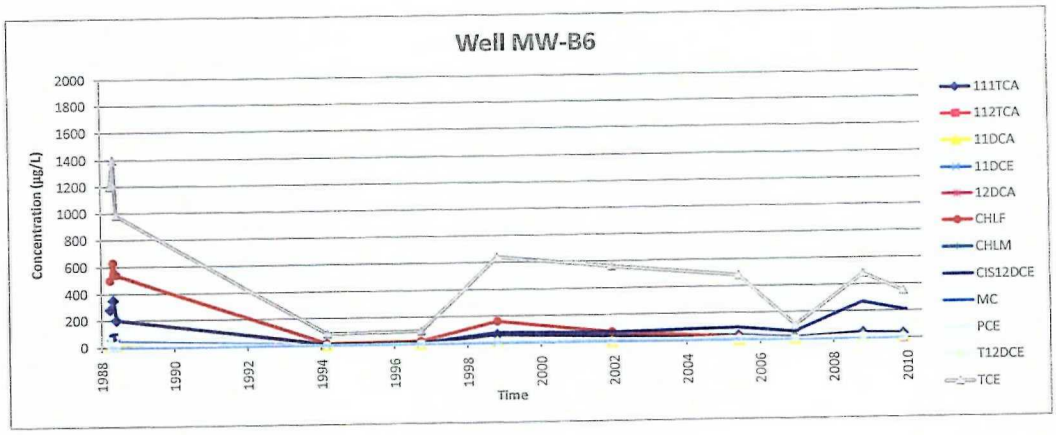







Figure B1-22
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/25/1988 | 2.2 | ND | 1.1 | 0.28 | ND | 2.1 | ND | 0.29 | ND | ND | | 1.7 | ND | 7.67 |
| 5/12/1988 | 1.8 | 0.06 | 1.1 | 0.28 | ND | 1 | ND | 0.14 | ND | 0.09 | | 0.71 | ND | 5.18 |
| 6/2/1988 | 2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | 2 |
| 3/16/1994 | **3.2** | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | 3.2 |
| 10/1/1996 | 9.1 | | **5.7** | **4.8** | | | | **5.2** | | ND | | 18 | ND | 42.8 |
| 11/1/1998 | 16 | ND | 10 | 10 | ND | **10** | ND | 10 | ND | ND | | 31 | ND | 87 |
| 12/20/2001 | 16 | ND | 13 | **29** | ND | 13 | ND | 14 | ND | ND | ND | 98 | ND | 183 |
| 8/16/2005 | 16 | ND | 14 | 24 | ND | 6 | ND | 41 | ND | **2** | ND | 150 | ND | 253 |
| 12/19/2006 | 17 | ND | 30 | 22 | ND | 7.1 | ND | 55 | ND | 1.7 | ND | 180 | ND | 312.8 |
| 11/19/2008 | 12 | ND | 15 | 20 | ND | 6.2 | ND | 62 | ND | 1.6 | ND | 180 | ND | 296.8 |
| 12/4/2009 | 13 | ND | 18 | 23 | **0.45** | 5.7 | ND | 69 | ND | 1.7 | ND | 210 | **0.45** | 341.3 |

Values in **bold** have a "J" qualifier
ND = Not Detected

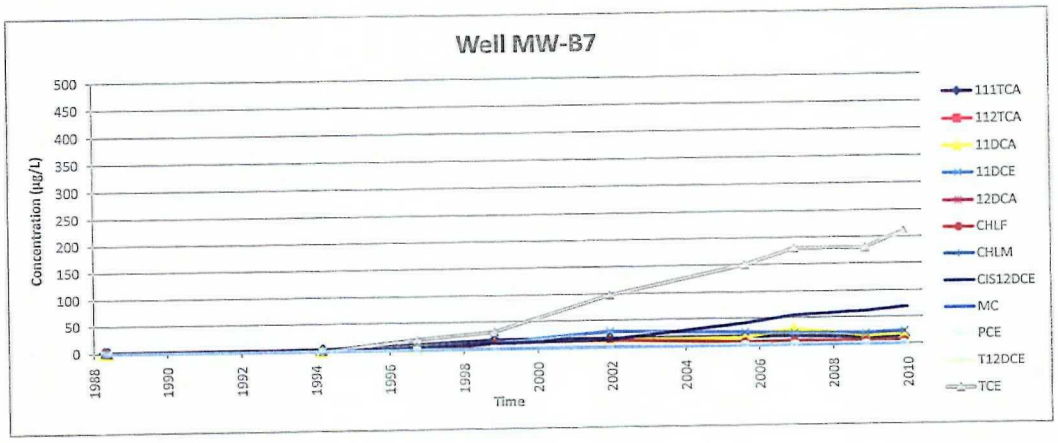


Figure B1-23
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/21/1988 | 0.31 | ND | 0.07 | ND | ND | 0.09 | ND | ND | ND | ND | | ND | ND | 0.47 |
| 5/10/1988 | 0.63 | ND | 0.13 | ND | ND | 0.15 | ND | 0.11 | ND | 0.13 | | 0.56 | ND | 1.71 |
| 6/1/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 3/22/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | |
| 10/1/1996 | ND | | ND | ND | | | | ND | | ND | | ND | ND | |
| 11/1/1998 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | | ND | |
| 12/18/2001 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 6/8/2005 | ND | ND | ND | ND | ND | ND | ND | **1.9** | ND | **1** | ND | 11 | ND | 13.9 |
| 2/6/2007 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 11/4/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/9/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

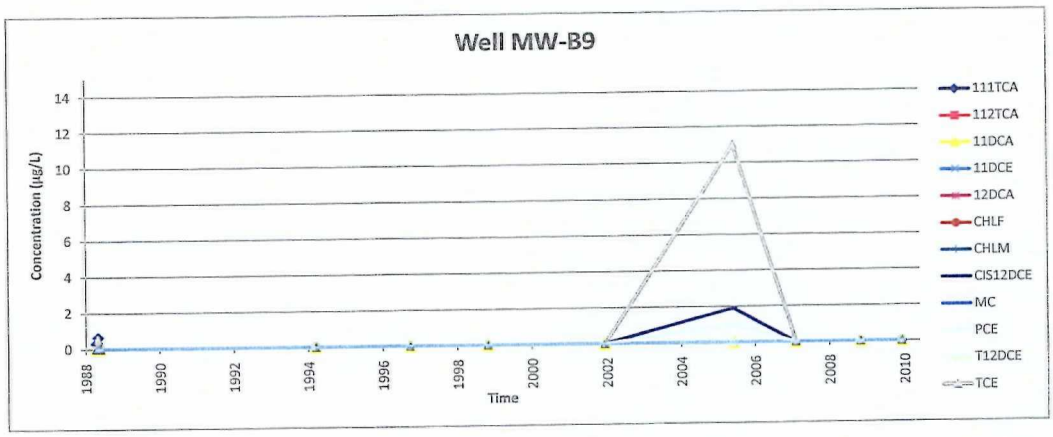







Figure B1-24
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/14/1988 | 0.05 | ND | 0.07 | ND | ND | 0.19 | ND | ND | 2 | ND | | ND | ND | 2.31 |
| 5/10/1988 | 0.48 | ND | 0.07 | ND | ND | 0.11 | ND | ND | ND | ND | | 0.13 | ND | 0.79 |
| 6/13/1988 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | ND | |
| 3/11/1994 | ND | ND | ND | ND | ND | ND | | ND | ND | ND | | ND | ND | |
| 10/1/1996 | ND | | ND | ND | | | | ND | | ND | | ND | ND | |
| 11/1/1998 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | **1** | ND | 1 |
| 12/10/2001 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 6/8/2005 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | **1.8** | ND | 1.8 |
| 12/15/2006 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 10/27/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/8/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

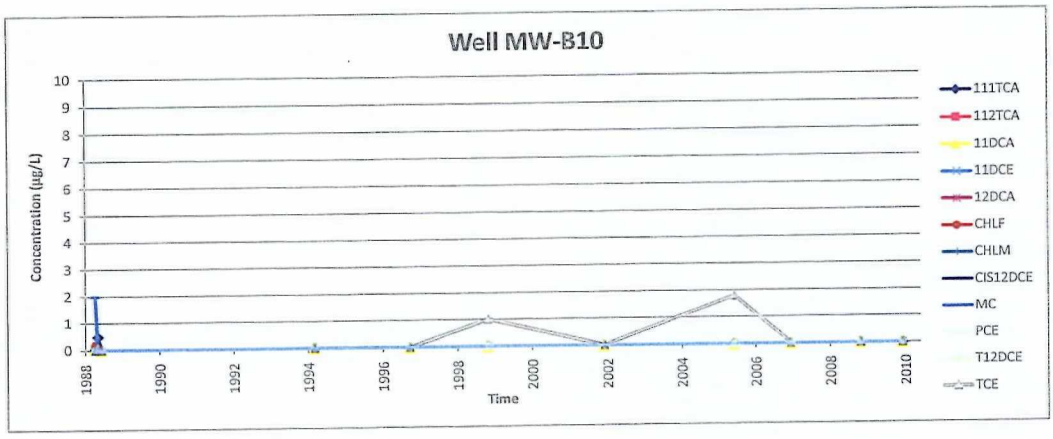


Figure B1-25
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2000 | 880 | | **88** | **100** | | **120** | | 2100 | ND | 520 | | 2900 | ND | 6708 |
| 6/13/2005 | 400 | ND | **46** | 120 | ND | **30** | ND | 1300 | ND | 250 | ND | 1600 | ND | 3746 |
| 12/14/2006 | 420 | ND | 79 | 56 | ND | 18 | ND | 1500 | ND | 230 | ND | 1000 | ND | 3303 |
| 10/20/2008 | 180 | ND | 41 | 46 | ND | 10 | ND | 690 | ND | 210 | ND | 590 | ND | 1767 |
| 11/20/2009 | 260 | ND | 64 | 39 | ND | 8.9 | ND | 830 | ND | 160 | **3.3** | 670 | ND | 2035.2 |

Values in **bold** have a "J" qualifier
ND = Not Detected

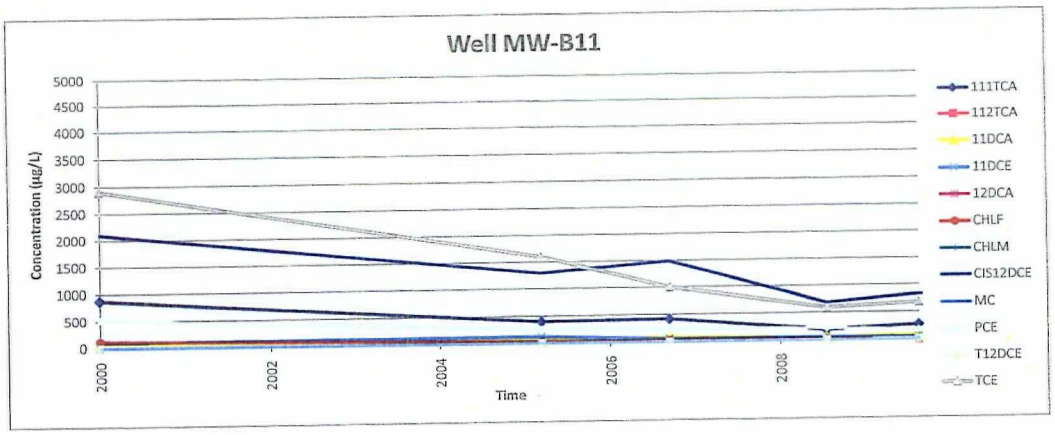







Figure B1-26
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/1/2000 | 460 | | **170** | ND | | ND | | 4500 | | **240** | | 420 | 580 | 6370 |
| 12/17/2001 | 560 | ND | **230** | ND | ND | ND | ND | 2600 | ND | ND | ND | **50** | 780 | 4220 |
| 6/11/2004 | **47** | ND | **39** | ND | ND | ND | ND | 1100 | ND | 510 | ND | 520 | **27** | 2243 |
| 6/6/2005 | 32 | ND | **20** | **5.5** | ND | ND | ND | 610 | ND | 230 | ND | 250 | **9.7** | 1157.2 |
| 12/12/2006 | 78 | ND | 59 | ND | ND | ND | ND | 1700 | ND | 140 | ND | 240 | 68 | 2285 |
| 10/20/2008 | 350 | ND | 170 | 41 | ND | ND | ND | 1000 | ND | 24 | ND | 22 | 150 | 1757 |
| 11/23/2009 | 210 | ND | 62 | ND | ND | ND | ND | 890 | ND | 27 | **4.5** | 26 | 72 | 1291.5 |

Values in **bold** have a "J" qualifier
ND = Not Detected

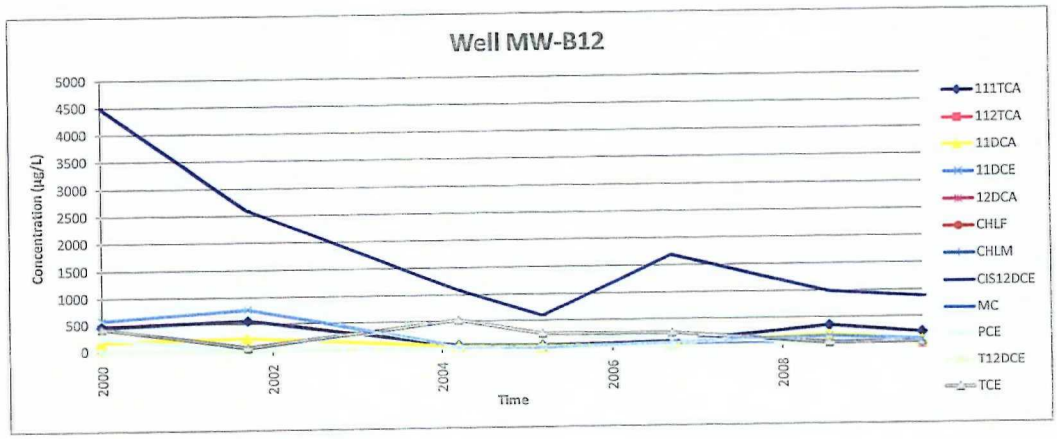


Figure B1-27
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/1/2000 | 820 | | **41** | **79** | | **13** | | 980 | | 72 | | 1200 | **14** | 3224 |
| 12/6/2001 | 1200 | ND | **42** | 210 | ND | **27** | ND | 1200 | ND | **74** | ND | 2000 | ND | 4753 |
| 9/16/2003 | 200 | ND | **8.4** | **21** | ND | ND | ND | 420 | ND | 38 | ND | 410 | ND | 1097.4 |
| 6/10/2004 | 150 | ND | **12** | **14** | ND | ND | ND | 670 | ND | **29** | ND | 240 | ND | 1115 |
| 6/2/2005 | 100 | ND | ND | **25** | ND | ND | ND | 580 | ND | **24** | ND | 160 | ND | 889 |
| 12/2/2005 | 64 | ND | **4** | **9** | ND | **2** | ND | 120 | ND | 22 | ND | 140 | ND | 361 |
| 3/23/2006 | **47** | ND | ND | ND | ND | ND | ND | 430 | ND | 13 | ND | 110 | ND | 600 |
| 12/6/2006 | 65 | ND | 5.6 | ND | ND | ND | ND | 270 | ND | 18 | ND | 120 | ND | 478.6 |
| 10/17/2008 | 110 | ND | 17 | 19 | ND | 5.8 | ND | 510 | ND | 26 | ND | 160 | ND | 847.8 |
| 11/30/2009 | 96 | ND | 14 | 7.9 | ND | 4.1 | ND | 410 | ND | 18 | **1.4** | 100 | **1.4** | 652.8 |

Values in **bold** have a "J" qualifier
ND = Not Detected

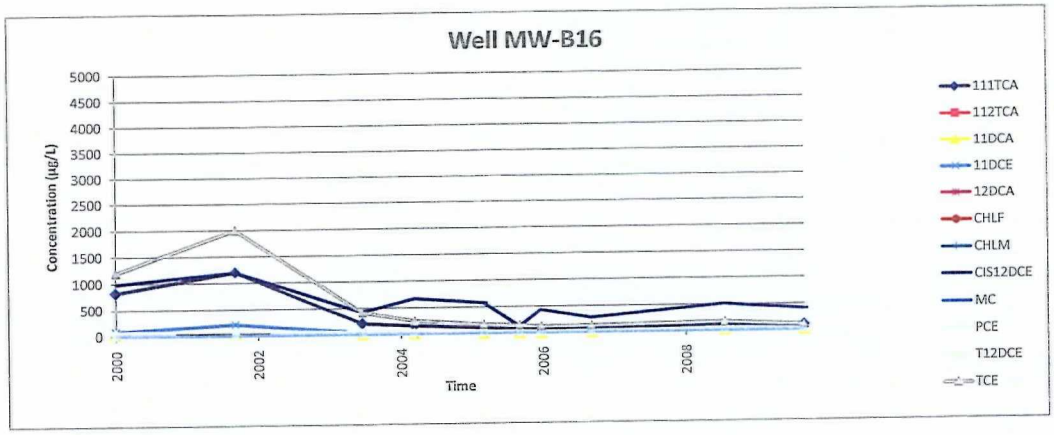







Figure B1-28
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/29/2005 | 320 | ND | 110 | 67 | ND | **22** | ND | 2100 | ND | **80** | ND | 740 | 110 | 3549 |
| 12/1/2005 | 440 | ND | 390 | 100 | ND | **24** | ND | 2200 | **40** | 100 | ND | 810 | 310 | 4414 |
| 12/12/2006 | 350 | ND | 120 | **68** | ND | ND | ND | 2100 | ND | 140 | ND | 1000 | 130 | 3908 |
| 10/10/2008 | 220 | ND | 240 | ND | ND | ND | ND | 1400 | ND | 67 | ND | 230 | 220 | 2377 |
| 11/25/2009 | 170 | ND | 100 | 43 | ND | **2** | ND | 950 | ND | 33 | **3.3** | 190 | 140 | 1631.3 |

Values in **bold** have a "J" qualifier
ND = Not Detected

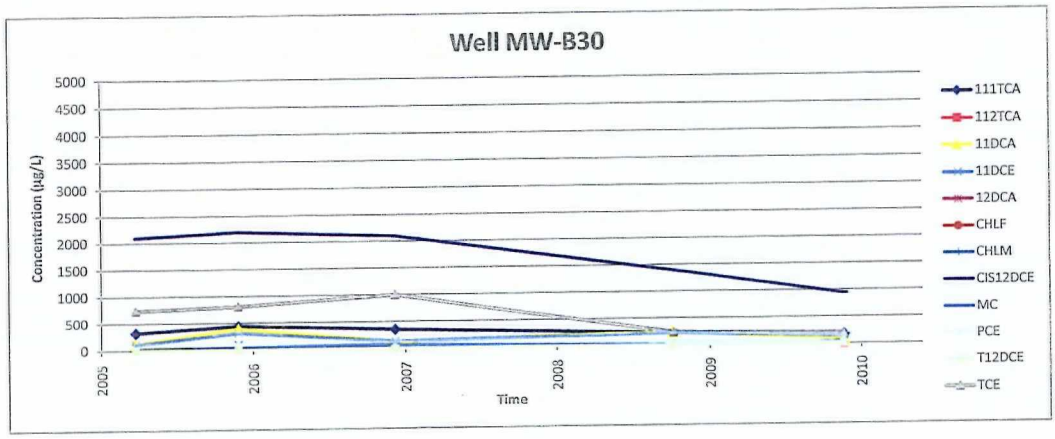


Figure B1-29
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/6/2005 | ND | ND | ND | ND | ND | ND | ND | **1.2** | ND | ND | ND | **1.3** | ND | 2.5 |
| 12/11/2006 | ND | ND | ND | ND | ND | ND | ND | 1.7 | ND | ND | ND | 1.9 | ND | 3.6 |
| 10/21/2008 | 1.4 | ND | ND | ND | ND | ND | ND | 1.1 | ND | 1.4 | ND | 13 | ND | 16.9 |
| 11/23/2009 | 1 | ND | ND | **0.21** | ND | ND | ND | **0.82** | **0.58** | 1.4 | ND | 10 | ND | 14.01 |

Values in **bold** have a "J" qualifier
ND = Not Detected

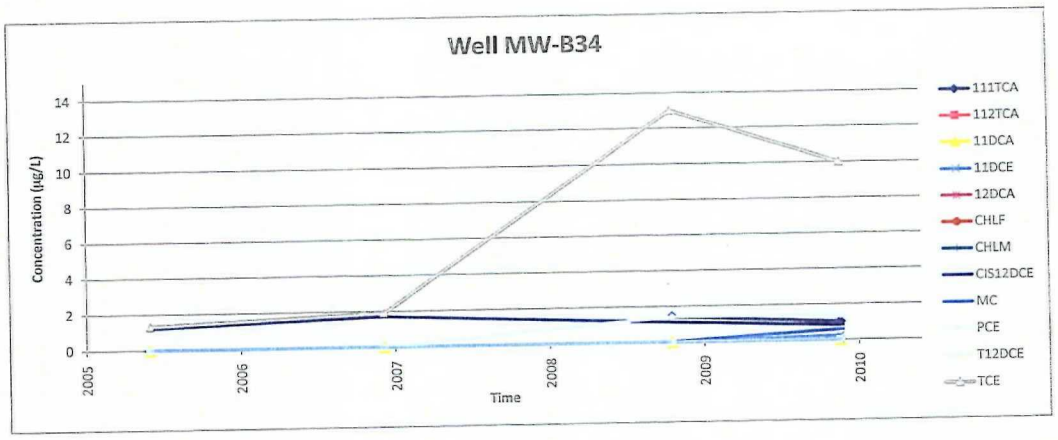







Figure B1-30
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/26/2007 | 370 | ND | 200 | 85 | ND | 35 | ND | 2600 | ND | 370 | 3 | 1800 | 170 | 5633 |
| 10/15/2008 | 490 | ND | 380 | 45 | ND | 42 | ND | 2400 | ND | 510 | ND | 1500 | 350 | 5717 |
| 11/20/2009 | 270 | ND | 290 | ND | ND | 21 | ND | 1500 | ND | 240 | **5.6** | 810 | 210 | 3346.6 |

Values in **bold** have a "J" qualifier
ND = Not Detected

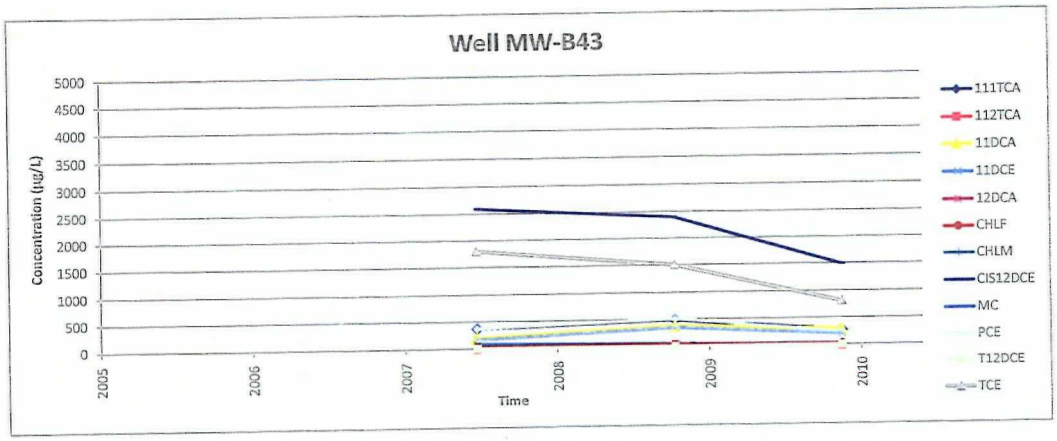


Figure B1-31
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/6/2007 | 390 | ND | 170 | 76 | ND | 71 | ND | 2700 | ND | 460 | ND | 2400 | 61 | 6328 |
| 10/13/2008 | 290 | ND | 120 | 32 | ND | 80 | ND | 1600 | ND | 390 | ND | 1900 | 90 | 4502 |
| 11/20/2009 | 310 | ND | 200 | 88 | ND | 74 | ND | 2400 | ND | 400 | 8.8 | 2000 | 300 | 5780.8 |

Values in **bold** have a "J" qualifier
ND = Not Detected

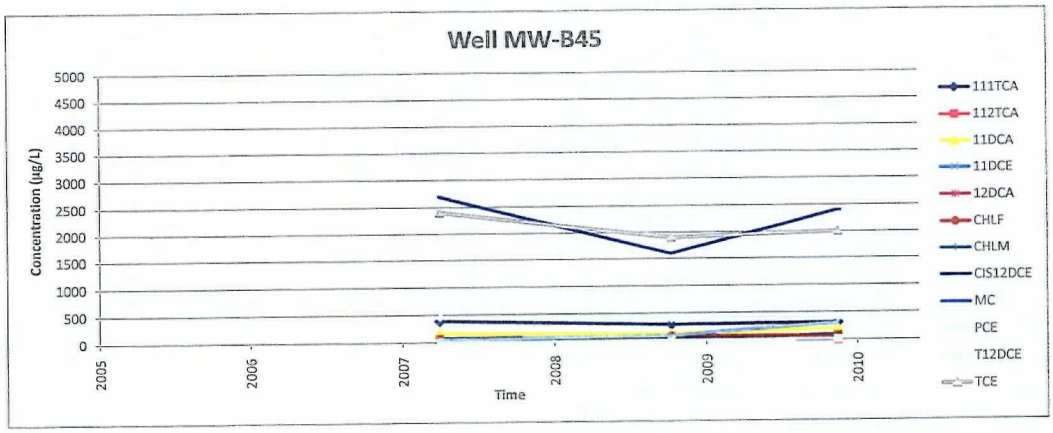







Figure B1-32
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/6/2007 | 8 | ND | 1.7 | 3.1 | ND | 15 | ND | 6.8 | ND | 9.5 | ND | 97 | ND | 141.1 |
| 10/13/2008 | 8.6 | ND | 1.9 | ND | ND | 7.6 | ND | 6.2 | ND | 11 | ND | 97 | ND | 132.3 |
| 11/24/2009 | 5.3 | ND | 1.3 | 1.5 | ND | 5 | ND | 3.6 | ND | 8.1 | ND | 66 | ND | 90.8 |

Values in **bold** have a "J" qualifier
ND = Not Detected

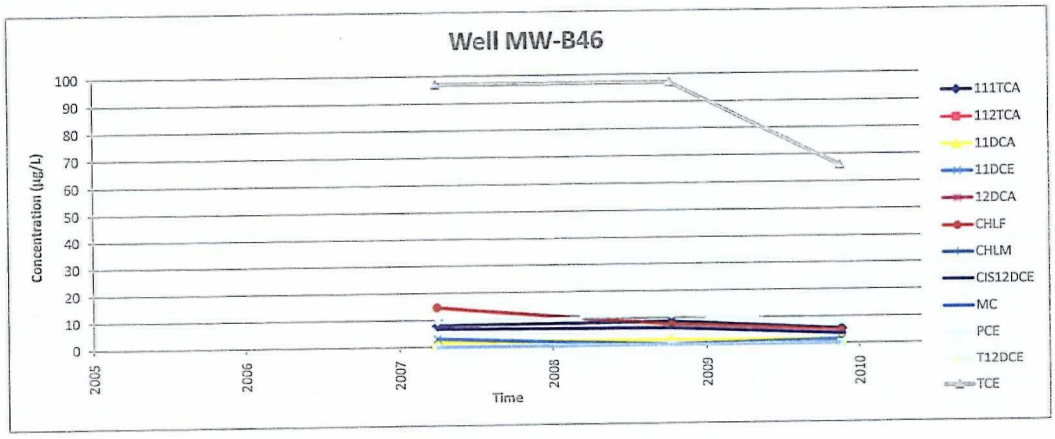


Figure B1-33
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/22/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2.2 | ND | 2.2 |
| 12/3/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

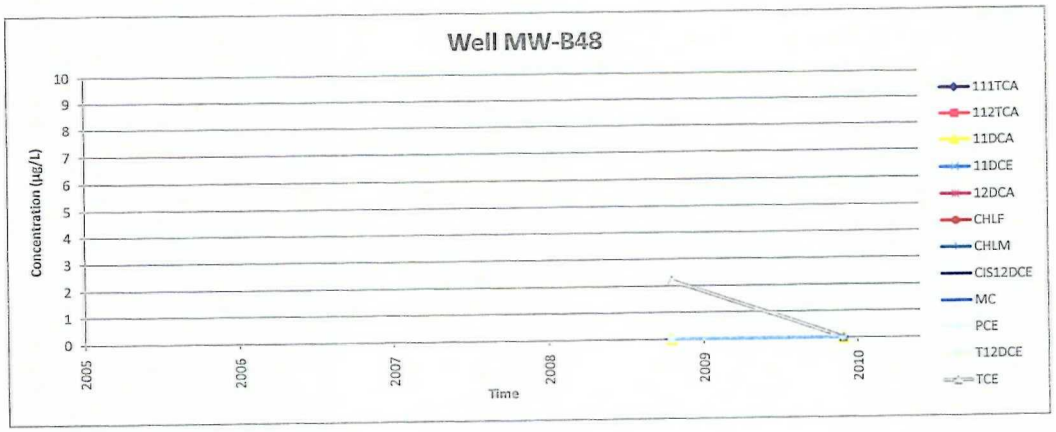







Figure B1-34
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/13/2008 | 18 | ND | 8 | ND | ND | 17 | ND | 72 | ND | 17 | ND | 120 | ND | 252 |
| 12/1/2009 | 7.7 | ND | 2.2 | 1.2 | ND | 2.9 | ND | 14 | ND | 16 | ND | 90 | ND | 134 |

Values in **bold** have a "J" qualifier
ND = Not Detected

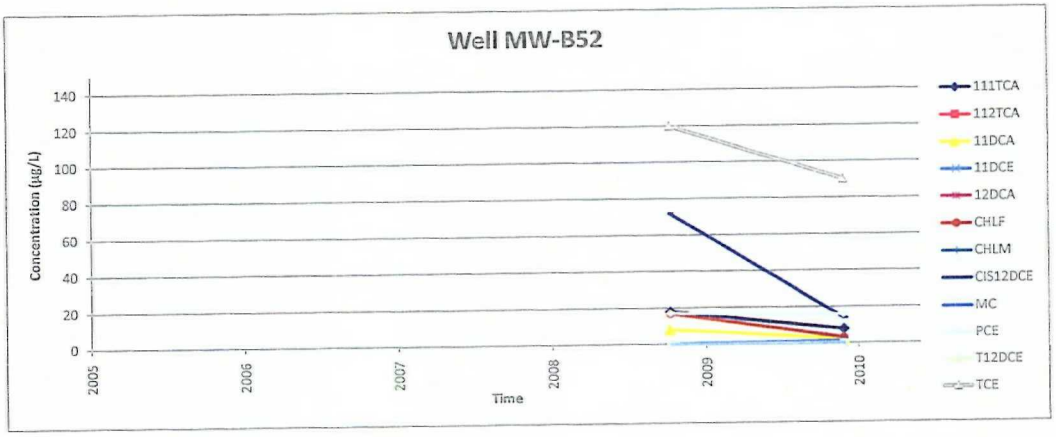


Figure B1-35
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/7/1988 | 980 | ND | ND | ND | ND | ND | ND | ND | ND | ND | | 150 | ND | 1130 |
| 5/18/1988 | **730** | ND | ND | 180 | ND | 48000 | ND | ND | ND | ND | | ND | ND | 48910 |
| 6/6/1988 | ND | ND | ND | ND | ND | 13000 | ND | 610 | ND | ND | | ND | ND | 13610 |
| 3/10/1994 | 150 | ND | 33 | **17** | ND | 590 | | 280 | ND | 38 | | 640 | ND | 1748 |
| 10/1/1996 | 96 | ND | **35** | **11** | ND | 120 | | 360 | ND | **33** | | 370 | ND | 1025 |
| 11/1/1998 | 170 | ND | **45** | **17** | ND | 120 | ND | 660 | ND | 56 | | 530 | ND | 1598 |
| 12/12/2001 | 17 | ND | 10 | **1.4** | ND | ND | ND | 20 | ND | ND | ND | 19 | ND | 67.4 |
| 9/17/2003 | 46 | ND | 8 | **1.6** | ND | ND | ND | 62 | ND | **1.9** | ND | 44 | ND | 163.5 |
| 6/9/2005 | 56 | ND | **9** | 12 | ND | **2** | ND | 200 | ND | **1.8** | ND | 50 | **2.4** | 333.2 |
| 12/20/2006 | 33 | ND | 12 | 1.3 | ND | ND | ND | 91 | ND | 1.8 | ND | 24 | 2 | 165.1 |
| 10/14/2008 | 38 | ND | 5 | 1.1 | ND | ND | ND | 30 | ND | 1.1 | ND | 15 | ND | 90.2 |
| 12/2/2009 | 28 | ND | 3.8 | 1.1 | ND | ND | ND | 29 | **0.21** | **0.4** | ND | 7.6 | ND | 70.11 |

Values in **bold** have a "J" qualifier
ND = Not Detected

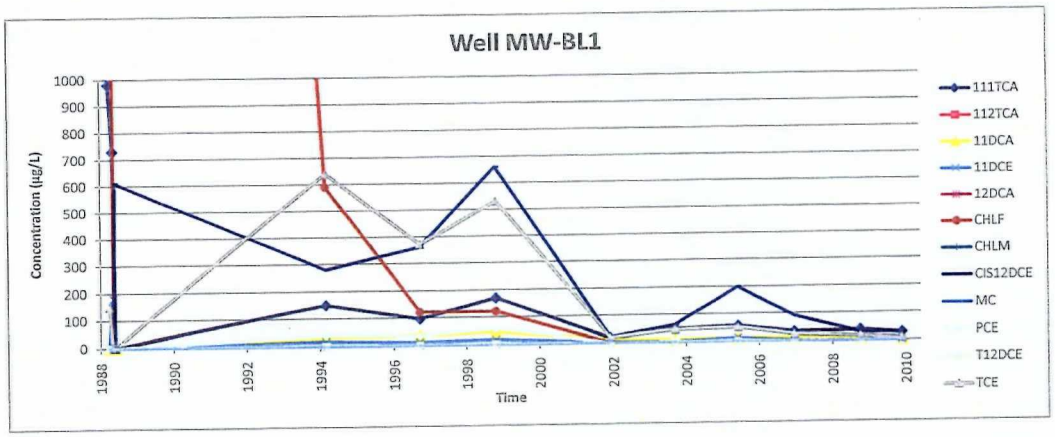







Figure B1-36
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/1/1988 | 430 | ND | 120 | 64 | 6 | 64000 | | 610 | ND | 200 | | 5700 | ND | 71130 |
| 5/1/1988 | **2100** | ND | 140 | 69 | ND | 40000 | | 630 | ND | **170** | | 5000 | ND | 48109 |
| 6/1/1988 | 1400 | ND | **200** | **170** | ND | **40000** | | ND | **200** | 290 | | **7000** | **14** | 49274 |
| 3/1/1994 | 3700 | ND | ND | 240 | ND | 4900 | | 6200 | ND | 790 | | 13000 | ND | 28830 |
| 10/1/1996 | 5200 | **13** | 820 | 570 | ND | 2500 | | 16000 | ND | 1500 | | 17000 | 50 | 43653 |
| 11/1/1996 | 3200 | ND | 540 | **380** | ND | 1600 | | 11000 | ND | 1200 | | 11000 | ND | 28920 |
| 11/5/1998 | 2700 | ND | **380** | **290** | ND | **930** | ND | **10000** | ND | 1200 | ND | 10000 | ND | 25500 |
| 9/17/2003 | 1400 | ND | 490 | 310 | ND | 290 | ND | 9600 | ND | 770 | ND | 4500 | 170 | 17530 |
| 6/9/2005 | 710 | ND | **85** | 160 | ND | **32** | ND | 4200 | ND | **120** | ND | 460 | **30** | 5797 |
| 12/20/2006 | 1100 | ND | 490 | ND | ND | 68 | ND | 6500 | ND | 220 | ND | 920 | 320 | 9618 |
| 10/17/2008 | 500 | ND | 440 | 120 | ND | 48 | ND | 3300 | ND | 230 | 10 | 840 | 640 | 6128 |
| 12/2/2009 | 200 | ND | 130 | 43 | ND | 12 | ND | 1400 | ND | 84 | **4.3** | 330 | 180 | 2383.3 |

Values in **bold** have a "J" qualifier
ND = Not Detected

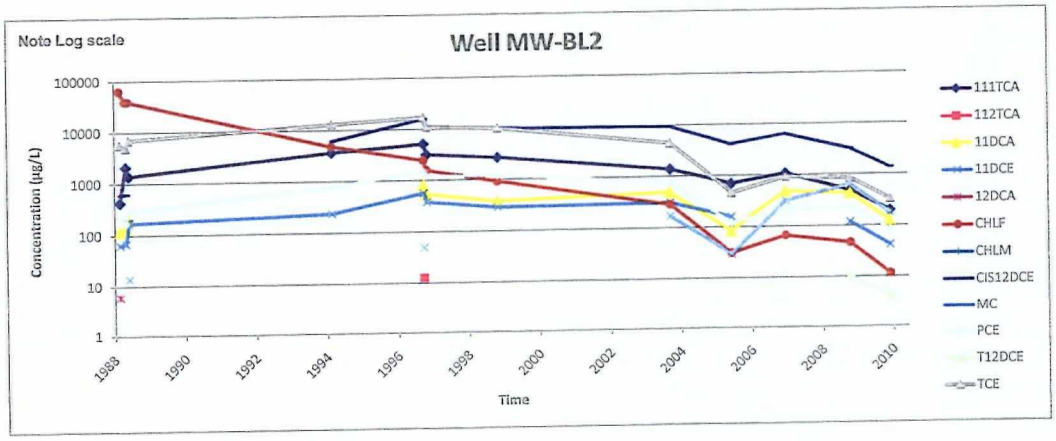


Figure B1-37
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/1/1997 | 580 | ND | 110 | 240 | ND | 790 | | 1300 | ND | 230 | | 6000 | ND | 9250 |
| 11/5/1998 | **9** | ND | ND | **1** | ND | ND | ND | 19 | ND | ND | ND | 42 | ND | 71 |
| 1/22/2002 | **75** | ND | **88** | **110** | ND | 280 | ND | 510 | **56** | **51** | ND | 1100 | ND | 2270 |
| 6/7/2005 | **94** | ND | **36** | 170 | ND | 560 | ND | 530 | ND | **99** | ND | 3100 | ND | 4589 |
| 12/13/2006 | 73 | ND | 110 | 170 | ND | 550 | | 360 | ND | 70 | ND | 3000 | ND | 4333 |
| 10/29/2008 | 45 | ND | 87 | 130 | ND | 410 | ND | 590 | ND | 50 | ND | 2300 | ND | 3612 |
| 12/3/2009 | 39 | ND | 74 | 120 | **4** | 330 | ND | 460 | ND | 44 | ND | 2200 | ND | 3271 |

Values in **bold** have a "J" qualifier
ND = Not Detected

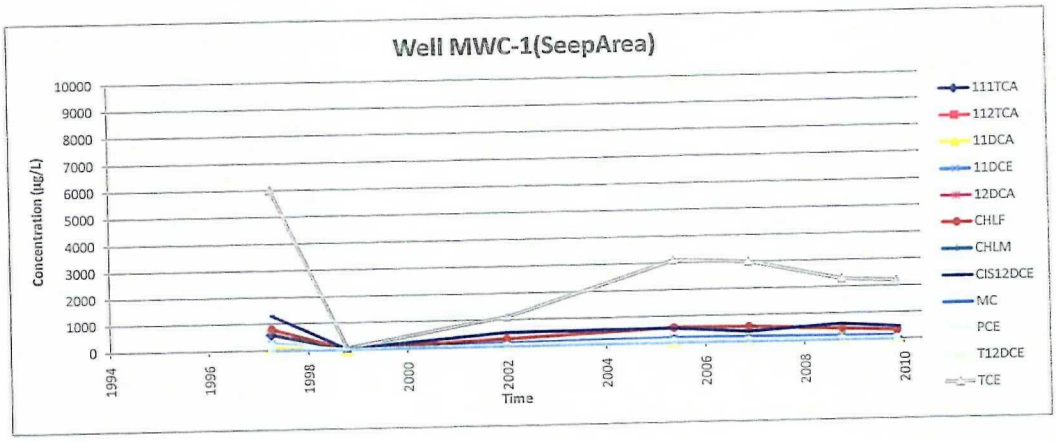







Figure B1-38
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/22/1988 | 530 | 2.1 | 54 | 87 | 3.9 | 560 | ND | ND | ND | 22 | | 2400 | ND | 3659 |
| 5/16/1988 | 670 | ND | 66 | 120 | ND | 790 | ND | 310 | ND | 31 | | 3700 | ND | 5687 |
| 6/6/1988 | 570 | ND | 90 | 170 | ND | 980 | ND | ND | ND | 46 | | 3800 | ND | 5656 |
| 3/14/1994 | 30 | ND | ND | ND | ND | 210 | | 74 | ND | ND | | 570 | ND | 884 |
| 10/1/1996 | 19 | ND | 13 | 13 | **2.7** | 180 | | 64 | **1** | **3.4** | | 460 | ND | 756.1 |
| 11/1/1998 | **34** | ND | **17** | **30** | ND | **160** | ND | **71** | ND | **10** | | 780 | ND | 1102 |
| 12/18/2001 | **32** | ND | ND | **62** | ND | 280 | ND | **83** | ND | ND | ND | 1100 | ND | 1562 |
| 6/13/2005 | ND | ND | ND | **60** | ND | 210 | ND | **78** | ND | ND | ND | 830 | ND | 1178 |
| 12/15/2006 | 16 | ND | 18 | 49 | ND | 200 | ND | 83 | ND | 16 | ND | 830 | ND | 1212 |
| 10/24/2008 | 13 | ND | 20 | 64 | ND | 240 | ND | 96 | ND | 14 | ND | 1000 | ND | 1447 |
| 12/8/2009 | 14 | ND | 19 | 62 | **2.6** | 280 | ND | 89 | ND | 12 | **2.7** | 1100 | ND | 1581.3 |

Values in **bold** have a "J" qualifier
ND = Not Detected

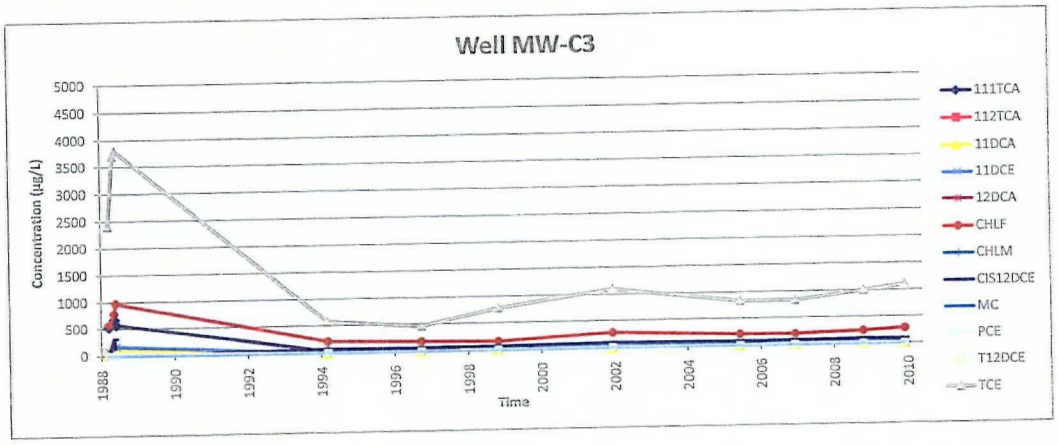


Figure B1-39
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/1/1997 | 480 | ND | 87 | 120 | ND | 160 | | 1400 | ND | 150 | | 3200 | ND | 5597 |
| 12/13/2001 | 620 | ND | ND | **170** | ND | ND | ND | 2300 | ND | **150** | ND | 3300 | ND | 6540 |
| 6/3/2005 | 380 | ND | **35** | 170 | ND | ND | ND | 2000 | ND | 180 | ND | 2700 | ND | 5465 |
| 12/14/2006 | 550 | ND | 130 | 180 | ND | 21 | | 2300 | ND | 240 | ND | 2500 | 12 | 5933 |
| 10/27/2008 | 460 | ND | 140 | 190 | ND | 52 | ND | 2700 | ND | 220 | ND | 3300 | 20 | 7082 |
| 12/3/2009 | 310 | ND | 110 | 120 | ND | 35 | ND | 1800 | ND | 140 | **2** | 2500 | **9.7** | 5026.7 |

Values in **bold** have a "J" qualifier
ND = Not Detected

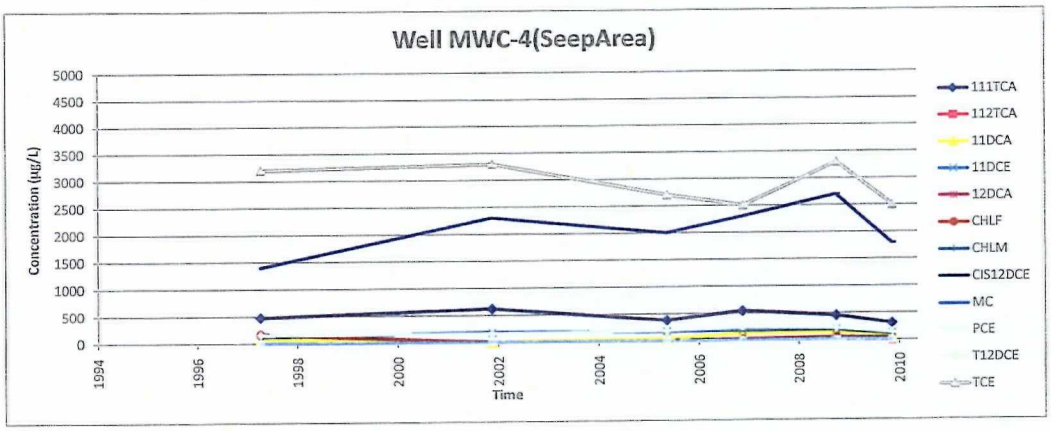







Figure B1-40
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/23/1988 | 270 | 2.8 | 17 | 32 | ND | 410 | ND | 72 | 850 | 46 | | 1500 | ND | 3199.8 |
| 5/17/1988 | 68 | 0.91 | 92 | 38 | 1.8 | 58 | ND | 110 | 47 | 23 | | 1200 | ND | 1638.71 |
| 6/16/1988 | 41 | ND | **79** | **41** | 3 | 160 | ND | ND | ND | 34 | | **1200** | ND | 1558 |
| 3/9/1994 | 130 | ND | ND | ND | ND | 170 | | 110 | ND | 89 | | 1600 | ND | 2099 |
| 10/1/1996 | 110 | | **15** | **24** | | | | 120 | | **85** | | 1300 | ND | 1654 |
| 12/11/2001 | ND | ND | 81 | **19** | ND | **18** | ND | 89 | ND | **10** | ND | 630 | **12** | 859 |
| 6/9/2005 | ND | ND | **33** | **9.7** | ND | **11** | ND | 68 | ND | **8.6** | ND | 420 | **10** | 560.3 |
| 12/14/2006 | ND | ND | 11 | 3.3 | ND | 1.4 | ND | 110 | ND | 1.9 | ND | 62 | 4.6 | 194.2 |
| 10/30/2008 | ND | ND | 36 | ND | ND | ND | ND | 12 | ND | 2.8 | ND | 41 | 210 | 301.8 |
| 12/8/2009 | ND | ND | 4.3 | **0.88** | ND | ND | ND | 11 | ND | 1.5 | **0.4** | 6.6 | 72 | 96.68 |

Values in **bold** have a "J" qualifier
ND = Not Detected

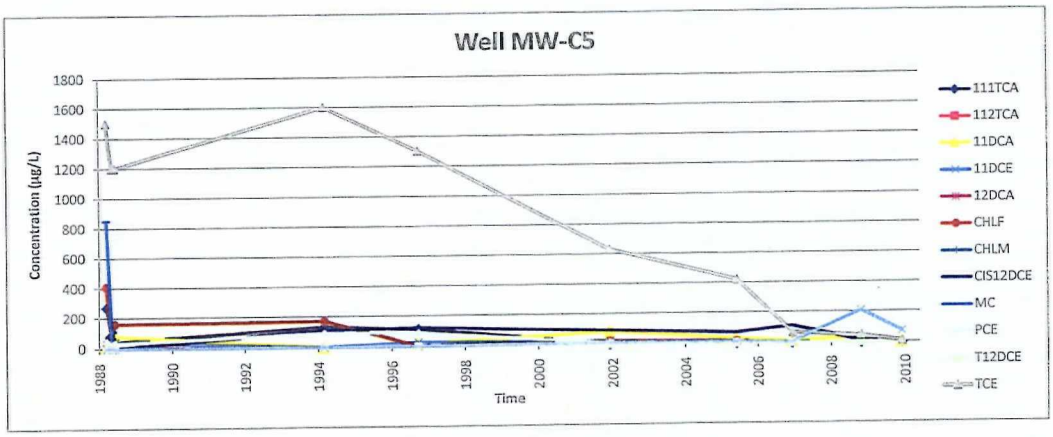


Figure B1-41
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/1/1997 | 520 | ND | ND | 150 | ND | 230 | | 1500 | ND | 170 | | 3900 | ND | 6470 |
| 12/13/2001 | 550 | ND | ND | **140** | ND | ND | ND | 2100 | ND | **170** | ND | 3000 | ND | 5960 |
| 6/3/2005 | 290 | ND | **47** | 160 | ND | ND | ND | 1700 | ND | 150 | ND | 2200 | ND | 4547 |
| 12/13/2006 | 400 | ND | 120 | 160 | ND | ND | | 2600 | ND | 170 | ND | 2900 | ND | 6350 |
| 10/27/2008 | 460 | ND | 140 | 210 | ND | ND | ND | 2600 | ND | 210 | ND | 3200 | ND | 6820 |
| 12/3/2009 | 290 | ND | 110 | 120 | ND | 35 | ND | 1700 | ND | 130 | ND | 2300 | 13 | 4698 |

Values in **bold** have a "J" qualifier
ND = Not Detected

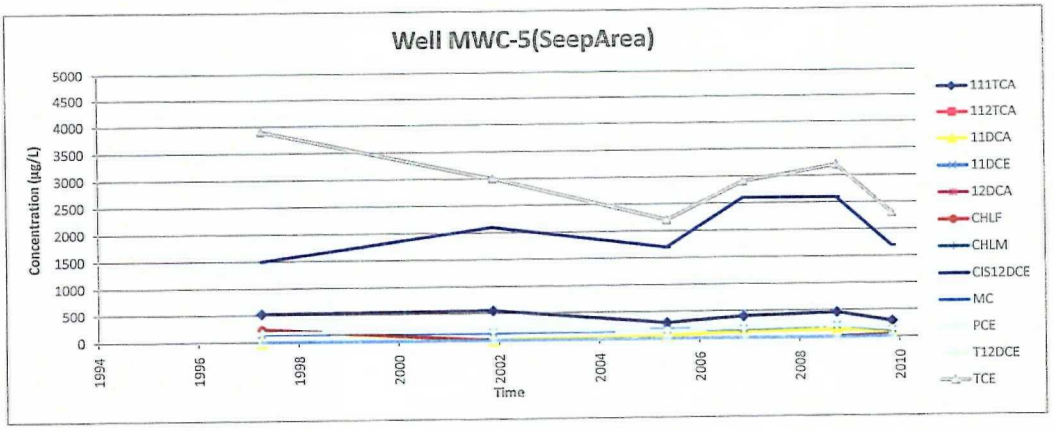







Figure B1-42
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/13/1988 | 320 | ND | 18 | 47 | ND | **710** | ND | 110 | ND | 84 | | **1400** | ND | 2689 |
| 5/16/1988 | 340 | ND | 18 | 46 | ND | 620 | ND | 98 | ND | 79 | | 1400 | ND | 2601 |
| 6/14/1988 | **96** | ND | **15** | **60** | ND | **480** | ND | ND | ND | **88** | | **800** | ND | 1539 |
| 3/30/1994 | 120 | ND | ND | 81 | ND | 500 | | 140 | 7.8 | 48 | | 1600 | ND | 2496.8 |
| 10/1/1996 | **150** | ND | **41** | **150** | ND | 570 | | **260** | ND | **78** | | 2800 | ND | 4049 |
| 11/1/1998 | 120 | ND | **32** | **110** | ND | 430 | ND | **202** | ND | **74** | | 2500 | ND | 3468 |
| 12/19/2001 | ND | ND | ND | ND | ND | ND | ND | **130** | ND | ND | ND | 1400 | ND | 1530 |
| 6/14/2005 | **30** | ND | **17** | 68 | ND | 78 | ND | 130 | ND | **42** | ND | 1200 | ND | 1565 |
| 12/20/2006 | 30 | ND | 21 | 66 | ND | 78 | ND | 150 | ND | 42 | ND | 1200 | ND | 1587 |
| 10/29/2008 | 25 | ND | 27 | 66 | ND | 130 | ND | 190 | ND | 44 | ND | 1300 | ND | 1782 |
| 12/2/2009 | 19 | ND | 19 | 55 | ND | 62 | ND | 220 | ND | 32 | ND | 800 | ND | 1207 |

Values in **bold** have a "J" qualifier
ND = Not Detected

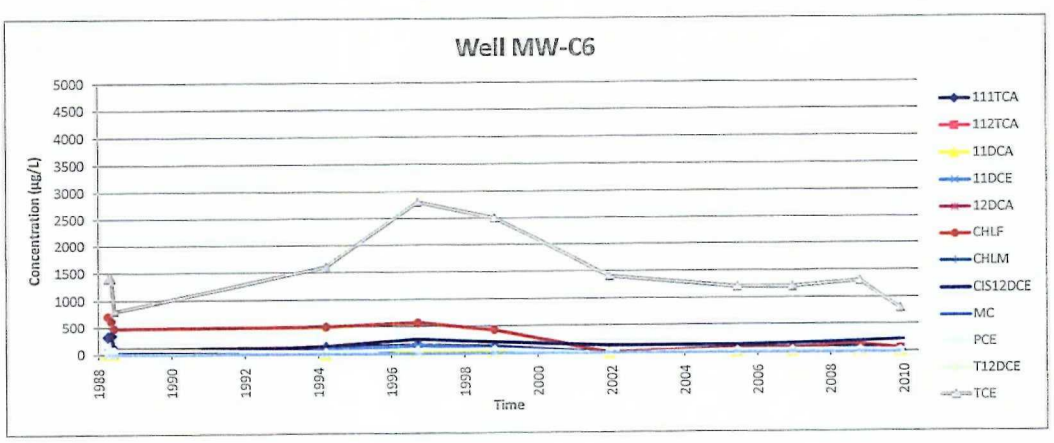


Figure B1-43
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/25/1988 | 13 | ND | 4 | 3.6 | **0.19** | 16 | ND | 6.6 | ND | 0.72 | | 48 | ND | 92.11 |
| 5/13/1988 | 62 | ND | 10 | 14 | 0.2 | 16 | ND | 22 | 4.2 | 3 | | 180 | ND | 311.4 |
| 6/2/1988 | 76 | ND | 14 | 20 | ND | 57 | ND | ND | ND | 8 | | 300 | ND | 475 |
| 3/28/1994 | 37 | ND | 16 | 22 | ND | 76 | | 24 | ND | 7.9 | | 340 | ND | 522.9 |
| 10/1/1996 | 110 | | 44 | 90 | | | | 240 | | 43 | | 2000 | ND | 2527 |
| 11/1/1998 | **100** | ND | **54** | **100** | ND | 380 | ND | 250 | ND | **56** | | 2400 | ND | 3340 |
| 12/20/2001 | **58** | ND | **52** | 180 | ND | 350 | ND | 180 | ND | ND | ND | 2000 | ND | 2820 |
| 6/16/2005 | **41** | ND | **60** | **49** | ND | 300 | ND | 260 | ND | **48** | ND | 2000 | ND | 2758 |
| 12/19/2006 | 1.2 | ND | 4.2 | 4.6 | ND | 11 | ND | 12 | ND | 2.5 | ND | 83 | ND | 118.5 |
| 11/19/2008 | ND | ND | 40 | 64 | ND | 180 | ND | 190 | ND | 31 | ND | 1200 | ND | 1705 |
| 12/4/2009 | 10 | ND | 43 | 61 | **2.1** | 140 | ND | 260 | ND | 26 | **1.5** | 1200 | ND | 1743.6 |

Values in **bold** have a "J" qualifier
ND = Not Detected

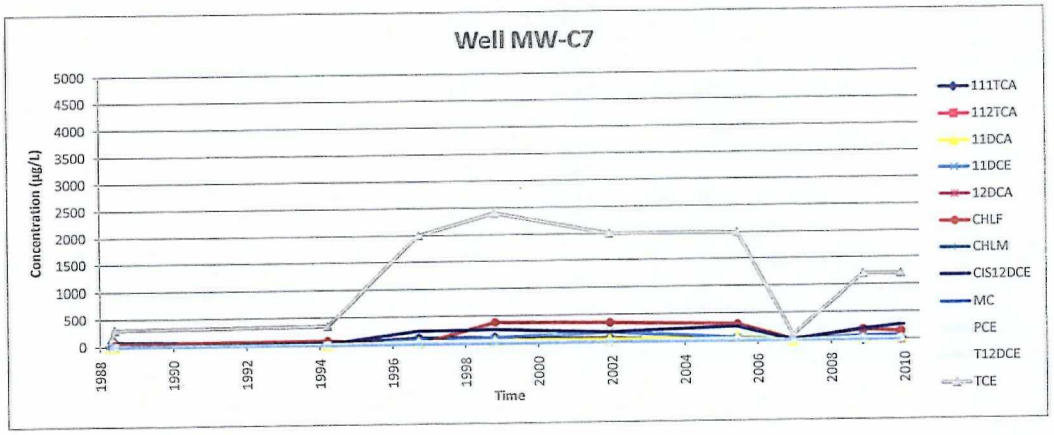







Figure B1-44
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/1/1988 | **0.71** | ND | 0.17 | ND | ND | 0.24 | ND | 0.39 | ND | ND | | 2.1 | ND | 3.61 |
| 5/10/1988 | 0.81 | ND | 0.16 | ND | ND | 0.24 | ND | 0.33 | ND | 0.03 | | 2 | ND | 3.57 |
| 6/16/1988 | ND | ND | ND | ND | ND | **1** | ND | ND | ND | ND | | 3 | ND | 4 |
| 3/29/1994 | ND | ND | ND | ND | ND | **4.1** | | ND | ND | ND | | ND | ND | 4.1 |
| 10/1/1996 | ND | | ND | ND | | | | ND | | ND | | ND | ND | |
| 11/1/1998 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | **1** | ND | 1 |
| 12/11/2001 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 6/8/2005 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | **2.4** | ND | 2.4 |
| 12/15/2006 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 10/27/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/8/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

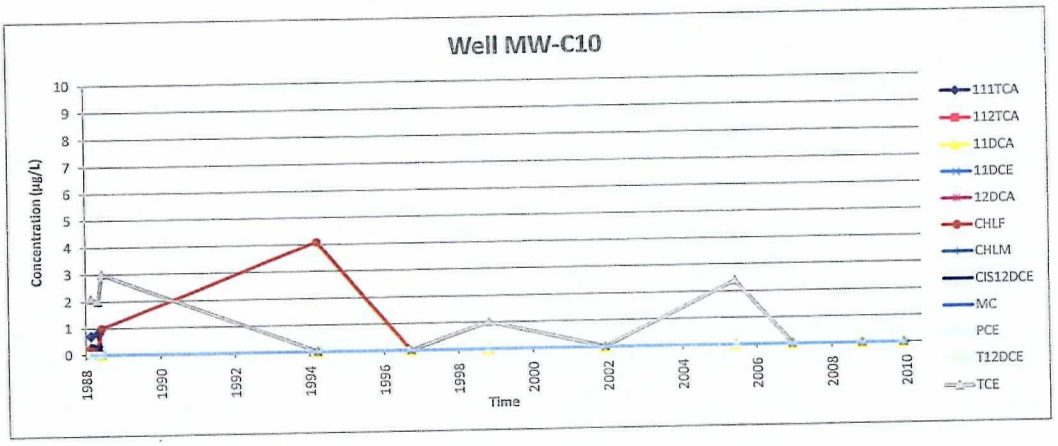


Figure B1-45
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/1/2000 | 1030 | | **61** | **130** | | 79 | | 980 | | 280 | | 4400 | ND | 6960 |
| 12/12/2001 | 750 | ND | ND | **130** | ND | ND | ND | **470** | ND | **230** | ND | 3100 | ND | 4680 |
| 9/17/2003 | 690 | ND | 74 | 150 | ND | 59 | ND | 870 | ND | 250 | ND | 4900 | ND | 6993 |
| 6/13/2005 | **490** | ND | ND | **380** | ND | ND | ND | 790 | ND | **210** | ND | 3500 | ND | 5370 |
| 12/14/2006 | 770 | ND | 110 | 160 | ND | 62 | ND | 880 | ND | 270 | ND | 3400 | ND | 5652 |
| 10/20/2008 | 670 | ND | 83 | 180 | ND | 60 | ND | 690 | ND | 300 | ND | 3400 | ND | 5383 |
| 11/20/2009 | 460 | ND | 65 | 94 | ND | 37 | ND | 570 | ND | 180 | 7 | 2100 | ND | 3513 |

Values in **bold** have a "J" qualifier
ND = Not Detected

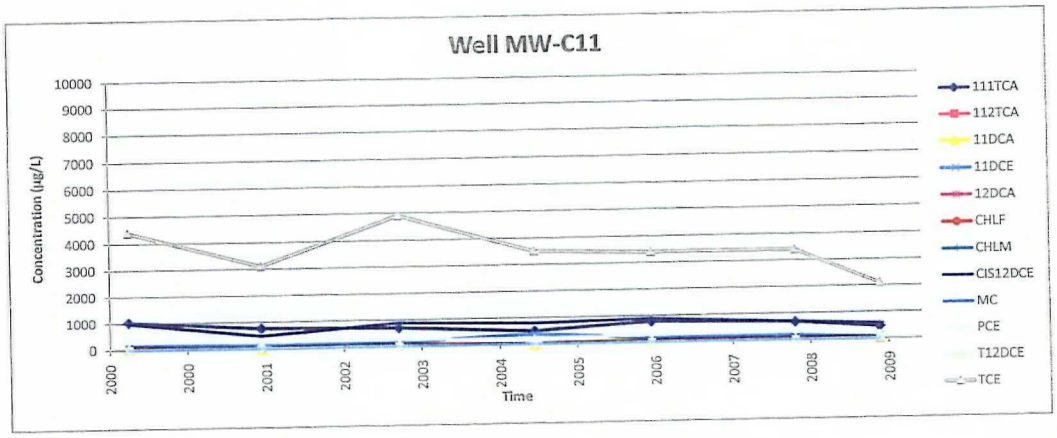







Figure B1-46
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/1/2000 | **31** | | **56** | ND | | ND | | 2500 | | 620 | | 430 | **78** | 3715 |
| 12/14/2001 | **13** | ND | **33** | ND | ND | ND | ND | 1800 | ND | 81 | ND | 70 | 240 | 2237 |
| 6/11/2004 | ND | ND | ND | **27** | ND | ND | ND | 2800 | ND | 800 | ND | 330 | 140 | 4097 |
| 6/6/2005 | ND | ND | ND | ND | ND | ND | ND | 1400 | ND | 460 | ND | 140 | **45** | 2045 |
| 12/12/2006 | ND | ND | 16 | ND | ND | ND | ND | 1100 | ND | 270 | ND | 120 | 36 | 1542 |
| 12/8/2009 | 3.2 | ND | 9.6 | **0.75** | ND | **0.23** | ND | 170 | ND | 34 | 1.7 | 20 | 27 | 266.48 |

Values in **bold** have a "J" qualifier
ND = Not Detected

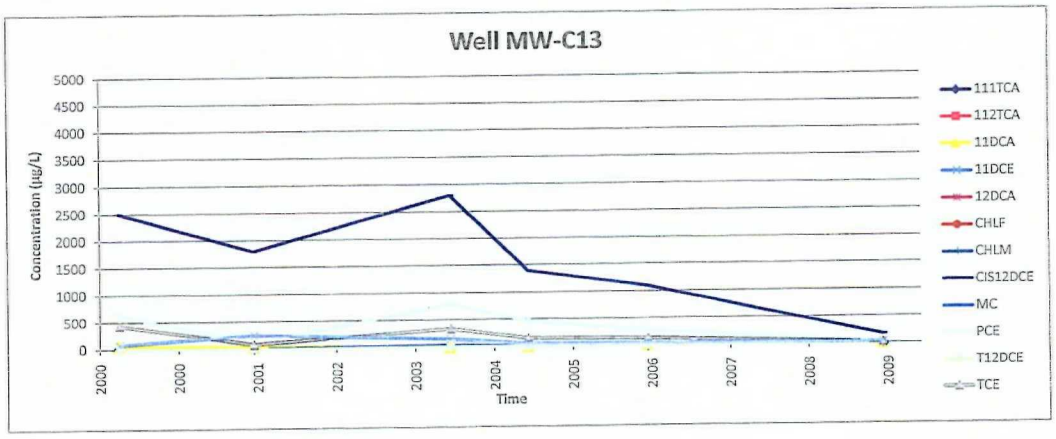


Figure B1-47
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/1/2000 | 3100 | | **480** | **320** | | **160** | | 16000 | | ND | | **170** | **540** | 20770 |
| 12/6/2001 | 930 | ND | **380** | **140** | ND | 100 | ND | 8500 | **1.2** | 25 | 10 | 33 | 2100 | 12219.2 |
| 6/10/2004 | 1100 | ND | 480 | 200 | ND | 75 | ND | 9600 | ND | **30** | **20** | 110 | **32** | 11647 |
| 6/2/2005 | 580 | ND | ND | **160** | ND | ND | ND | 5500 | ND | ND | ND | ND | ND | 6240 |
| 12/7/2006 | 700 | ND | 340 | **110** | ND | ND | ND | 3900 | ND | ND | ND | 200 | 64 | 5314 |
| 10/23/2008 | 510 | ND | 260 | 130 | ND | ND | ND | 6300 | ND | ND | ND | 94 | ND | 7294 |
| 11/30/2009 | 410 | ND | 170 | 66 | ND | 24 | ND | 4500 | ND | **15** | **5.8** | 51 | 43 | 5284.8 |

Values in **bold** have a "J" qualifier
ND = Not Detected

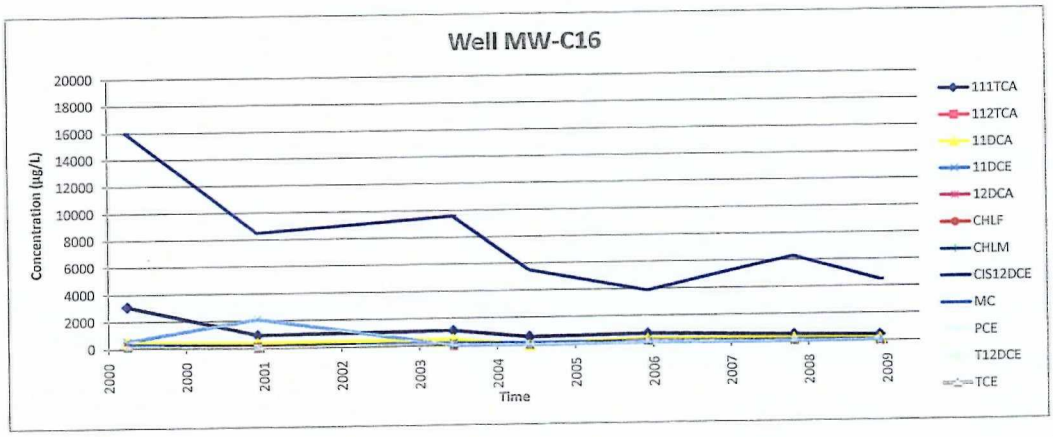







Figure B1-48
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2000 | **3** | | ND | ND | | 21 | | **7** | ND | **3** | ND | 12 | ND | 46 |
| 12/1/2005 | ND | ND | ND | ND | ND | ND | ND | **4** | **1** | **1.7** | ND | 6 | ND | 12.7 |
| 12/8/2006 | ND | ND | ND | ND | ND | ND | ND | 11 | ND | ND | ND | 6.3 | ND | 17.3 |
| 10/23/2008 | 1.1 | ND | ND | ND | ND | ND | ND | 4.9 | 1.3 | 3.2 | ND | 9.3 | ND | 19.8 |
| 11/20/2009 | ND | ND | **0.2** | ND | ND | ND | ND | 2.1 | ND | **0.53** | ND | 2.3 | ND | 5.13 |

Values in **bold** have a "J" qualifier
ND = Not Detected

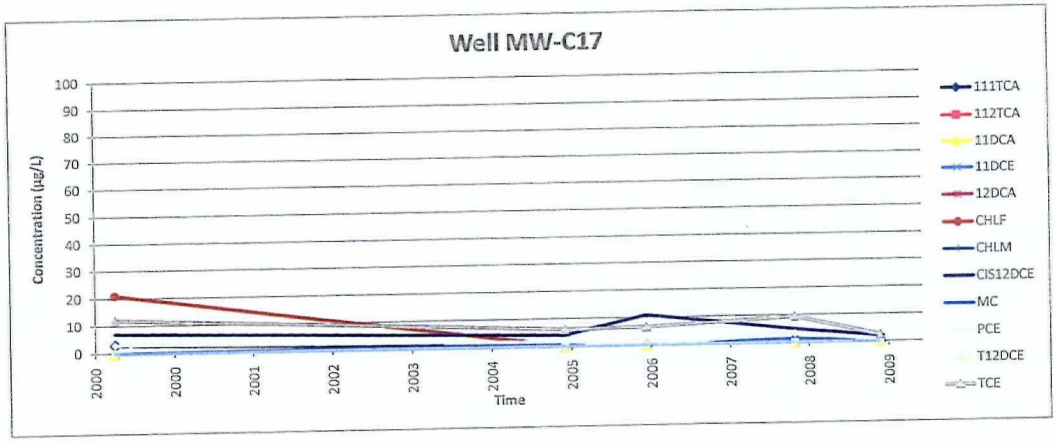


Figure B1-49
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2000 | 14 | | 68 | 3 | | 13 | | 200 | ND | 7 | | 210 | ND | 515 |
| 6/10/2005 | 8.2 | ND | 65 | 6.6 | ND | 5.2 | ND | 170 | ND | 19 | 3.6 | 290 | 9.8 | 577.4 |
| 12/7/2006 | 10 | ND | 80 | ND | ND | ND | ND | 120 | ND | 19 | ND | 260 | ND | 489 |
| 10/23/2008 | 6.2 | ND | 91 | 5.8 | ND | ND | ND | 150 | ND | 21 | ND | 280 | 9.9 | 563.9 |
| 12/2/2009 | 8.3 | ND | 90 | 6.2 | ND | 2 | ND | 100 | 0.28 | 18 | 5.1 | 230 | 3.6 | 463.48 |

Values in **bold** have a "J" qualifier
ND = Not Detected

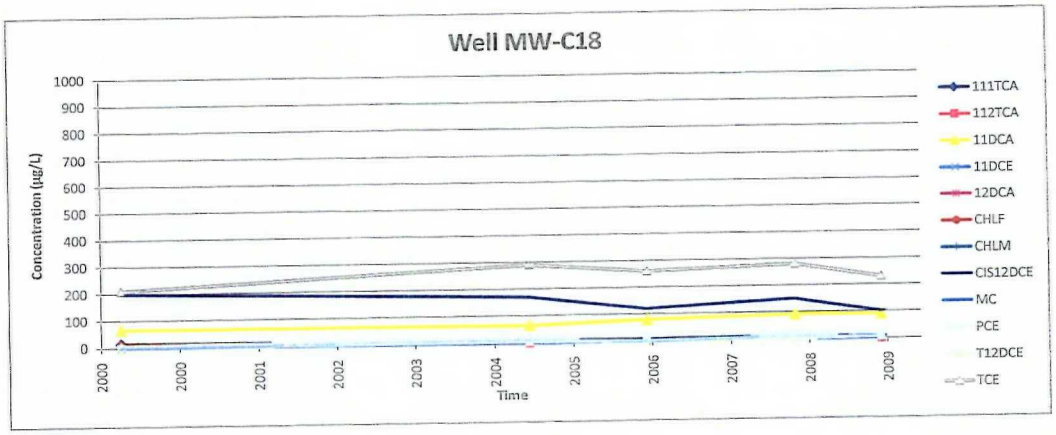







Figure B1-50
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/29/2005 | 390 | ND | 48 | 84 | ND | 170 | ND | 650 | ND | 700 | ND | 4500 | ND | 6542 |
| 12/1/2005 | 770 | ND | 53 | 140 | ND | 260 | ND | 1700 | ND | 870 | ND | 4800 | 56 | 8649 |
| 12/13/2006 | 410 | ND | ND | 93 | ND | 170 | ND | 1200 | ND | 600 | ND | 3300 | ND | 5773 |
| 10/10/2008 | 570 | ND | ND | 160 | ND | 140 | ND | 2700 | ND | 470 | ND | 3100 | 390 | 7530 |
| 6/22/2009 | 120 | ND | 14 | 36 | ND | 30 | ND | 230 | 57 | 190 | ND | 1100 | 16 | 1793 |
| 11/25/2009 | 87 | ND | 7.8 | 25 | ND | 17 | ND | 130 | ND | 170 | ND | 920 | 5.7 | 1362.5 |

Values in **bold** have a "J" qualifier
ND = Not Detected

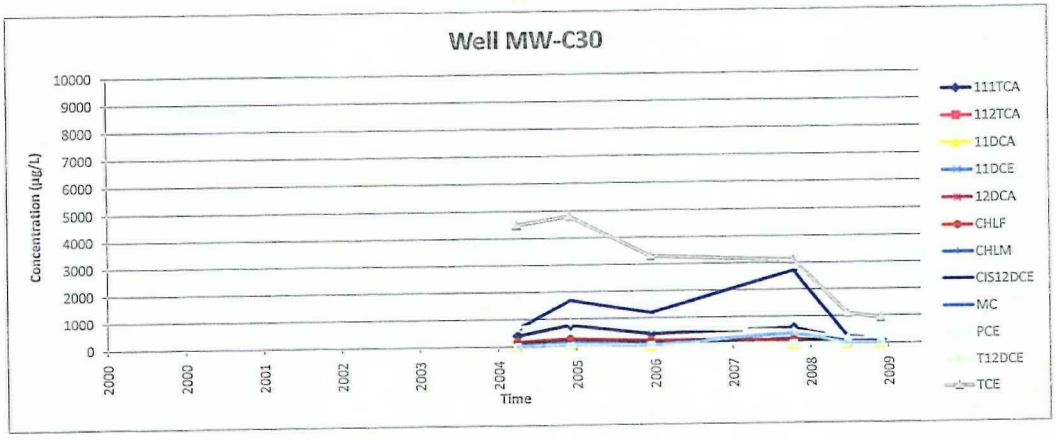


Figure B1-51
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/29/2005 | 11000 | **23** | 8800 | 270 | 230 | 360 | ND | 3600 | 4100 | 1400 | ND | 86000 | 51 | 115839 |
| 12/1/2005 | 4000 | **14** | 6300 | **510** | 150 | 180 | ND | 42000 | 3400 | 85 | ND | **1100** | **34** | 57773 |
| 3/24/2006 | 4000 | ND | 4200 | 330 | 200 | 160 | ND | 50000 | 2500 | 210 | ND | 550 | 51 | 62201 |
| 12/12/2006 | 820 | ND | 1300 | **66** | ND | ND | ND | 6500 | ND | ND | ND | 670 | 61 | 9417 |
| 10/20/2008 | 410 | ND | 340 | 86 | ND | ND | ND | 2500 | ND | 82 | ND | 210 | 330 | 3958 |
| 12/1/2009 | 70 | ND | 58 | 8 | 1.6 | 1 | ND | 350 | 1.6 | 31 | **0.61** | 53 | 69 | 643.81 |

Values in **bold** have a "J" qualifier
ND = Not Detected

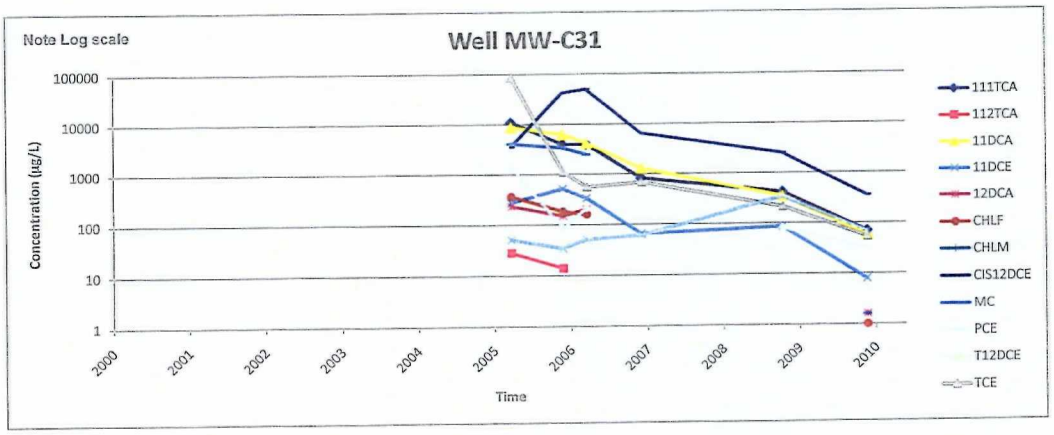







Figure B1-52
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/6/2005 | 87000 | ND | **1800** | 16000 | ND | 17000 | ND | 61000 | 44000 | 14000 | ND | 260000 | ND | 500800 |
| 12/1/2005 | 75000 | **190** | **2500** | **5700** | **150** | 16000 | ND | 51000 | 73000 | **9500** | **36** | 230000 | **82** | 463158 |
| 12/11/2006 | 140000 | ND | 5200 | **9600** | ND | 35000 | ND | 26000 | 140000 | 12000 | ND | 500000 | ND | 867800 |
| 10/20/2008 | 120000 | 210 | 3700 | 11000 | 210 | 26000 | ND | 17000 | 110000 | 12000 | ND | 450000 | ND | 750120 |
| 11/23/2009 | 87000 | ND | 2600 | 6100 | ND | 20000 | ND | 11000 | 79000 | 9600 | ND | 310000 | ND | 525300 |

Values in **bold** have a "J" qualifier
ND = Not Detected

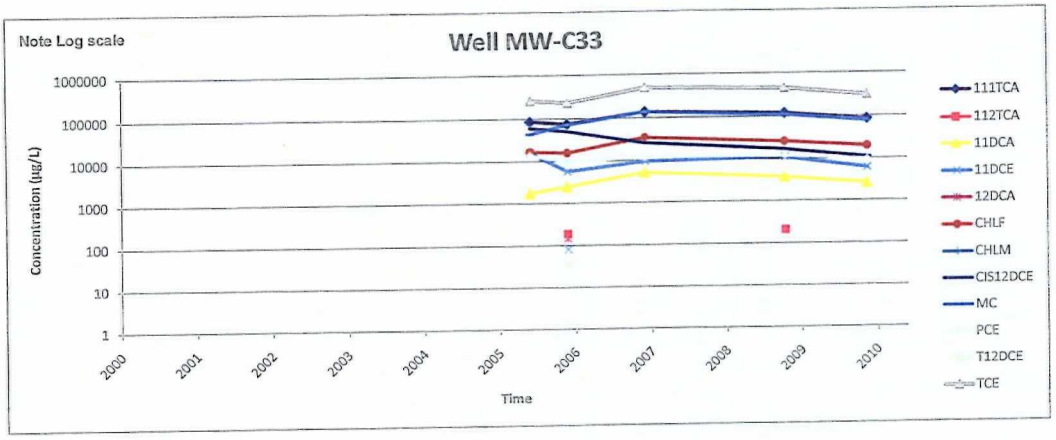


Figure B1-53
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/6/2005 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/11/2006 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 10/21/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 11/23/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

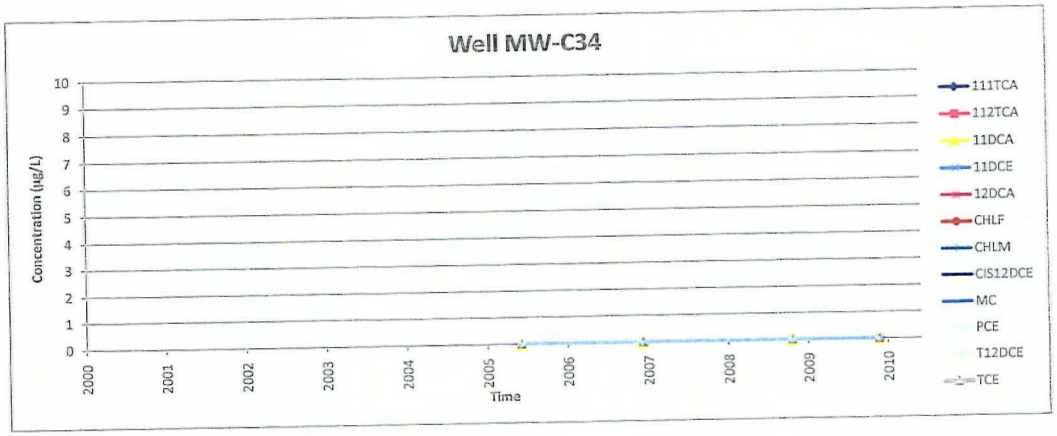







Figure B1-54
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/7/2005 | 170 | ND | 210 | **20** | ND | ND | ND | ND | ND | ND | **5.3** | ND | **17** | 422.8 |
| 12/1/2005 | **3** | ND | 41 | ND | ND | ND | ND | 6 | ND | ND | ND | **1** | 6 | 57 |
| 12/11/2006 | 20 | ND | 180 | ND | ND | ND | ND | 5.4 | ND | 1.1 | 2.7 | 1.3 | 4.9 | 215.4 |
| 10/20/2008 | ND | ND | ND | ND | ND | ND | ND | 1.1 | ND | ND | ND | ND | ND | 1.1 |
| 11/25/2009 | ND | ND | 1.7 | ND | ND | ND | ND | **0.59** | **0.5** | ND | ND | **0.76** | ND | 3.55 |

Values in **bold** have a "J" qualifier
ND = Not Detected

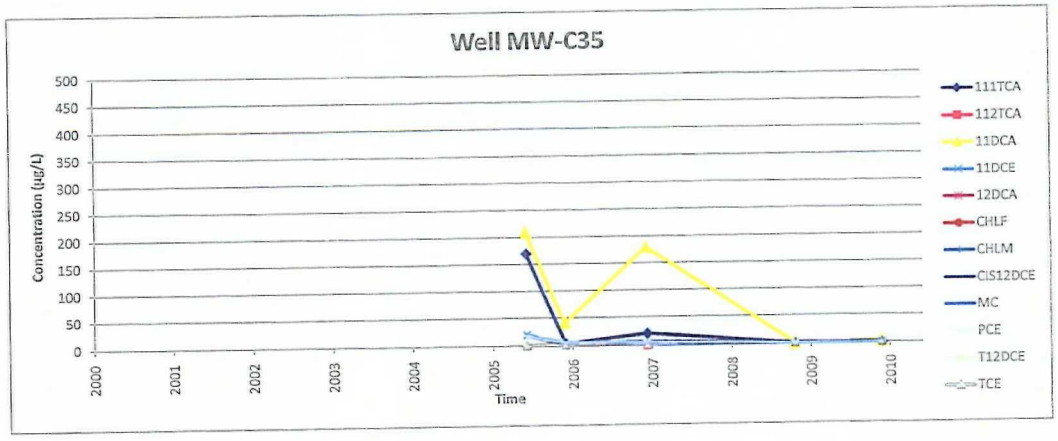


Figure B1-55
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/2/2005 | 2200 | ND | **400** | **300** | ND | **38** | ND | 9200 | ND | **30** | ND | 880 | **31** | 13079 |
| 3/24/2006 | 520 | ND | 120 | ND | ND | ND | ND | 2900 | ND | ND | ND | **49** | **20** | 3609 |
| 12/12/2006 | 1300 | ND | 300 | ND | ND | ND | ND | 6500 | ND | ND | ND | ND | ND | 8100 |
| 10/20/2008 | 430 | ND | 110 | 110 | ND | ND | ND | 2700 | ND | ND | ND | ND | ND | 3350 |
| 12/1/2009 | 1300 | ND | 260 | 84 | ND | **20** | ND | 6200 | ND | **14** | **9.2** | 55 | 64 | 8006.2 |

Values in **bold** have a "J" qualifier
ND = Not Detected

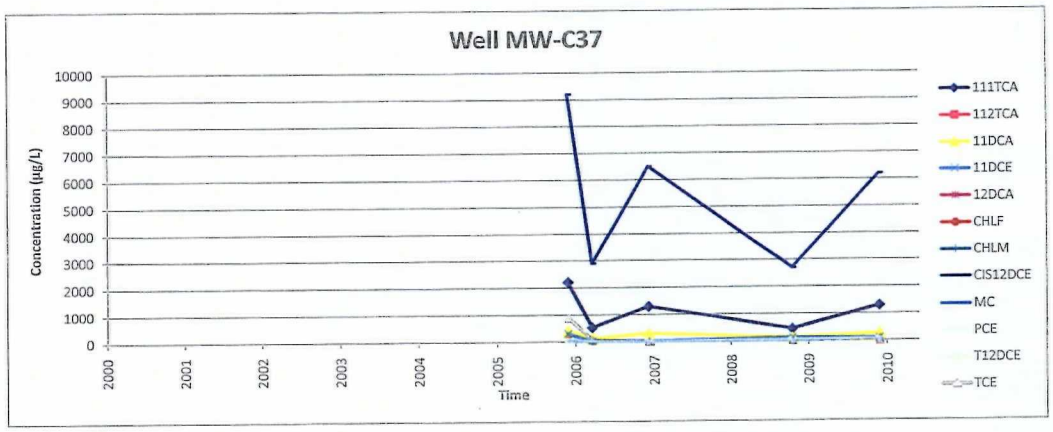







Figure B1-56
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/1/2005 | 69 | ND | 61 | ND | ND | ND | ND | 770 | **10** | **17** | ND | 210 | ND | 1137 |
| 12/12/2006 | 29 | ND | 33 | ND | ND | ND | ND | 520 | ND | ND | ND | 88 | ND | 670 |
| 11/4/2008 | 12 | ND | 16 | ND | ND | ND | ND | 230 | ND | ND | ND | 45 | ND | 303 |
| 12/1/2009 | 8.8 | ND | 12 | 2.1 | **0.37** | 1.2 | ND | 180 | ND | 1.7 | **0.41** | 33 | ND | 239.58 |

Values in **bold** have a "J" qualifier
ND = Not Detected

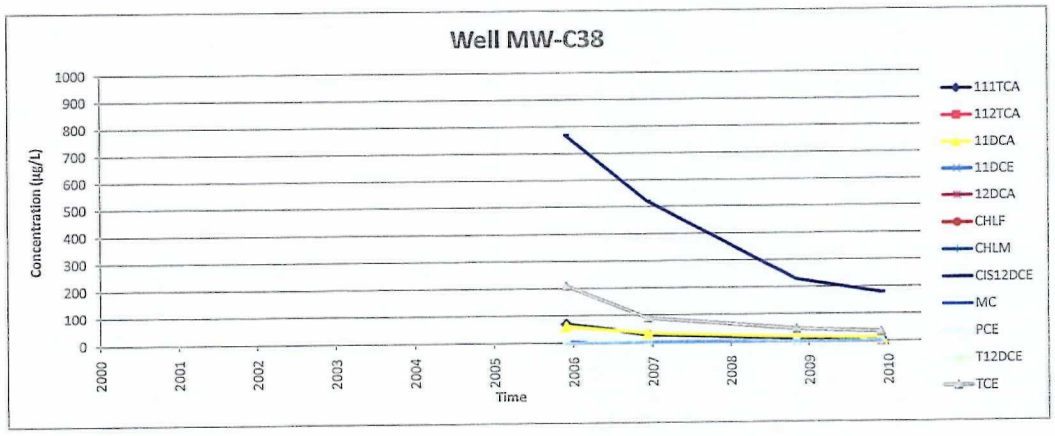


Figure B1-57
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/13/2006 | 3800 | ND | 480 | 170 | ND | 750 | ND | 160 | 1300 | 120 | ND | 12000 | ND | 18780 |
| 10/21/2008 | 3000 | ND | 810 | 400 | ND | 790 | ND | 1100 | 2100 | ND | ND | 13000 | ND | 21200 |
| 12/4/2009 | 1700 | ND | 740 | 210 | ND | 530 | ND | 810 | 1200 | 45 | ND | 9200 | ND | 14435 |

Values in **bold** have a "J" qualifier
ND = Not Detected

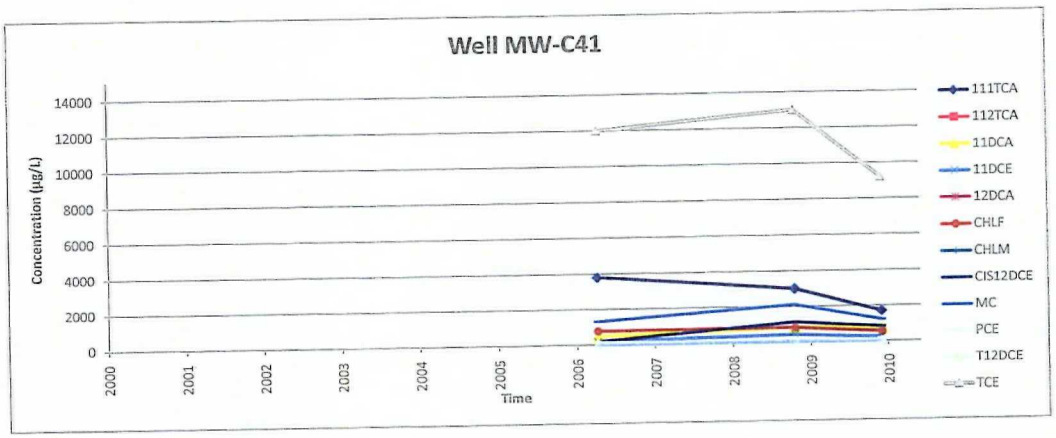







Figure B1-58
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/13/2006 | 2000 | ND | 160 | 360 | ND | 160 | ND | 5400 | ND | 250 | ND | 4900 | 79 | 13309 |
| 10/21/2008 | 1300 | ND | 110 | 380 | ND | 95 | ND | 4200 | ND | 100 | ND | 2000 | 77 | 8262 |
| 12/7/2009 | 1300 | **3.2** | 84 | 260 | ND | 120 | ND | 3900 | ND | 150 | **7.9** | 2600 | 49 | 8474.1 |

Values in **bold** have a "J" qualifier
ND = Not Detected

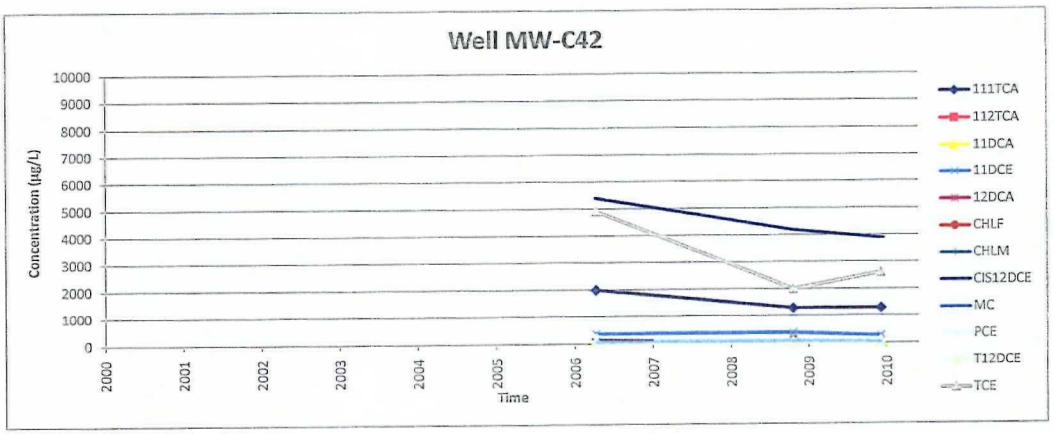


Figure B1-59
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/26/2007 | 1100 | ND | 90 | 310 | 2.3 | 490 | ND | 790 | ND | 440 | 1.4 | 6800 | ND | 10023.7 |
| 10/15/2008 | 1400 | ND | 100 | 140 | ND | 270 | ND | 820 | ND | 410 | ND | 5700 | ND | 8840 |
| 11/20/2009 | 650 | ND | 53 | 150 | ND | 120 | ND | 440 | ND | 270 | 1.3 | 3100 | ND | 4784.8 |

Values in **bold** have a "J" qualifier
ND = Not Detected

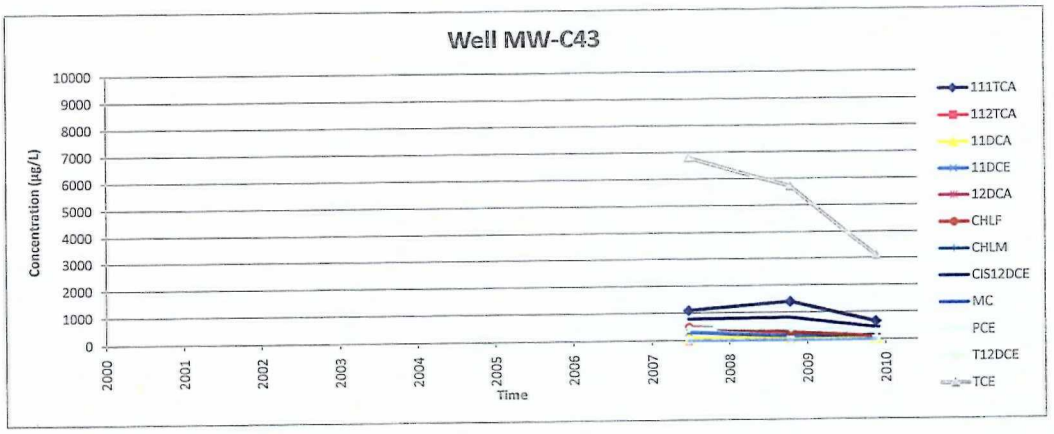







Figure B1-60
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/6/2007 | 500 | ND | 55 | 200 | ND | 460 | ND | 360 | ND | 250 | ND | 3300 | ND | 5125 |
| 10/14/2008 | 500 | ND | 57 | 95 | ND | 360 | ND | 380 | ND | 220 | ND | 3300 | ND | 4912 |
| 12/2/2009 | 360 | ND | 46 | 150 | ND | 220 | ND | 330 | ND | 160 | ND | 2700 | ND | 3966 |

Values in **bold** have a "J" qualifier
ND = Not Detected

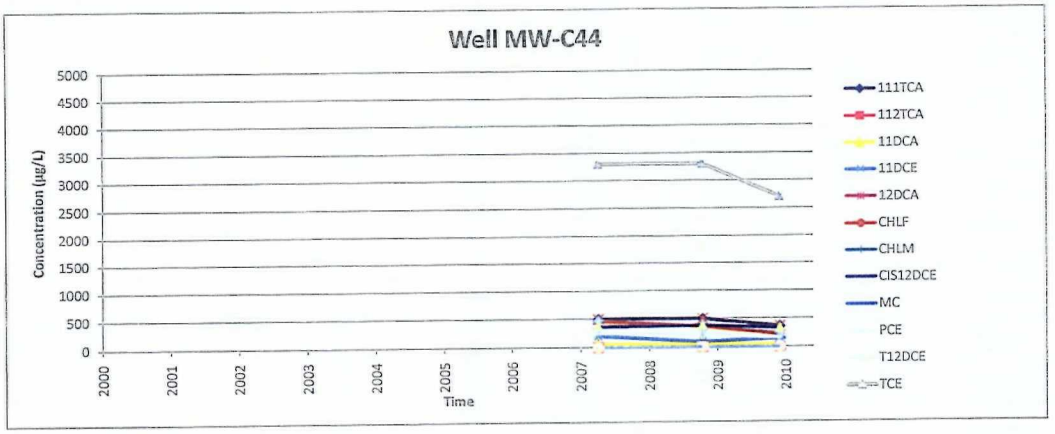


Figure B1-61
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/6/2007 | 560 | ND | 55 | 160 | ND | 270 | ND | 400 | ND | 570 | ND | 5700 | ND | 7715 |
| 10/13/2008 | 720 | ND | 57 | 100 | ND | 300 | ND | 610 | ND | 740 | ND | 7100 | 18 | 9645 |
| 6/24/2009 | 730 | ND | 92 | 200 | ND | 290 | ND | 640 | ND | 500 | ND | 4000 | ND | 6452 |
| 11/20/2009 | 480 | ND | 53 | 150 | ND | 160 | ND | 380 | ND | 310 | ND | 3600 | ND | 5133 |

Values in **bold** have a "J" qualifier
ND = Not Detected

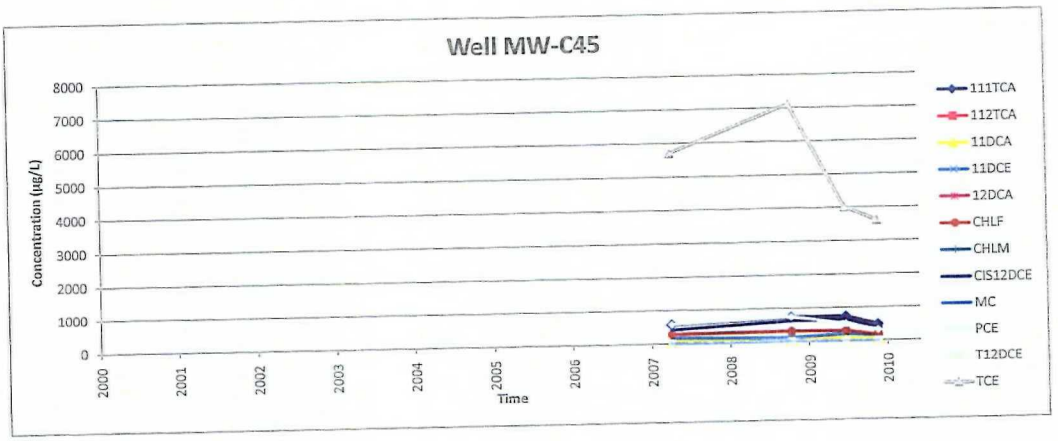







Figure B1-62
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/6/2007 | 940 | ND | 57 | 210 | ND | 430 | ND | 80 | ND | 1600 | ND | 11000 | ND | 14317 |
| 10/13/2008 | 730 | ND | 51 | 250 | ND | 440 | ND | 100 | ND | 1300 | ND | 11000 | ND | 13871 |
| 6/24/2009 | 51 | ND | ND | 28 | ND | 45 | ND | 14 | ND | 130 | ND | 1100 | ND | 1368 |
| 11/24/2009 | 39 | ND | 6.7 | 27 | ND | 51 | ND | 11 | ND | 100 | ND | 970 | ND | 1204.7 |

Values in **bold** have a "J" qualifier
ND = Not Detected

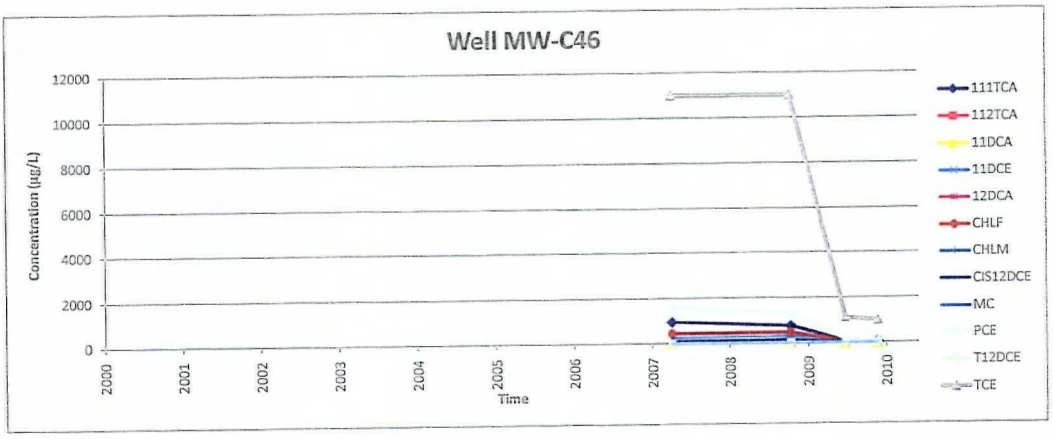


Figure B1-63
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/21/2008 | 880 | ND | 160 | 940 | ND | 290 | ND | 150 | ND | 680 | ND | 22000 | ND | 25100 |
| 3/24/2010 | 230 | ND | 17 | 120 | ND | 81 | ND | 12 | ND | 69 | ND | 2300 | ND | 2829 |

Values in **bold** have a "J" qualifier
ND = Not Detected

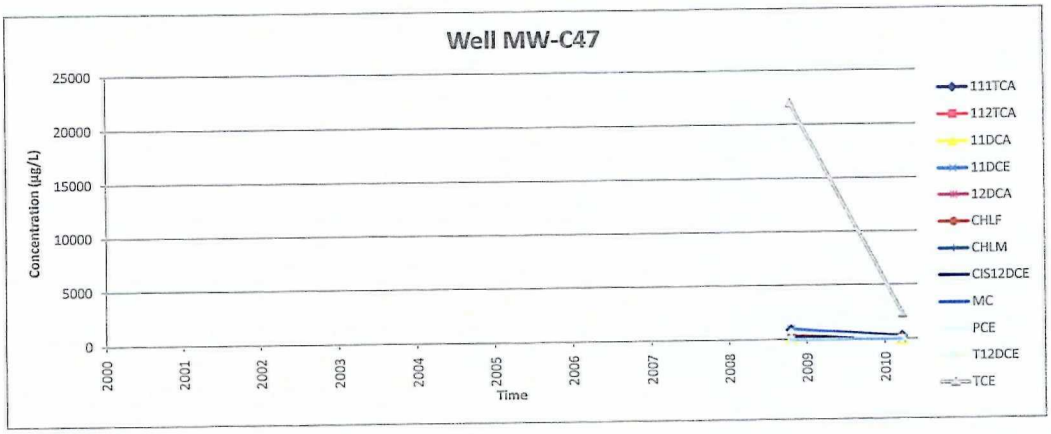







Figure B1-64
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/22/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |
| 12/3/2009 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

Values in **bold** have a "J" qualifier
ND = Not Detected

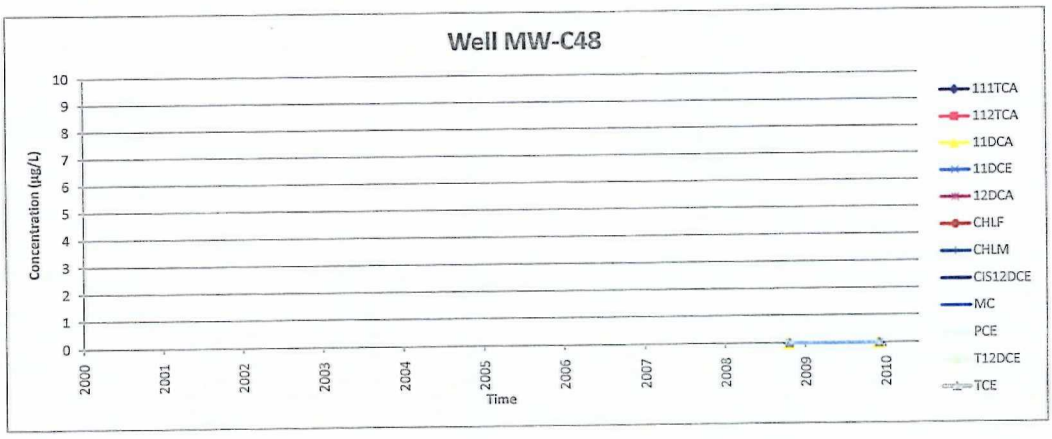


Figure B1-65
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/13/2008 | 220 | ND | 110 | 120 | ND | 160 | ND | 1700 | ND | 220 | ND | 2700 | 94 | 5324 |
| 6/24/2009 | 230 | ND | 72 | 91 | ND | 210 | ND | 1600 | ND | 190 | ND | 2600 | 44 | 5037 |
| 12/1/2009 | 200 | **0.76** | 110 | 66 | ND | 91 | ND | 1400 | ND | 180 | **1.9** | 1600 | 110 | 3759.66 |

Values in **bold** have a "J" qualifier
ND = Not Detected

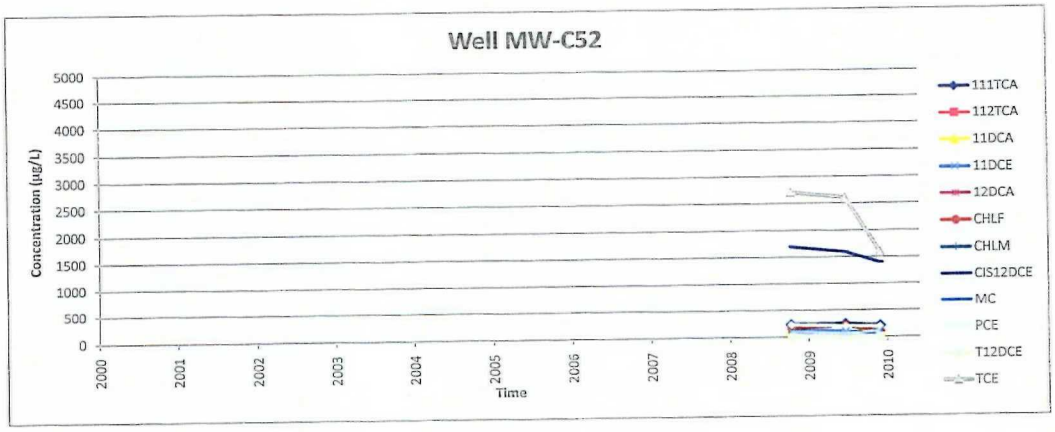







Figure B1-66
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/1/1996 | 1400 | | **84** | **180** | | | | 2600 | | **130** | | 8000 | ND | 12394 |
| 11/1/1998 | 1500 | ND | ND | **180** | ND | ND | ND | 3350 | ND | **220** | | 10000 | ND | 15250 |
| 12/11/2001 | 1600 | ND | ND | **180** | ND | ND | ND | 2600 | ND | **110** | ND | 5900 | ND | 10390 |
| 6/14/2005 | 2000 | ND | 180 | 580 | ND | ND | ND | 3600 | ND | **100** | ND | 3100 | 300 | 9860 |
| 12/18/2006 | 1300 | ND | 650 | 200 | ND | 16 | | 2900 | ND | 100 | 15 | 2000 | 350 | 7531 |
| 10/21/2008 | 1700 | ND | 300 | 270 | ND | ND | ND | 2300 | ND | 64 | ND | 2900 | 230 | 7764 |
| 12/7/2009 | 16 | ND | 3 | 1.6 | ND | ND | ND | 17 | ND | **0.46** | ND | 13 | 1.2 | 52.26 |

Values in **bold** have a "J" qualifier
ND = Not Detected

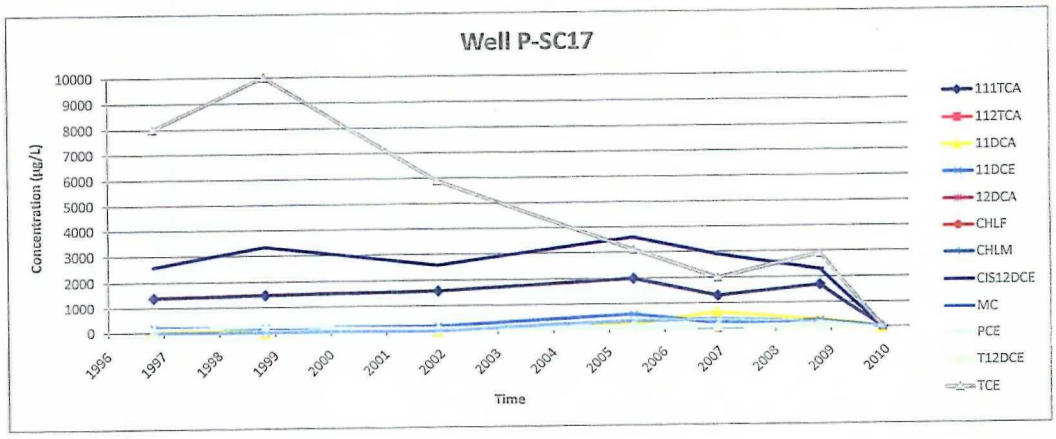


Figure B1-67
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/6/1994 | 1300 | 6.3 | 120 | 200 | ND | 80 | | 2600 | ND | 240 | | 5300 | 110 | 9956.3 |
| 10/1/1996 | 630 | ND | 63 | 130 | ND | 63 | | 1400 | ND | **160** | | 3600 | 72 | 6118 |
| 11/1/1998 | 1200 | ND | **110** | **130** | ND | **36** | ND | 2600 | ND | **250** | | 4100 | ND | 8476 |
| 12/18/2001 | 1600 | ND | 150 | 430 | ND | **26** | ND | 2900 | ND | **110** | ND | 3800 | 540 | 9556 |
| 6/14/2005 | 500 | ND | **24** | **50** | ND | **23** | ND | 1100 | ND | 110 | ND | 1700 | **30** | 3542 |
| 12/18/2006 | 220 | ND | 39 | 54 | ND | ND | | 610 | ND | 66 | ND | 890 | 25 | 1904 |
| 12/4/2009 | 270 | ND | 81 | 60 | **1.1** | 5.1 | ND | 590 | ND | 54 | 2.8 | 820 | 64 | 1948 |

Values in **bold** have a "J" qualifier
ND = Not Detected

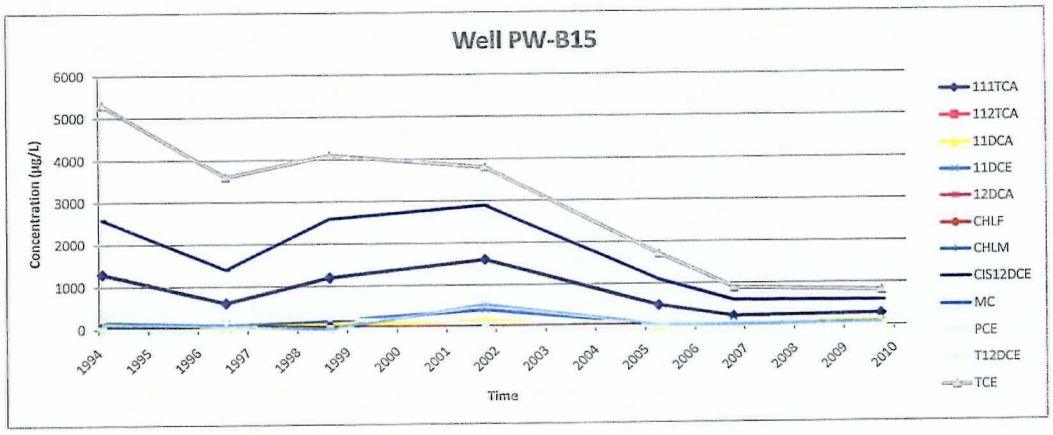







Figure B1-68
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/6/1994 | 2000 | **8.4** | 120 | 240 | **4.4** | 130 | | 3300 | **1.2** | 240 | | 8600 | 120 | 14764 |
| 11/1/1996 | 1800 | ND | **110** | **270** | ND | **110** | | 3900 | ND | **200** | | 9900 | ND | 16290 |
| 11/5/1998 | 1500 | ND | **130** | **170** | ND | **91** | ND | 3870 | ND | **210** | ND | 8300 | ND | 14271 |
| 12/18/2001 | 1500 | ND | **160** | **380** | ND | ND | ND | 3400 | ND | **230** | ND | 7900 | ND | 13570 |
| 6/14/2005 | 1300 | ND | ND | **740** | ND | ND | ND | 3000 | ND | ND | ND | 6100 | **130** | 11270 |
| 12/18/2006 | 1400 | ND | 940 | 300 | ND | ND | ND | 2600 | ND | ND | ND | 5200 | 270 | 10710 |
| 10/23/2008 | 1200 | ND | 210 | 270 | ND | ND | ND | 2800 | ND | 93 | ND | 7300 | 76 | 11949 |
| 12/4/2009 | 1300 | ND | 200 | 220 | ND | 33 | ND | 2000 | ND | 57 | **6.2** | 5100 | 78 | 8994.2 |

Values in **bold** have a "J" qualifier
ND = Not Detected

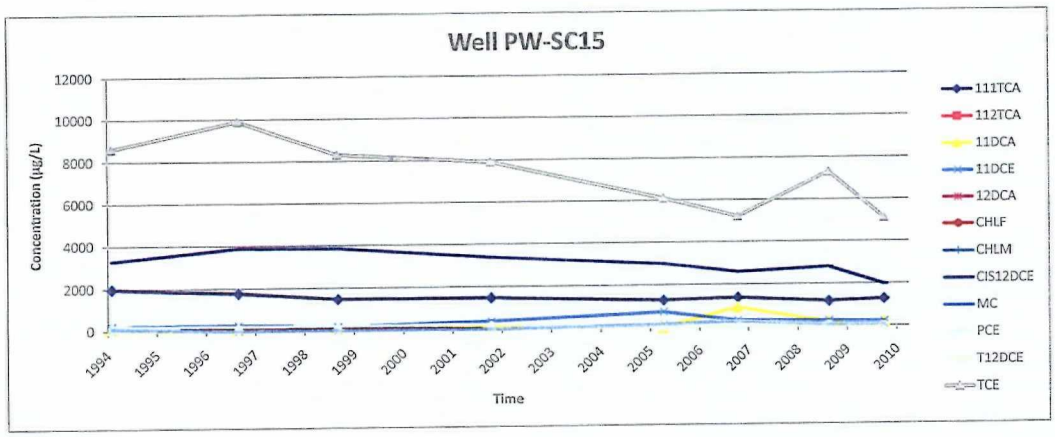
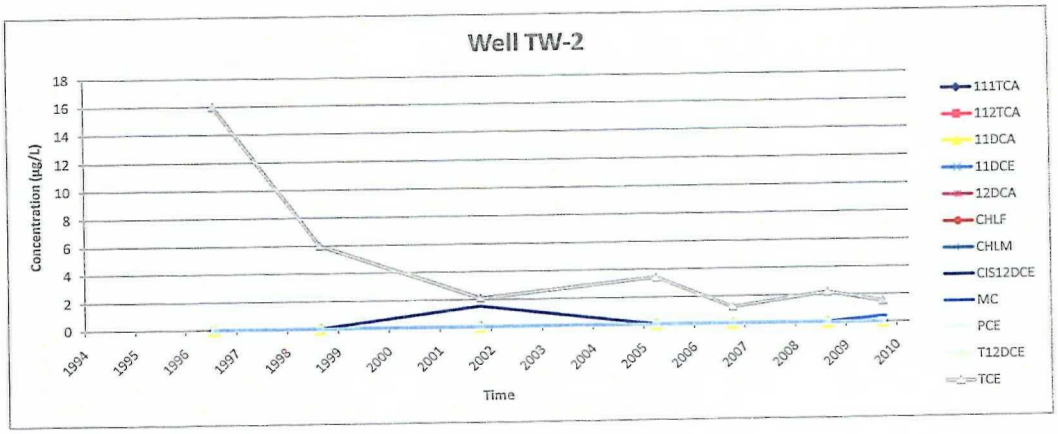


Figure B1-69
Concentration (mass) vs. Time

| Date | 111TCA | 112TCA | 11DCA | 11DCE | 12DCA | CHLF | CHLM | CIS12DCE | MC | PCE | T12DCE | TCE | VC | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/1/1996 | ND | | ND | ND | | | | ND | | ND | | 16 | ND | 16 |
| 11/1/1998 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | 6 | ND | 6 |
| 12/19/2001 | ND | ND | ND | ND | ND | ND | ND | **1.5** | ND | ND | ND | **2.1** | ND | 3.6 |
| 6/6/2005 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | **3.4** | ND | 3.4 |
| 12/8/2006 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1.2 | ND | 1.2 |
| 10/21/2008 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2.2 | ND | 2.2 |
| 11/25/2009 | ND | ND | ND | ND | ND | ND | ND | ND | **0.39** | ND | ND | 1.5 | ND | 1.89 |

Values in **bold** have a "J" qualifier
ND = Not Detected



# APPENDIX C

# MANN-KENDALL STATISTICAL TEST RESULTS

Table C-1
Results of Mann-Kendall Statistical Analysis
2009 Area Wide Groundwater Evaluation
Caldwell Trucking Superfund Site

| | | | 1,1,1-Trichloroethane | | | | | | 1,1,2-Trichloroethane | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well I.D. | Screened Zone | Location | S | n | p | V(S) | Z | Accept Hypothesis | S | n | p | V(S) | Z | Accept Hypothesis |
| MW-A10 | A | A zone | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-A11 | A | A zone | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-A3 | A | A zone | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-A4 | A | A zone | -24 | 9 | 0.0063 | NA, SS | NA, SS | H2 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-A9 | A | A zone | -6 | 7 | 0.2381 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-D1 | D | D-zone | -7 | 5 | 0.0791 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 |
| MW-D10 | D | D-zone | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| MW-D3 | D | D-zone | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 |
| MW-D5 | D | D-zone | -10 | 5 | 0.0083 | NA, SS | NA, SS | H2 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 |
| MW-D6 | D | D-zone | -8 | 5 | 0.042 | NA, SS | NA, SS | H2 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 |
| MW-D7 | D | D-zone | -6 | 4 | 0.042 | NA, SS | NA, SS | H2 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| GH-2 | B | General Hose | -38 | 10 | NA, LS | 125 | -3.130495168 | H2 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| GH-7 | B | General Hose | -9 | 6 | 0.068 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| GH-8 | B | General Hose | 9 | 5 | 0.0211 | NA, SS | NA, SS | H1 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 |
| MW-1 | C | Lateral Extent | -6 | 9 | 0.306 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-1A | B | Lateral Extent | 12 | 7 | 0.0479 | NA, SS | NA, SS | H1 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-B10 | B | Lateral Extent | -8 | 9 | 0.238 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-B5 | B | Lateral Extent | -7 | 7 | 0.191 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-C10 | C | Lateral Extent | -8 | 9 | 0.238 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-C5 | C | Lateral Extent | -16 | 8 | 0.016 | NA, SS | NA, SS | H2 | -6 | 7 | 0.2381 | NA, SS | NA, SS | H0 |
| MW-B12 | B | North Lagoon | -3 | 7 | 0.368 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-C13 | C | North Lagoon | -8 | 6 | 0.1862 | NA, SS | NA, SS | H0 | 0 | 6 | 0.592 | NA, SS | NA, SS | H0 |
| TW-2 | C | North Lagoon | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| CTBR | C | Plume Core | -19 | 13 | NA, LS | 268.6666667 | -1.098159977 | H0 | 0 | 13 | NA, LS | 268.6666667 | 0 | H0 |
| CTMW-1 | B | Plume Core | -15 | 10 | NA, LS | 125 | -1.252198067 | H0 | 0 | 10 | NA, LS | 125 | 0 | H0 |
| MW-B1 | B | Plume Core | -28 | 9 | 0.0029 | NA, SS | NA, SS | H2 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-B4 | B | Plume Core | -21 | 9 | -0.04642 | NA, SS | NA, SS | H2 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-B6 | B | Plume Core | -4 | 9 | 0.381 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-BL1 | B | Plume Core | -27 | 10 | NA, LS | 125 | -2.325510697 | H2 | 0 | 10 | NA, LS | 125 | 0 | H0 |
| MW-BL2 | B | Plume Core | -32 | 10 | NA, LS | 125 | -2.772724292 | H2 | -5 | 10 | NA, LS | 125 | -0.357770876 | H0 |
| MW-C11 | C | Plume Core | -13 | 7 | 0.035 | NA, SS | NA, SS | H2 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-C6 | C | Plume Core | -24 | 9 | 0.0063 | NA, SS | NA, SS | H2 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| P-SC16 | C | Plume Core | -15 | 6 | 0.0014 | NA, SS | NA, SS | H2 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| P-SC17 | C | Plume Core | -1 | 7 | 0.5 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| PW-B15 | B | Plume Core | -11 | 7 | 0.068 | NA, SS | NA, SS | H0 | -6 | 7 | 0.2381 | NA, SS | NA, SS | H0 |
| PW-SC15 | C | Plume Core | -22 | 8 | 0.0028 | NA, SS | NA, SS | H2 | -7 | 8 | 0.2306 | NA, SS | NA, SS | H0 |
| MWB-1(SeepArea) | B | Pre-Seep Area | -10 | 6 | 0.0462 | NA, SS | NA, SS | H2 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MWB-2(SeepArea) | B | Pre-Seep Area | -9 | 6 | 0.068 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MWC-1(SeepArea) | C | Pre-Seep Area | -9 | 7 | 0.119 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MWC-4(SeepArea) | C | Pre-Seep Area | -7 | 6 | 0.136 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MWC-5(SeepArea) | C | Pre-Seep Area | -6 | 6 | 0.1862 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-B16 | B | Source Area | -25 | 10 | NA, LS | 125 | -2.146825258 | H2 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-C16 | C | Source Area | -17 | 7 | 0.0054 | NA, SS | NA, SS | H2 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-B3 | B | Toe of Plume | -21 | 9 | -0.04642 | NA, SS | NA, SS | H2 | -6 | 9 | 0.238 | NA, SS | NA, SS | H0 |
| MW-B7 | B | Toe of Plume | 17 | 9 | 0.01734 | NA, SS | NA, SS | H1 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-B9 | B | Toe of Plume | -8 | 9 | 0.238 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-C3 | C | Toe of Plume | -20 | 9 | 0.022 | NA, SS | NA, SS | H2 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-C7 | C | Toe of Plume | -20 | 9 | 0.022 | NA, SS | NA, SS | H2 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-4A | B | Up-gradient | -20 | 9 | 0.022 | NA, SS | NA, SS | H2 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |

ID = Insufficient Data
LS = Large Sample
NA = Not Applicable
SS = Small Sample

H0 Null hypothesis, no trend
H1 Increasing trend
H2 Decreasing trend
NA Not Applicable for analysis

Table C-1
Results of Mann-Kendall Statistical Analysis
2009 Area Wide Groundwater Evaluation
Caldwell Trucking Superfund Site

| Well I.D. | 1,1-Dichloroethane | | | | | | 1,1-Dichloroethene | | | | | | 1,2-Dichloroethane | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | n | p | V(S) | Z | Accept Hypothesis | S | n | p | V(S) | Z | Accept Hypothesis | S | n | p | V(S) | Z | Accept Hypothesis |
| MW-A10 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-A11 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-A3 | 2 | 8 | 0.452 | NA, SS | NA, SS | H0 | -7 | 8 | 0.2306 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-A4 | 14 | 9 | 0.09 | NA, SS | NA, SS | H0 | 16 | 9 | 0.06 | NA, SS | NA, SS | H0 | -8 | 9 | 0.238 | NA, SS | NA, SS | H0 |
| MW-A9 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-D1 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 |
| MW-D10 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| MW-D3 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -3 | 5 | 0.3151 | NA, SS | NA, SS | H0 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 |
| MW-D5 | -1 | 5 | 0.4931 | NA, SS | NA, SS | H0 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | 0 | 3 | ID | NA, SS | NA, SS | NA |
| MW-D6 | -7 | 5 | 0.0791 | NA, SS | NA, SS | H0 | -6 | 5 | 0.117 | NA, SS | NA, SS | H0 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 |
| MW-D7 | -2 | 4 | 0.375 | NA, SS | NA, SS | H0 | -4 | 4 | 0.167 | NA, SS | NA, SS | H0 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 |
| GH-2 | -8 | 8 | 0.199 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| GH-7 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| GH-8 | 1 | 5 | 0.4931 | NA, SS | NA, SS | H0 | 7 | 5 | 0.0791 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 |
| MW-1 | 3 | 9 | 0.41186 | NA, SS | NA, SS | H0 | 16 | 9 | 0.06 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-1A | 14 | 7 | 0.0133 | NA, SS | NA, SS | H1 | 16 | 7 | 0.0102 | NA, SS | NA, SS | H1 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-B10 | -8 | 9 | 0.238 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-B5 | 2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | 2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-C10 | -8 | 9 | 0.238 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-C5 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | -15 | 8 | 0.0436 | NA, SS | NA, SS | H2 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-B12 | -2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | 5 | 7 | 0.281 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-C13 | -6 | 6 | 0.1862 | NA, SS | NA, SS | H0 | 3 | 6 | 0.36 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 |
| TW-2 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| CTBR | -3 | 13 | NA, LS | 268.6666667 | -0.122017775 | H0 | 4 | 13 | NA, LS | 268.6666667 | 0.183026663 | H0 | 0 | 13 | NA, LS | 268.6666667 | 0 | H0 |
| CTMW-1 | 12 | 10 | NA, LS | 125 | 0.98386991 | H0 | 15 | 10 | NA, LS | 125 | 1.252198067 | H0 | 0 | 10 | NA, LS | 125 | 0 | H0 |
| MW-B1 | -4 | 9 | 0.361 | NA, SS | NA, SS | H0 | -15 | 9 | 0.0545 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-B4 | 12 | 9 | 0.13 | NA, SS | NA, SS | H0 | -3 | 9 | 0.4119 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-B6 | 7 | 9 | 0.26074 | NA, SS | NA, SS | H0 | 7 | 9 | 0.2607 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-BL1 | -13 | 10 | NA, LS | 125 | -1.073312629 | H0 | -33 | 10 | NA, LS | 125 | -2.882187011 | H2 | 0 | 10 | NA, LS | 125 | 0 | H0 |
| MW-BL2 | -4 | 10 | NA, LS | 125 | -0.268328157 | H0 | -21 | 10 | NA, LS | 125 | -1.788854382 | H2 | 0 | 10 | NA, LS | 125 | 0 | H0 |
| MW-C11 | 6 | 7 | 0.2381 | NA, SS | NA, SS | H0 | 4 | 7 | 0.3303 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-C6 | 3 | 9 | 0.41186 | NA, SS | NA, SS | H0 | -9 | 9 | 0.1986 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| P-SC16 | -3 | 6 | 0.36 | NA, SS | NA, SS | H0 | -9 | 6 | 0.068 | NA, SS | NA, SS | H0 | 3 | 4 | 0.2632 | NA, SS | NA, SS | H0 |
| P-SC17 | 6 | 7 | 0.2381 | NA, SS | NA, SS | H0 | 2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| PW-B15 | -5 | 7 | 0.281 | NA, SS | NA, SS | H0 | -7 | 7 | 0.191 | NA, SS | NA, SS | H0 | 6 | 7 | 0.2381 | NA, SS | NA, SS | H0 |
| PW-SC15 | 12 | 8 | 0.089 | NA, SS | NA, SS | H0 | 1 | 8 | 0.5003 | NA, SS | NA, SS | H0 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 |
| MWB-1(SeepArea) | 2 | 6 | 0.4254 | NA, SS | NA, SS | H0 | -3 | 6 | 0.36 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MWB-2(SeepArea) | -1 | 6 | 0.5 | NA, SS | NA, SS | H0 | -7 | 6 | 0.136 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MWC-1(SeepArea) | -2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | -2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | 6 | 7 | 0.2381 | NA, SS | NA, SS | H0 |
| MWC-4(SeepArea) | 7 | 6 | 0.136 | NA, SS | NA, SS | H0 | 5 | 6 | 0.236 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MWC-5(SeepArea) | 10 | 6 | 0.0482 | NA, SS | NA, SS | H1 | 2 | 6 | 0.4254 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-B16 | -8 | 10 | NA, LS | 125 | -0.626099034 | H0 | -26 | 10 | NA, LS | 125 | -2.236067977 | H2 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-C16 | -12 | 7 | 0.0479 | NA, SS | NA, SS | H2 | -15 | 7 | 0.015 | NA, SS | NA, SS | H2 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MW-B3 | -9 | 9 | 0.18862 | NA, SS | NA, SS | H0 | -6 | 9 | 0.306 | NA, SS | NA, SS | H0 | -1 | 9 | 0.50278 | NA, SS | NA, SS | H0 |
| MW-B7 | 30 | 9 | 0.00043 | NA, SS | NA, SS | H1 | 18 | 9 | 0.038 | NA, SS | NA, SS | H1 | 7 | 8 | 0.23064 | NA, SS | NA, SS | H0 |
| MW-B9 | -6 | 9 | 0.238 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-C3 | 7 | 9 | 0.26074 | NA, SS | NA, SS | H0 | 11 | 9 | 0.1442 | NA, SS | NA, SS | H0 | 3 | 9 | 0.41186 | NA, SS | NA, SS | H0 |
| MW-C7 | 6 | 9 | 0.306 | NA, SS | NA, SS | H0 | 4 | 9 | 0.381 | NA, SS | NA, SS | H0 | 7 | 8 | 0.23064 | NA, SS | NA, SS | H0 |
| MW-4A | 1 | 9 | 0.50278 | NA, SS | NA, SS | H0 | 4 | 9 | 0.381 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |

ID = Insufficient Data
LS = Large Sample
NA = Not Applicable
SS = Small Sample

Table C-1
Results of Mann-Kendall Statistical Analysis
2009 Area Wide Groundwater Evaluation
Caldwell Trucking Superfund Site

| Well I.D. | Chloroform | | | | | | Methylene Chloride | | | | | | cis-1,2-Dichloroethene | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | n | p | V(S) | Z | Accept Hypothesis | S | n | p | V(S) | Z | Accept Hypothesis | S | n | p | V(S) | Z | Accept Hypothesis |
| MW-A10 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-A11 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 |
| MW-A3 | -6 | 7 | 0.2381 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 9 | 8 | 0.16732 | NA, SS | NA, SS | H0 |
| MW-A4 | -26 | 9 | 0.0029 | NA, SS | NA, SS | H2 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 21 | 9 | -0.04642 | NA, SS | NA, SS | H1 |
| MW-A9 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-D1 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 |
| MW-D10 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 |
| MW-D3 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -1 | 4 | 0.4902 | NA, SS | NA, SS | H0 | 2 | 5 | 0.408 | NA, SS | NA, SS | H0 |
| MW-D5 | -8 | 5 | 0.042 | NA, SS | NA, SS | H2 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 |
| MW-D6 | -10 | 5 | 0.0083 | NA, SS | NA, SS | H2 | -2 | 4 | 0.375 | NA, SS | NA, SS | H0 | -6 | 5 | 0.117 | NA, SS | NA, SS | H0 |
| MW-D7 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | -1 | 3 | ID | NA, SS | NA, SS | NA | -2 | 4 | 0.375 | NA, SS | NA, SS | H0 |
| GH-2 | -12 | 10 | NA, LS | 125 | -0.98386991 | H0 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | 18 | 10 | NA, LS | 125 | 1.520526225 | H0 |
| GH-7 | -3 | 6 | 0.36 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 | 1 | 6 | 0.5 | NA, SS | NA, SS | H0 |
| GH-8 | 9 | 5 | 0.0211 | NA, SS | NA, SS | H1 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 7 | 5 | 0.0791 | NA, SS | NA, SS | H0 |
| MW-1 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 4 | 9 | 0.381 | NA, SS | NA, SS | H0 |
| MW-1A | 16 | 7 | 0.015 | NA, SS | NA, SS | H1 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 16 | 7 | 0.0102 | NA, SS | NA, SS | H1 |
| MW-B10 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-B5 | -5 | 6 | 0.235 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | 6 | 7 | 0.2381 | NA, SS | NA, SS | H0 |
| MW-C10 | -11 | 8 | 0.11568 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | -8 | 9 | 0.238 | NA, SS | NA, SS | H0 |
| MW-C5 | -20 | 7 | 0.0008 | NA, SS | NA, SS | H2 | -6 | 7 | 0.2381 | NA, SS | NA, SS | H0 | -13 | 8 | 0.07476 | NA, SS | NA, SS | H0 |
| MW-B12 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | -13 | 7 | 0.035 | NA, SS | NA, SS | H2 |
| MW-C13 | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -11 | 6 | 0.028 | NA, SS | NA, SS | H2 |
| TW-2 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 | -2 | 7 | 0.4369 | NA, SS | NA, SS | H0 |
| CTBR | -6 | 13 | NA, LS | 268.6666667 | -0.305044438 | H0 | -8 | 13 | NA, LS | 268.6666667 | -0.427062213 | H0 | 58 | 13 | NA, LS | 268.6666667 | 3.477506594 | H1 |
| CTMW-1 | -14 | 10 | NA, LS | 125 | -1.162755348 | H0 | 0 | 10 | NA, LS | 125 | 0 | H0 | 5 | 10 | NA, LS | 125 | 0.357770876 | H0 |
| MW-B1 | -13 | 9 | 0.09648 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | -26 | 9 | 0.0029 | NA, SS | NA, SS | H2 |
| MW-B4 | -32 | 9 | 0.00012 | NA, SS | NA, SS | H2 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 2 | 9 | 0.46 | NA, SS | NA, SS | H0 |
| MW-B6 | -20 | 9 | 0.022 | NA, SS | NA, SS | H2 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 14 | 9 | 0.09 | NA, SS | NA, SS | H0 |
| MW-BL1 | -30 | 10 | NA, LS | 125 | -2.593838864 | H2 | 8 | 9 | 0.238 | NA, SS | NA, SS | H0 | -7 | 10 | NA, LS | 125 | -0.536656315 | H0 |
| MW-BL2 | -41 | 10 | NA, LS | 125 | -3.577708764 | H2 | -9 | 10 | NA, LS | 125 | -0.715541753 | H0 | -16 | 10 | NA, LS | 125 | -1.252198067 | H0 |
| MW-C11 | -2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | 0 | 8 | 0.5822 | NA, SS | NA, SS | H0 | -7 | 7 | 0.191 | NA, SS | NA, SS | H0 |
| MW-C8 | -21 | 9 | -0.04642 | NA, SS | NA, SS | H2 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | 11 | 9 | 0.14418 | NA, SS | NA, SS | H0 |
| P-SC16 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 | -15 | 6 | 0.0014 | NA, SS | NA, SS | H2 |
| P-SC17 | 1 | 6 | 0.5 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | -8 | 7 | 0.1603 | NA, SS | NA, SS | H0 |
| PW-B15 | -17 | 7 | 0.0054 | NA, SS | NA, SS | H2 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | -12 | 7 | 0.0479 | NA, SS | NA, SS | H2 |
| PW-SC15 | -14 | 8 | 0.054 | NA, SS | NA, SS | H0 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | -20 | 8 | 0.0071 | NA, SS | NA, SS | H2 |
| MWB-1(SeepArea) | -15 | 6 | 0.0014 | NA, SS | NA, SS | H2 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | -1 | 6 | 0.5 | NA, SS | NA, SS | H0 |
| MWB-2(SeepArea) | -5 | 6 | 0.235 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | -5 | 6 | 0.235 | NA, SS | NA, SS | H0 |
| MWC-1(SeepArea) | -3 | 7 | 0.388 | NA, SS | NA, SS | H0 | -2 | 7 | 0.4369 | NA, SS | NA, SS | H0 | -1 | 7 | 0.5 | NA, SS | NA, SS | H0 |
| MWC-4(SeepArea) | 2 | 6 | 0.4254 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | 4 | 6 | 0.2934 | NA, SS | NA, SS | H0 |
| MWC-5(SeepArea) | -1 | 6 | 0.5 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 |
| MW-B16 | -3 | 10 | NA, LS | 125 | -0.178885438 | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | -21 | 10 | NA, LS | 125 | -1.788854382 | H2 |
| MW-C16 | -12 | 7 | 0.0479 | NA, SS | NA, SS | H2 | -5 | 6 | 0.235 | NA, SS | NA, SS | H0 | -13 | 7 | 0.035 | NA, SS | NA, SS | H2 |
| MW-B3 | -7 | 9 | 0.26074 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 4 | 9 | 0.381 | NA, SS | NA, SS | H0 |
| MW-B7 | 2 | 8 | 0.452 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 34 | 9 | 2.5E-05 | NA, SS | NA, SS | H1 |
| MW-B9 | -7 | 8 | 0.23064 | NA, SS | NA, SS | H0 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | -5 | 9 | 0.3315 | NA, SS | NA, SS | H0 |
| MW-C3 | 2 | 9 | 0.48 | NA, SS | NA, SS | H0 | -5 | 8 | 0.3066 | NA, SS | NA, SS | H0 | 10 | 9 | 0.179 | NA, SS | NA, SS | H0 |
| MW-C7 | -2 | 8 | 0.452 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 15 | 9 | 0.0545 | NA, SS | NA, SS | H0 |
| MW-4A | -11 | 9 | 0.14418 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 9 | 9 | 0.19862 | NA, SS | NA, SS | H0 |

ID = Insufficient Data
LS = Large Sample
NA = Not Applicable
SS = Small Sample

Table C-1
Results of Mann-Kendall Statistical Analysis
2009 Area Wide Groundwater Evaluation
Caldwell Trucking Superfund Site

| | Tetrachloroethene | | | | | | trans-1,2-Dichloroethene | | | | | | Trichloroethene | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well I.D. | S | n | p | V(S) | Z | Accept Hypothesis | S | n | p | V(S) | Z | Accept Hypothesis | S | n | p | V(S) | Z | Accept Hypothesis |
| MW-A10 | -1 | 9 | 0.50278 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 4 | 9 | 0.381 | NA, SS | NA, SS | H0 |
| MW-A11 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -9 | 8 | 0.16732 | NA, SS | NA, SS | H0 |
| MW-A3 | -1 | 8 | 0.50028 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -2 | 8 | 0.452 | NA, SS | NA, SS | H0 |
| MW-A4 | 20 | 9 | 0.022 | NA, SS | NA, SS | H1 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -7 | 9 | 0.26074 | NA, SS | NA, SS | H0 |
| MW-A9 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-D1 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | 0 | 3 | ID | NA, SS | NA, SS | NA | -8 | 5 | 0.042 | NA, SS | NA, SS | H2 |
| MW-D10 | -3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | 0 | 3 | ID | NA, SS | NA, SS | NA | -1 | 4 | 0.4902 | NA, SS | NA, SS | H0 |
| MW-D3 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 | 2 | 3 | ID | NA, SS | NA, SS | NA | -8 | 5 | 0.042 | NA, SS | NA, SS | H2 |
| MW-D5 | -8 | 5 | 0.042 | NA, SS | NA, SS | H2 | 0 | 2 | ID | NA, SS | NA, SS | NA | -10 | 5 | 0.0083 | NA, SS | NA, SS | H2 |
| MW-D6 | -5 | 5 | 0.1771 | NA, SS | NA, SS | H0 | 0 | 2 | ID | NA, SS | NA, SS | NA | -10 | 5 | 0.0083 | NA, SS | NA, SS | H2 |
| MW-D7 | -1 | 4 | 0.4902 | NA, SS | NA, SS | H0 | 2 | 3 | ID | NA, SS | NA, SS | NA | -5 | 4 | 0.0986 | NA, SS | NA, SS | H0 |
| GH-2 | -22 | 10 | NA, LS | 125 | -1.876297101 | H2 | 0 | 1 | ID | NA, SS | NA, SS | NA | -22 | 10 | NA, LS | 125 | -1.876297101 | H2 |
| GH-7 | 11 | 6 | 0.028 | NA, SS | NA, SS | H1 | 0 | 1 | ID | NA, SS | NA, SS | NA | -8 | 6 | 0.1862 | NA, SS | NA, SS | H0 |
| GH-8 | 7 | 5 | 0.0791 | NA, SS | NA, SS | H0 | 0 | 1 | ID | NA, SS | NA, SS | NA | 1 | 5 | 0.4931 | NA, SS | NA, SS | H0 |
| MW-1 | 12 | 9 | 0.13 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 11 | 9 | 0.14418 | NA, SS | NA, SS | H0 |
| MW-1A | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 17 | 7 | 0.0054 | NA, SS | NA, SS | H1 |
| MW-B10 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 1 | 9 | 0.50278 | NA, SS | NA, SS | H0 |
| MW-B5 | 5 | 7 | 0.281 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -4 | 7 | 0.3303 | NA, SS | NA, SS | H0 |
| MW-C10 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -7 | 9 | 0.26074 | NA, SS | NA, SS | H0 |
| MW-C5 | -22 | 8 | 0.0028 | NA, SS | NA, SS | H2 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -26 | 8 | 0.00019 | NA, SS | NA, SS | H2 |
| MW-B12 | -7 | 7 | 0.191 | NA, SS | NA, SS | H0 | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 | -11 | 7 | 0.068 | NA, SS | NA, SS | H0 |
| MW-C13 | -7 | 6 | 0.136 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -9 | 6 | 0.068 | NA, SS | NA, SS | H0 |
| TW-2 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -13 | 7 | 0.035 | NA, SS | NA, SS | H2 |
| CTBR | 10 | 13 | NA, LS | 268.6666667 | 0.549079988 | H0 | 4 | 7 | 0.3303 | NA, SS | NA, SS | H0 | -21 | 13 | NA, LS | 268.6666667 | -1.220177752 | H0 |
| CTMW-1 | -11 | 10 | NA, LS | 125 | -0.894427191 | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -23 | 10 | NA, LS | 125 | -1.96773982 | H2 |
| MW-B1 | -25 | 9 | -0.1025 | NA, SS | NA, SS | H2 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 | -26 | 9 | 0.0029 | NA, SS | NA, SS | H2 |
| MW-B4 | -4 | 9 | 0.381 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -19 | 9 | -0.01598 | NA, SS | NA, SS | H2 |
| MW-B6 | 15 | 8 | 0.0436 | NA, SS | NA, SS | H1 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -5 | 9 | 0.3316 | NA, SS | NA, SS | H0 |
| MW-BL1 | -13 | 10 | NA, LS | 125 | -1.073312629 | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | -17 | 10 | NA, LS | 125 | -1.431083506 | H0 |
| MW-BL2 | -22 | 10 | NA, LS | 125 | -1.876297101 | H2 | 7 | 6 | 0.136 | NA, SS | NA, SS | H0 | -31 | 10 | NA, LS | 125 | -2.683281573 | H2 |
| MW-C11 | -3 | 7 | 0.386 | NA, SS | NA, SS | H0 | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 | -10 | 7 | 0.0969 | NA, SS | NA, SS | H0 |
| MW-C8 | -19 | 9 | -0.01598 | NA, SS | NA, SS | H2 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -20 | 9 | 0.022 | NA, SS | NA, SS | H2 |
| P-SC16 | -13 | 6 | 0.0083 | NA, SS | NA, SS | H2 | 3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | -15 | 6 | 0.0014 | NA, SS | NA, SS | H2 |
| P-SC17 | -18 | 7 | -0.0127 | NA, SS | NA, SS | H2 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -17 | 7 | 0.0054 | NA, SS | NA, SS | H2 |
| PW-B15 | -16 | 7 | 0.0102 | NA, SS | NA, SS | H2 | 3 | 4 | 0.2632 | NA, SS | NA, SS | H0 | -17 | 7 | 0.0054 | NA, SS | NA, SS | H2 |
| PW-SC15 | -13 | 8 | 0.07476 | NA, SS | NA, SS | H0 | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 | -22 | 8 | 0.0028 | NA, SS | NA, SS | H2 |
| MWB-1(SeepArea) | -1 | 6 | 0.5 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -12 | 6 | 0.0134 | NA, SS | NA, SS | H2 |
| MWB-2(SeepArea) | -8 | 6 | 0.1038 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -11 | 6 | 0.028 | NA, SS | NA, SS | H2 |
| MWC-1(SeepArea) | -7 | 7 | 0.191 | NA, SS | NA, SS | H0 | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 | -3 | 7 | 0.386 | NA, SS | NA, SS | H0 |
| MWC-4(SeepArea) | 2 | 6 | 0.4254 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -5 | 6 | 0.235 | NA, SS | NA, SS | H0 |
| MWC-5(SeepArea) | -2 | 6 | 0.4254 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -5 | 6 | 0.235 | NA, SS | NA, SS | H0 |
| MW-B16 | -30 | 10 | NA, LS | 125 | -2.593838854 | H2 | 8 | 9 | 0.238 | NA, SS | NA, SS | H0 | -34 | 10 | NA, LS | 125 | -2.95160973 | H2 |
| MW-C16 | -1 | 7 | 0.5 | NA, SS | NA, SS | H0 | -4 | 6 | 0.2834 | NA, SS | NA, SS | H0 | -3 | 7 | 0.386 | NA, SS | NA, SS | H0 |
| MW-B3 | -7 | 9 | 0.26074 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | -29 | 9 | -0.16858 | NA, SS | NA, SS | H2 |
| MW-B7 | 13 | 8 | 0.07476 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 33 | 9 | -0.22234 | NA, SS | NA, SS | H1 |
| MW-B9 | -5 | 9 | 0.3316 | NA, SS | NA, SS | H0 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | -5 | 8 | 0.3066 | NA, SS | NA, SS | H0 |
| MW-C3 | 3 | 9 | 0.41186 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | 10 | 9 | 0.179 | NA, SS | NA, SS | H0 |
| MW-C7 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 | 4 | 5 | 0.242 | NA, SS | NA, SS | H0 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-4A | -25 | 9 | -0.1025 | NA, SS | NA, SS | H2 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 | 1 | 9 | 0.50278 | NA, SS | NA, SS | H0 |

ID = Insufficient Data
LS = Large Sample
NA = Not Applicable
SS = Small Sample

Table C-1
Results of Mann-Kendall Statistical Analysis
2009 Area Wide Groundwater Evaluation
Caldwell Trucking Superfund Site

| Well I.D. | Vinyl Chloride | | | | | |
|---|---|---|---|---|---|---|
| | S | n | p | V(S) | Z | Accept Hypothesis |
| MW-A10 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-A11 | 0 | 8 | 0.548 | NA, SS | NA, SS | H0 |
| MW-A3 | 10 | 8 | 0.138 | NA, SS | NA, SS | H0 |
| MW-A4 | 13 | 8 | 0.09646 | NA, SS | NA, SS | H0 |
| MW-A9 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-D1 | -4 | 5 | 0.242 | NA, SS | NA, SS | H0 |
| MW-D10 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| MW-D3 | 0 | 5 | 0.592 | NA, SS | NA, SS | H0 |
| MW-D5 | 3 | 5 | 0.3151 | NA, SS | NA, SS | H0 |
| MW-D6 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| MW-D7 | 0 | 4 | 0.625 | NA, SS | NA, SS | H0 |
| GH-2 | 0 | 10 | NA, LS | 125 | 0 | H0 |
| GH-7 | -4 | 6 | 0.2934 | NA, SS | NA, SS | H0 |
| GH-8 | 7 | 5 | 0.0791 | NA, SS | NA, SS | H0 |
| MW-1 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-1A | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-B10 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-B5 | 6 | 7 | 0.2361 | NA, SS | NA, SS | H0 |
| MW-C10 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-C5 | 17 | 8 | 0.02124 | NA, SS | NA, SS | H1 |
| MW-B12 | -3 | 7 | 0.386 | NA, SS | NA, SS | H0 |
| MW-C13 | -11 | 6 | 0.028 | NA, SS | NA, SS | H2 |
| TW-2 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| CTBR | 0 | 13 | NA, LS | 268.6666667 | 0 | H0 |
| CTMW-1 | 0 | 10 | NA, LS | 125 | 0 | H0 |
| MW-B1 | 6 | 9 | 0.306 | NA, SS | NA, SS | H0 |
| MW-B4 | 17 | 9 | 0.01734 | NA, SS | NA, SS | H1 |
| MW-B6 | 8 | 8 | 0.238 | NA, SS | NA, SS | H0 |
| MW-BL1 | 7 | 10 | NA, LS | 125 | 0.538656315 | H0 |
| MW-BL2 | 24 | 10 | NA, LS | 125 | 2.057182539 | H1 |
| MW-C11 | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MW-C6 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| P-SC18 | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 |
| P-SC17 | 8 | 7 | 0.1603 | NA, SS | NA, SS | H0 |
| PW-B15 | -5 | 7 | 0.281 | NA, SS | NA, SS | H0 |
| PW-SC15 | 7 | 8 | 0.23064 | NA, SS | NA, SS | H0 |
| MWB-1(SeepArea) | 0 | 6 | 0.5822 | NA, SS | NA, SS | H0 |
| MWB-2(SeepArea) | 2 | 6 | 0.4254 | NA, SS | NA, SS | H0 |
| MWC-1(SeepArea) | 0 | 7 | 0.5579 | NA, SS | NA, SS | H0 |
| MWC-4(SeepArea) | 8 | 6 | 0.1038 | NA, SS | NA, SS | H0 |
| MWC-5(SeepArea) | 5 | 6 | 0.235 | NA, SS | NA, SS | H0 |
| MW-B16 | -1 | 10 | NA, LS | 125 | 0 | H0 |
| MW-C16 | -8 | 7 | 0.1603 | NA, SS | NA, SS | H0 |
| MW-B3 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-B7 | 8 | 8 | 0.238 | NA, SS | NA, SS | H0 |
| MW-B9 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-C3 | 0 | 8 | 0.54 | NA, SS | NA, SS | H0 |
| MW-C7 | 0 | 9 | 0.54 | NA, SS | NA, SS | H0 |
| MW-4A | 0 | 8 | 0.54 | NA, SS | NA, SS | H0 |

ID = Insufficient Data
LS = Large Sample
NA = Not Applicable
SS = Small Sample

# APPENDIX D

# LINEAR REGRESSION RESULTS

Table D-1
Linear Regression Analysis Results
Concentration Time Trends: Caldwell Trucking Site

| WELL ID | Screened Zone | Location | 1,1,1-Trichloroethane | | | 1,1,2-Trichloroethane | | | 1,1-Dichloroethane | | | 1,1-Dichloroethene | | | 1,2-Dichloroethane | | | Chloroform | | | cis-1,2-Dichloroethene | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | slope | slope | $R^2$ | slope | slope | $R^2$ | slope | slope | $R^2$ | slope | slope | $R^2$ | slope | slope | $R^2$ | slope | slope | $R^2$ | slope | slope | $R^2$ |
| | | | ug/L.d | ug/L/Y | | ug/L.d | ug/L/Y | | ug/L.d | ug/L/Y | | ug/L.d | ug/L/Y | | ug/L.d | ug/L/Y | | ug/L.d | ug/L/Y | | ug/L.d | ug/L/Y | |
| CTBR | C | Plume Core | -3.6E-01 | -130.9 | 0.388 | 0.0E+00 | 0.0 | No Detects | -3.0E-02 | -130.9 | 0.220 | -1.5E-02 | -5.4 | 0.048 | 0.0E+00 | 0.0 | No Detects | -1.6E-01 | -59.7 | 0.450 | 2.9E-01 | 107.0 | 0.472 |
| CTMW-1 | B | Plume Core | -2.2E-03 | -0.8 | 0.264 | 0.0E+00 | 0.0 | No Detects | 1.6E-04 | -0.8 | 0.026 | 1.3E-04 | 0.0 | 0.332 | 0.0E+00 | 0.0 | No Detects | -9.9E-04 | -0.4 | 0.333 | 2.0E-04 | 0.1 | 0.001 |
| MW-1 | C | Lateral Extent | -1.4E-04 | -0.1 | 0.001 | 0.0E+00 | 0.0 | No Detects | 9.8E-04 | -0.1 | 0.140 | 4.2E-03 | 1.5 | 0.598 | 0.0E+00 | 0.0 | No Detects | 1.9E-03 | 0.7 | 0.206 | 3.9E-03 | 1.4 | 0.333 |
| MW-1A | B | Lateral Extent | 1.2E-03 | 0.4 | 0.852 | 0.0E+00 | 0.0 | No Detects | 6.3E-04 | 0.4 | 0.807 | 9.5E-04 | 0.3 | 0.915 | 0.0E+00 | 0.0 | No Detects | 3.1E-04 | 0.1 | 0.903 | 1.5E-03 | 0.6 | 0.869 |
| MW-4A | B | Upgradient of Site | -4.6E-03 | -1.7 | 0.547 | 0.0E+00 | 0.0 | No Detects | -1.1E-04 | 0.0 | 0.033 | -4.0E-04 | -0.1 | 0.175 | 0.0E+00 | 0.0 | No Detects | -8.1E-04 | -0.3 | 0.403 | -2.7E-04 | -0.1 | 0.009 |
| MW-A1 | A | A zone | -2.2E-02 | -8.0 | 0.587 | 0.0E+00 | 0.0 | No Detects | -2.5E-03 | -0.9 | 0.587 | -1.4E-03 | -0.5 | 0.587 | -2.0E-04 | -0.1 | 0.587 | -1.7E-02 | -6.3 | 0.587 | -5.0E-02 | -18.1 | 0.586 |
| MW-A10 | A | A zone | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 1.7E-05 | 0.0 | 0.001 |
| MW-A11 | A | A zone | -4.0E-05 | 0.0 | 0.460 | 0.0E+00 | 0.0 | No Detects | -9.4E-06 | 0.0 | 0.460 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -1.5E-04 | -0.1 | 0.049 |
| MW-A2 | A | A zone | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 7.2E-06 | 0.0 | 0.001 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -4.5E-03 | -1.7 | 0.594 |
| MW-A3 | A | A zone | -8.8E-05 | 0.0 | 0.471 | 0.0E+00 | 0.0 | No Detects | -7.9E-06 | 0.0 | 0.001 | -1.3E-05 | 0.0 | 0.471 | 0.0E+00 | 0.0 | No Detects | -1.3E-05 | 0.0 | 0.082 | 1.3E-04 | 0.0 | 0.031 |
| MW-A4 | A | A zone | -6.5E-02 | -23.6 | 0.474 | 0.0E+00 | 0.0 | No Detects | 1.8E-02 | 6.6 | 0.464 | 1.2E-02 | 4.3 | 0.355 | -3.5E-04 | -0.1 | 0.441 | -1.7E-01 | -63.4 | 0.882 | 4.8E-01 | 175.4 | 0.645 |
| MW-A6 | A | A zone | 1.9E-03 | 0.7 | 0.509 | 0.0E+00 | 0.0 | No Detects | 8.4E-04 | 0.3 | 0.619 | 7.2E-04 | 0.3 | 0.613 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 7.0E-03 | 2.5 | 0.563 |
| MW-A7 | A | A zone | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects |
| MW-A9 | A | A zone | -2.6E-06 | 0.0 | 0.567 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects |
| MW-B1 | B | Plume Core | -3.4E-01 | -122.4 | 0.581 | 0.0E+00 | 0.0 | No Detects | -1.3E-02 | -4.6 | 0.393 | -2.1E-02 | -7.8 | 0.507 | 0.0E+00 | 0.0 | No Detects | -9.2E-02 | -33.8 | 0.391 | -3.2E-01 | -118.4 | 0.669 |
| MWB-1(SeepArea) | B | Pre-Seep Area | -1.9E-01 | -70.3 | 0.796 | 0.0E+00 | 0.0 | No Detects | 1.3E-02 | 4.7 | 0.152 | -2.3E-02 | -8.3 | 0.019 | 0.0E+00 | 0.0 | No Detects | -2.9E-01 | -105.0 | 0.960 | 3.8E-02 | 13.8 | 0.014 |
| MW-B10 | B | Lateral Extent | -4.1E-06 | 0.0 | 0.442 | 0.0E+00 | 0.0 | No Detects | -5.8E-06 | 0.0 | 0.442 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -1.7E-05 | 0.0 | 0.516 | 0.0E+00 | 0.0 | No slope |
| MW-B11 | B | Plume Core | -1.9E-01 | -69.2 | 0.925 | 0.0E+00 | 0.0 | No slope | -8.6E-03 | -3.1 | 0.336 | 5.2E-02 | 18.8 | 0.165 | 2.7E-02 | 9.9 | 0.398 | 8.0E-03 | 2.9 | 0.014 | -1.1E-03 | -0.4 | 0.000 |
| MW-B12 | B | North Lagoon | -7.7E-02 | -28.1 | 0.215 | 0.0E+00 | 0.0 | No Detects | -2.8E-02 | -10.2 | 0.192 | 5.2E-03 | 1.9 | 0.191 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -8.6E-01 | -312.9 | 0.637 |
| MW-B2 | B | Plume Core | -3.9E-02 | -14.4 | 0.229 | 0.0E+00 | 0.0 | No Detects | 5.4E-03 | 2.0 | 0.148 | -1.7E-03 | -0.6 | 0.008 | 0.0E+00 | 0.0 | No Detects | -1.3E-02 | -4.8 | 0.392 | 8.4E-02 | 30.5 | 0.142 |
| MWB-2(SeepArea) | B | Pre-Seep Area | -1.9E-01 | -68.7 | 0.719 | 0.0E+00 | 0.0 | No Detects | -1.2E-02 | -4.3 | 0.094 | -5.2E-02 | -18.9 | 0.427 | 0.0E+00 | 0.0 | No Detects | -7.2E-02 | -26.2 | 0.708 | -3.4E-01 | -124.3 | 0.230 |
| MW-B3 | B | Toe of Plume | -7.3E-02 | -26.6 | 0.455 | -2.7E-04 | -0.1 | 0.439 | -1.3E-02 | -4.7 | 0.443 | -1.6E-02 | -5.9 | 0.410 | -3.3E-04 | -0.1 | 0.409 | -1.2E-01 | -45.4 | 0.439 | -2.3E-02 | -8.5 | 0.199 |
| MW-B30 | B | Plume Core | -1.3E-01 | -46.6 | 0.721 | 0.0E+00 | 0.0 | No Detects | -4.5E-02 | -16.3 | 0.065 | -3.7E-02 | -13.4 | 0.498 | 0.0E+00 | 0.0 | No Detects | -1.4E-02 | -5.0 | 0.630 | -7.3E-01 | -267.1 | 0.898 |
| MW-B34 | B | North Lagoon | 8.3E-04 | 0.3 | 0.717 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 1.0E-04 | 0.0 | 0.513 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -3.1E-04 | -0.1 | 0.369 |
| MW-B4 | B | Plume Core | -9.9E-02 | -36.0 | 0.521 | 0.0E+00 | 0.0 | No Detects | 1.0E-02 | 3.8 | 0.188 | -3.5E-03 | -1.3 | 0.055 | 0.0E+00 | 0.0 | No Detects | -1.5E-01 | -56.0 | 0.873 | 9.4E-02 | 34.2 | 0.062 |
| MW-B5 | B | Lateral Extent | 1.3E-03 | 0.5 | 0.007 | 0.0E+00 | 0.0 | No Detects | 8.9E-04 | 0.3 | 0.059 | 2.0E-03 | 0.7 | 0.170 | 0.0E+00 | 0.0 | No Detects | 3.4E-03 | 1.2 | 0.074 | -1.9E-03 | -0.7 | 0.003 |
| MW-B6 | B | Plume Core | -2.6E-02 | -9.3 | 0.393 | 0.0E+00 | 0.0 | No Detects | 3.9E-04 | 0.1 | 0.021 | -1.1E-03 | -0.4 | 0.052 | 0.0E+00 | 0.0 | No Detects | -5.5E-02 | -20.0 | 0.509 | 2.0E-02 | 7.2 | 0.353 |
| MW-B7 | B | Lateral Extent | 1.6E-03 | 0.6 | 0.572 | 0.0E+00 | 0.0 | No Detects | 2.8E-03 | 1.0 | 0.682 | 3.5E-03 | 1.3 | 0.719 | 2.5E-05 | 0.0 | 0.184 | 6.2E-04 | 0.2 | 0.178 | 9.7E-03 | 3.5 | 0.850 |
| MW-B9 | B | Toe of Plume | -4.8E-05 | 0.0 | 0.427 | 0.0E+00 | 0.0 | No Detects | -9.9E-06 | 0.0 | 0.427 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -1.3E-05 | 0.0 | 0.503 | 2.6E-05 | 0.0 | 0.014 |
| MW-B16 | B | On Property | -2.7E-01 | -100.0 | 0.553 | 0.0E+00 | 0.0 | No Detects | -8.6E-03 | -3.1 | 0.363 | -3.7E-02 | -13.7 | 0.389 | 0.0E+00 | 0.0 | No Detects | -5.1E-03 | -1.9 | 0.344 | -2.1E-01 | -75.8 | 0.475 |
| MW-BL1 | B | Plume Core | -6.4E-02 | -23.4 | 0.628 | 0.0E+00 | 0.0 | No Detects | -2.5E-03 | -0.9 | 0.176 | -1.5E-02 | -5.4 | 0.526 | 0.0E+00 | 0.0 | No Detects | -3.7E+00 | -1357.9 | 0.438 | -2.7E-02 | -10.0 | 0.116 |
| MW-BL2 | B | Plume Core | -3.9E-01 | -144.2 | 0.393 | -3.4E-04 | -0.1 | 0.044 | 1.3E-03 | 0.5 | 0.000 | -3.4E-02 | -12.3 | 0.263 | 0.0E+00 | 0.0 | No Detects | -3.4E+00 | -1234.4 | 0.495 | -3.4E-01 | -122.6 | 0.031 |
| MWC-1(SeepArea) | C | Pre-Seep Area | -6.6E-02 | -23.9 | 0.343 | 0.0E+00 | 0.0 | No Detects | 4.4E-03 | 1.6 | 0.038 | 1.5E-03 | 0.6 | 0.001 | 4.4E-04 | 0.2 | 0.266 | -4.6E-04 | -0.2 | 0.000 | -5.9E-02 | -21.6 | 0.075 |
| MW-C10 | C | Lateral Extent | -5.9E-05 | 0.0 | 0.447 | 0.0E+00 | 0.0 | No Detects | -1.4E-05 | 0.0 | 0.447 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -2.3E-04 | -0.1 | 0.198 | -3.2E-05 | 0.0 | 0.447 |
| MW-C11 | C | Plume Core | -1.7E-01 | -61.1 | 0.551 | 0.0E+00 | 0.0 | No Detects | 3.5E-03 | 1.3 | 0.012 | -1.9E-02 | -6.8 | 0.055 | 0.0E+00 | 0.0 | No Detects | 1.0E-02 | 3.8 | 0.104 | -1.2E-01 | -45.4 | 0.281 |
| MW-C13 | C | North Lagoon | -7.4E-03 | -2.7 | 0.572 | 0.0E+00 | 0.0 | No Detects | -1.2E-02 | -4.4 | 0.500 | -2.9E-04 | -0.1 | 0.001 | 0.0E+00 | 0.0 | No Detects | 5.3E-05 | 0.0 | 0.519 | -6.2E-01 | -226.0 | 0.668 |
| MW-C16 | C | On Property | -5.7E-01 | -209.3 | 0.615 | 0.0E+00 | 0.0 | No Detects | -7.6E-02 | -27.7 | 0.312 | -5.2E-02 | -18.9 | 0.663 | 0.0E+00 | 0.0 | No Detects | -4.2E-02 | -15.3 | 0.738 | -2.7E+00 | -980.1 | 0.679 |
| MW-C17 | C | On Property | -7.6E-04 | -0.3 | 0.634 | 0.0E+00 | 0.0 | No Detects | 3.4E-05 | 0.0 | 0.276 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -6.2E-03 | -2.3 | 0.829 | -9.1E-04 | -0.3 | 0.136 |
| MW-C18 | C | On Property | -1.8E-03 | -0.7 | 0.752 | 0.0E+00 | 0.0 | No Detects | 7.2E-03 | 2.6 | 0.668 | 6.6E-04 | 0.2 | 0.107 | 0.0E+00 | 0.0 | No Detects | -3.6E-03 | -1.3 | 0.837 | -2.5E-02 | -9.1 | 0.753 |
| MW-C3 | C | Toe of Plume | -5.6E-02 | -20.4 | 0.470 | 0.0E+00 | 0.0 | No Detects | -3.4E-03 | -1.2 | 0.201 | -5.1E-04 | -0.2 | 0.002 | 6.7E-05 | 0.0 | 0.023 | -4.1E-02 | -15.0 | 0.318 | -1.7E-02 | -6.1 | 0.337 |
| MW-C30 | C | Plume Core | -2.4E-01 | -86.8 | 0.418 | 0.0E+00 | 0.0 | No slope | -2.5E-02 | -9.1 | 0.545 | -3.5E-02 | -12.7 | 0.209 | 0.0E+00 | 0.0 | No slope | -1.1E-01 | -40.9 | 0.739 | -2.9E-01 | -105.3 | 0.044 |
| MW-C31 | C | Plume Core/Heisler | -4.9E+00 | -1788.6 | 0.619 | -1.2E-02 | -4.4 | 0.457 | -4.7E+00 | -1733.0 | 0.784 | -2.2E-01 | -80.8 | 0.582 | -1.4E-01 | -49.8 | 0.691 | -1.8E-01 | -65.1 | 0.661 | -1.7E+01 | -6301.4 | 0.263 |
| MW-C33 | C | North Lagoon | 7.6E+00 | 2765.3 | 0.038 | 2.6E-03 | 0.9 | 0.0003 | 3.9E-01 | 144.1 | 0.043 | -2.6E+00 | -938.0 | 0.181 | 1.4E-02 | 5.0 | 0.009 | 2.5E+00 | 927.9 | 0.051 | -2.9E+01 | -10764.2 | 0.886 |
| MW-C34 | C | North Lagoon | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects |
| MW-C35 | C | North Lagoon | -6.6E-02 | -24.0 | 0.382 | 0.0E+00 | 0.0 | No Detects | -1.0E-01 | -38.0 | 0.515 | -7.4E-03 | -2.7 | 0.334 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -1.6E-03 | -0.6 | 0.148 |
| MW-C37 | C | Plume Core/Heisler | -3.5E-01 | -126.8 | 0.093 | 0.0E+00 | 0.0 | No Detects | -5.8E-02 | -21.2 | 0.088 | -3.6E-02 | -13.3 | 0.035 | 0.0E+00 | 0.0 | No Detects | -3.5E-03 | -1.3 | 0.017 | -1.2E+00 | -422.0 | 0.072 |
| MW-C38 | C | Plume Core/Heisler | -3.8E-02 | -13.9 | 0.824 | 0.0E+00 | 0.0 | No Detects | -3.2E-02 | -11.6 | 0.888 | 1.2E-03 | 0.4 | 0.550 | 2.1E-04 | 0.1 | 0.550 | 6.7E-04 | 0.2 | 0.550 | -4.1E-01 | -148.1 | 0.953 |
| MWC-4(SeepArea) | C | Pre-Seep Area | -3.1E-02 | -11.2 | 0.221 | 0.0E+00 | 0.0 | No Detects | 1.6E-02 | 5.8 | 0.243 | 5.9E-03 | 2.1 | 0.109 | 0.0E+00 | 0.0 | No Detects | -2.1E-02 | -7.5 | 0.347 | 1.5E-01 | 53.4 | 0.308 |
| MW-C5 | C | Lateral Extent | -3.3E-02 | -12.0 | 0.878 | -2.7E-04 | -0.1 | 0.576 | 1.4E-03 | 0.5 | 0.025 | -3.0E-03 | -1.1 | 0.484 | 0.0E+00 | 0.0 | No slope | -4.9E-02 | -17.8 | 0.873 | -8.2E-03 | -3.0 | 0.295 |
| MWC-5(SeepArea) | C | Pre-Seep Area | -4.3E-02 | -15.7 | 0.437 | 0.0E+00 | 0.0 | No Detects | 3.2E-02 | 11.7 | 0.792 | 3.3E-03 | 1.2 | 0.035 | 0.0E+00 | 0.0 | No Detects | -4.0E-02 | -14.5 | 0.550 | 1.3E-01 | 48.4 | 0.226 |
| MW-C6 | C | Plume Core | -3.4E-02 | -12.4 | 0.795 | 0.0E+00 | 0.0 | No Detects | 4.2E-04 | 0.2 | 0.007 | -3.1E-03 | -1.1 | 0.039 | 0.0E+00 | 0.0 | No Detects | -9.0E-02 | -32.8 | 0.808 | 5.0E-03 | 1.8 | 0.071 |
| MW-C7 | C | Lateral Extent | -1.1E-02 | -3.9 | 0.487 | 0.0E+00 | 0.0 | No Detects | 2.4E-03 | 0.9 | 0.099 | 2.0E-03 | 0.7 | 0.010 | 1.2E-04 | 0.0 | 0.186 | 7.6E-03 | 2.8 | 0.022 | 2.0E-02 | 7.3 | 0.225 |
| MW-D1 | D | D Zone | -2.2E-03 | -0.8 | 0.701 | 0.0E+00 | 0.0 | No Detects | -8.7E-05 | 0.0 | 0.583 | -9.2E-05 | 0.0 | 0.583 | 0.0E+00 | 0.0 | No Detects | -1.8E-04 | -0.1 | 0.583 | -3.4E-03 | -1.3 | 0.583 |
| MW-D10 | D | D Zone | -6.6E-05 | 0.0 | 0.899 | 0.0E+00 | 0.0 | No Detects | -1.7E-05 | 0.0 | 0.899 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -2.2E-05 | 0.0 | 0.899 | -2.9E-05 | 0.0 | 0.899 |
| MW-D3 | D | D Zone | -9.4E-02 | -34.3 | 0.579 | -4.5E-04 | -0.2 | 0.579 | -9.3E-03 | -3.4 | 0.579 | -1.4E-02 | -5.2 | 0.574 | -6.3E-04 | -0.2 | 0.579 | -1.2E-01 | -44.5 | 0.579 | -4.7E-03 | -1.7 | 0.523 |
| MW-D5 | D | D Zone | -2.7E-02 | -9.8 | 0.865 | -3.9E-04 | -0.1 | 0.631 | -6.5E-04 | -0.2 | 0.284 | -1.5E-03 | -0.5 | 0.272 | 0.0E+00 | 0.0 | No Detects | -4.4E-02 | -16.1 | 0.615 | 1.6E-02 | 5.9 | 0.233 |
| MW-D6 | D | D Zone | -3.9E-02 | -14.3 | 0.681 | -1.4E-04 | -0.1 | 0.628 | -1.6E-03 | -0.6 | 0.719 | -6.5E-03 | -2.4 | 0.517 | -4.1E-04 | -0.1 | 0.628 | -5.7E-02 | -20.7 | 0.637 | -1.3E-02 | -4.9 | 0.709 |
| MW-D7 | D | D Zone | -1.8E-02 | -6.7 | 0.915 | 0.0E+00 | 0.0 | No Detects | -9.7E-04 | -0.4 | 0.788 | -1.7E-03 | -0.6 | 0.770 | -8.6E-05 | 0.0 | 0.900 | -5.5E-03 | -2.0 | 0.900 | -7.9E-03 | -2.9 | 0.838 |
| P-B16 | B | Plume Core | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID |
| P-SC16 | C | Plume Core | -3.0E-01 | -108.0 | 0.988 | 0.0E+00 | 0.0 | No Detects | -1.8E-02 | -6.7 | 0.253 | -5.9E-02 | -21.4 | 0.604 | 1.8E-03 | 0.7 | 0.651 | -3.2E-02 | -11.8 | 0.572 | -7.0E-01 | -253.7 | 0.978 |
| P-SC17 | C | Plume Core | -2.1E-01 | -77.5 | 0.278 | 0.0E+00 | 0.0 | No Detects | 3.0E-02 | 10.8 | 0.059 | -1.8E-02 | -6.7 | 0.036 | 0.0E+00 | 0.0 | No Detects | 3.7E-04 | 0.1 | 0.009 | -4.7E-01 | -170.5 | 0.393 |
| PW-B15 | B | Plume Core | -1.7E-01 | -63.9 | 0.509 | -5.9E-04 | -0.2 | 0.345 | -7.8E-03 | -2.9 | 0.167 | -2.8E-02 | -10.3 | 0.229 | 1.7E-04 | 0.1 | 0.514 | -1.2E-02 | -4.5 | 0.880 | -3.5E-01 | -126.9 | 0.589 |
| PW-SC15 | C | Plume Core | -1.1E-01 | -40.7 | 0.845 | -7.7E-04 | -0.3 | 0.353 | 3.8E-02 | 13.8 | 0.089 | 8.4E-03 | 3.1 | 0.011 | -4.0E-04 | -0.1 | 0.353 | -1.9E-02 | -7.1 | 0.645 | -2.8E-01 | -102.1 | 0.737 |
| TW-2 | C | North Lagoon | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 |
| 1 | 2 | 3 | 4 | 5 | 6 | 4 | 5 | 6 | 4 | 5 | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |

| SUMMARY | 1,1,1-Trichloroethane | 1,1,1-Trichloroethane | 1,1,1-Trichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | Chloroform | cis-1,2-Dichl |
|---|---|---|---|---|---|---|---|
| Number of Wells | 64 | 64 | 64 | 64 | 64 | 64 | 64 |
| Number ID or ND | 5 | 5 | 5 | 12 | 46 | 11 | 5 |
| Number Decreasing >1 ug/L.yr | 40 | 40 | 40 | 24 | 1 | 32 | 30 |
| Number Increasing >1 ug/L.yr | 1 | 1 | 1 | 8 | 2 | 5 | 14 |
| Number Stable (does not include ND) | 17 | 17 | 17 | 19 | 14 | 15 | 14 |
| % ID/ND, Decreasing or Stable | 98% | 98% | 98% | 88% | 97% | 92% | 78% |

Table D-1
Linear Regression Analysis Results
Concentration Time Trends: Caldwell Trucking Site

| WELL ID | Screened Zone | Location | Methylene Chloride slope ug/L.d | Methylene Chloride slope ug/L/Y | Methylene Chloride $R^2$ | Tetrachloroethene slope ug/L.d | Tetrachloroethene slope ug/L/Y | Tetrachloroethene $R^2$ | trans-1,2-Dichloroethene slope ug/L.d | trans-1,2-Dichloroethene slope ug/L/Y | trans-1,2-Dichloroethene $R^2$ | Trichloroethene slope ug/L.d | Trichloroethene slope ug/L/Y | Trichloroethene $R^2$ | Vinyl Chloride slope ug/L.d | Vinyl Chloride slope ug/L/Y | Vinyl Chloride $R^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CTBR | C | Plume Core | -1.1E-02 | -4.0 | 0.220 | 9.4E-03 | 3.4 | 0.005 | 2.3E-03 | 0.8 | 0.174 | -4.5E-01 | -164.6 | 7.6E-02 | 0.0E+00 | 0.0 | No Detects |
| CTMW-1 | B | Plume Core | 0.0E+00 | 0.0 | No Detects | -3.4E-03 | -1.2 | 0.289 | 0.0E+00 | 0.0 | No Detects | -1.5E-02 | -5.4 | 4.4E-01 | 0.0E+00 | 0.0 | No Detects |
| MW-1 | C | Lateral Extent | 0.0E+00 | 0.0 | No Detects | 1.5E-03 | 0.5 | 0.354 | 0.0E+00 | 0.0 | No Detects | 7.7E-02 | 28.2 | 6.5E-01 | 0.0E+00 | 0.0 | No Detects |
| MW-1A | B | Lateral Extent | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 4.9E-03 | 1.8 | 7.3E-01 | 0.0E+00 | 0.0 | No Detects |
| MW-4A | B | Upgradient of Site | 0.0E+00 | 0.0 | No Detects | -1.2E-03 | -0.4 | 0.729 | 0.0E+00 | 0.0 | No Detects | -2.7E-03 | -1.0 | 9.3E-02 | 0.0E+00 | 0.0 | No Detects |
| MW-A1 | A | A zone | 0.0E+00 | 0.0 | No Detects | -3.0E-03 | -1.1 | 0.587 | 0.0E+00 | 0.0 | No Detects | -6.1E-02 | -22.1 | 1.7E-01 | -1.1E-03 | -0.4 | 3.5E-01 |
| MW-A10 | A | A zone | 0.0E+00 | 0.0 | No Detects | 4.8E-05 | 0.0 | 0.122 | 0.0E+00 | 0.0 | No Detects | 4.4E-04 | 0.2 | 2.6E-01 | 0.0E+00 | 0.0 | No Detects |
| MW-A11 | A | A zone | 2.9E-05 | 0.0 | 0.278 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -2.2E-04 | -0.1 | 2.3E-01 | 0.0E+00 | 0.0 | No Detects |
| MW-A2 | A | A zone | 4.1E-05 | 0.0 | 0.341 | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 1.1E-03 | 0.4 | 9.9E-01 | 1.1E-04 | 0.0 | 1.6E-01 |
| MW-A3 | A | A zone | 0.0E+00 | 0.0 | No Detects | 5.4E-05 | 0.0 | 0.164 | 0.0E+00 | 0.0 | No Detects | -6.9E-05 | 0.0 | 1.7E-02 | 3.4E-04 | 0.1 | 4.4E-01 |
| MW-A4 | A | A zone | 0.0E+00 | 0.0 | No Detects | 2.1E-02 | 7.8 | 0.487 | 2.0E-03 | 0.7 | 0.351 | 7.1E-02 | 26.1 | 6.0E-02 | 2.9E-03 | 1.1 | 2.5E-01 |
| MW-A6 | A | A zone | 0.0E+00 | 0.0 | No Detects | -1.1E-03 | -0.4 | 0.748 | 0.0E+00 | 0.0 | No Detects | 1.3E-03 | 0.5 | 5.4E-01 | -1.7E-05 | 0.0 | 3.7E-01 |
| MW-A7 | A | A zone | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | ID | ID | ID | ID | ID | ID | ID | ID | ID |
| MW-A9 | A | A zone | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 4.4E-05 | 0.0 | 1.2E-01 | 0.0E+00 | 0.0 | No Detects |
| MW-B1 | B | Plume Core | 0.0E+00 | 0.0 | No Detects | -5.4E-02 | -19.5 | 0.593 | 0.0E+00 | 0.0 | No Detects | -1.7E+00 | -629.3 | 0.705 | -1.7E-03 | -0.6 | 0.004 |
| MWB-1(SeepArea) | B | Pre-Seep Area | 0.0E+00 | 0.0 | No Detects | 1.9E-02 | 6.8 | 0.227 | 0.0E+00 | 0.0 | No Detects | -1.2E+00 | -433.8 | 0.766 | 0.0E+00 | 0.0 | No Detects |
| MW-B10 | B | Lateral Extent | -1.8E-04 | -0.1 | 0.516 | 0.0E+00 | 0.0 | No slope | 0.0E+00 | 0.0 | No slope | 3.3E-05 | 0.0 | 0.018 | 0.0E+00 | 0.0 | No slope |
| MW-B11 | B | Plume Core | 2.3E-02 | 8.5 | 0.277 | -9.6E-02 | -35.1 | 0.947 | 8.6E-01 | 315.2 | 0.398 | -7.6E-01 | -275.9 | 0.960 | 5.2E-04 | 0.2 | 0.277 |
| MW-B12 | B | North Lagoon | 0.0E+00 | 0.0 | No Detects | -4.8E-02 | -17.5 | 0.115 | 1.1E-03 | 0.4 | 0.375 | -8.4E-02 | -30.6 | 0.290 | -1.8E-01 | -64.5 | 0.535 |
| MW-B2 | B | Plume Core | 0.0E+00 | 0.0 | No Detects | 4.6E-03 | 1.7 | 0.042 | -4.8E-04 | -0.2 | 0.281 | -1.1E-01 | -40.4 | 0.085 | 1.1E-03 | 0.4 | 0.152 |
| MWB-2(SeepArea) | B | Pre-Seep Area | 0.0E+00 | 0.0 | No Detects | -4.1E-02 | -14.9 | 0.412 | 8.8E-04 | 0.3 | 0.420 | -1.2E+00 | -421.4 | 0.738 | 3.6E-03 | 1.3 | 0.199 |
| MW-B3 | B | Toe of Plume | 0.0E+00 | 0.0 | No Detects | -2.7E-03 | -1.0 | 0.365 | 8.4E-05 | 0.0 | 0.352 | -4.4E-01 | -162.2 | 0.506 | 0.0E+00 | 0.0 | No Detects |
| MW-B30 | B | Plume Core | -1.0E-02 | -3.8 | 0.170 | -3.4E-02 | -12.6 | 0.383 | 1.5E-03 | 0.6 | 0.532 | -4.2E-01 | -153.2 | 0.676 | -1.1E-02 | -4.2 | 0.010 |
| MW-B34 | B | North Lagoon | 2.9E-04 | 0.1 | 0.513 | 1.0E-03 | 0.4 | 0.852 | 0.0E+00 | 0.0 | No Detects | 7.0E-03 | 2.6 | 0.753 | 0.0E+00 | 0.0 | No Detects |
| MW-B4 | B | Plume Core | 0.0E+00 | 0.0 | No Detects | -8.6E-03 | -3.2 | 0.079 | 1.9E-03 | 0.7 | 0.351 | -5.0E-01 | -180.7 | 0.678 | 3.5E-03 | 1.3 | 0.424 |
| MW-B5 | B | Lateral Extent | 0.0E+00 | 0.0 | No Detects | -2.6E-03 | -1.0 | 0.019 | 1.6E-05 | 0.0 | 0.060 | -7.4E-02 | -27.1 | 0.105 | 2.4E-04 | 0.1 | 0.057 |
| MW-B6 | B | Plume Core | 0.0E+00 | 0.0 | No Detects | 3.0E-03 | 1.1 | 0.398 | 5.1E-05 | 0.0 | 0.349 | -7.0E-02 | -25.7 | 0.209 | 3.5E-05 | 0.0 | 0.199 |
| MW-B7 | B | Lateral Extent | 0.0E+00 | 0.0 | No Detects | 3.9E-04 | 0.1 | 0.771 | 0.0E+00 | 0.0 | No Detects | 3.0E-02 | 11.1 | 0.901 | 2.5E-05 | 0.0 | 0.196 |
| MW-B9 | B | Toe of Plume | 0.0E+00 | 0.0 | No Detects | 8.3E-06 | 0.0 | 0.005 | 0.0E+00 | 0.0 | No Detects | 1.4E-04 | 0.1 | 0.011 | 0.0E+00 | 0.0 | No Detects |
| MW-B16 | B | On Property | 0.0E+00 | 0.0 | No Detects | -1.7E-02 | -6.2 | 0.697 | 3.2E-04 | 0.1 | 0.369 | -4.4E-01 | -160.9 | 0.555 | -2.3E-03 | -0.8 | 0.313 |
| MW-BL1 | B | Plume Core | 1.3E-05 | 0.0 | 0.155 | -3.6E-03 | -1.3 | 0.213 | 0.0E+00 | 0.0 | No Detects | -4.7E-02 | -17.2 | 0.258 | 9.4E-05 | 0.0 | 0.073 |
| MW-BL2 | B | Plume Core | -1.5E-02 | -5.6 | 0.392 | -1.0E-01 | -36.6 | 0.246 | 1.7E-03 | 0.6 | 0.375 | -1.7E+00 | -638.5 | 0.559 | 5.3E-02 | 19.5 | 0.448 |
| MWC-1(SeepArea) | C | Pre-Seep Area | -2.3E-03 | -0.8 | 0.037 | -1.7E-02 | -6.2 | 0.170 | 0.0E+00 | 0.0 | No Detects | -1.6E-01 | -58.5 | 0.023 | 0.0E+00 | 0.0 | No Detects |
| MW-C10 | C | Lateral Extent | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | -1.3E-04 | 0.0 | 0.148 | 0.0E+00 | 0.0 | No Detects |
| MW-C11 | C | Plume Core | 2.7E-02 | 9.9 | 0.214 | -1.9E-02 | -7.1 | 0.216 | 1.6E-03 | 0.6 | 0.371 | -4.5E-01 | -164.0 | 0.414 | 0.0E+00 | 0.0 | No Detects |
| MW-C13 | C | North Lagoon | 0.0E+00 | 0.0 | No Detects | -1.1E-01 | -39.0 | 0.199 | 5.5E-04 | 0.2 | 0.625 | -8.4E-02 | -30.7 | 0.446 | -3.9E-02 | -14.2 | 0.360 |
| MW-C16 | C | On Property | -3.3E-04 | -0.1 | 0.518 | -1.7E-03 | -0.6 | 0.028 | -3.7E-03 | -1.3 | 0.242 | -8.5E-03 | -3.1 | 0.022 | -3.6E-01 | -132.1 | 0.358 |
| MW-C17 | C | On Property | 1.3E-04 | 0.0 | 0.082 | -4.6E-04 | -0.2 | 0.190 | 0.0E+00 | 0.0 | No Detects | -2.0E-03 | -0.7 | 0.568 | 0.0E+00 | 0.0 | No Detects |
| MW-C18 | C | On Property | 4.9E-05 | 0.0 | 0.291 | 3.5E-03 | 1.3 | 0.761 | 5.8E-04 | 0.2 | 0.027 | 1.0E-02 | 3.8 | 0.183 | 1.4E-03 | 0.5 | 0.161 |
| MW-C3 | C | Toe of Plume | -7.0E-05 | 0.0 | 0.179 | -8.9E-04 | -0.3 | 0.053 | 6.3E-04 | 0.2 | 0.352 | -1.9E-01 | -69.4 | 0.267 | 0.0E+00 | 0.0 | No slope |
| MW-C30 | C | Plume Core | 1.5E-02 | 5.3 | 0.197 | -3.7E-01 | -133.8 | 0.864 | 0.0E+00 | 0.0 | No slope | -2.2E+00 | -789.6 | 0.875 | 5.1E-02 | 18.8 | 0.056 |
| MW-C31 | C | Plume Core/Heisler | -2.4E+00 | -885.7 | 0.720 | -4.7E-01 | -169.9 | 0.322 | 2.8E-04 | 0.1 | 0.549 | -2.8E+01 | -10204.7 | 0.282 | 8.7E-02 | 31.8 | 0.257 |
| MW-C33 | C | North Lagoon | 1.8E+01 | 6460.5 | 0.112 | -1.2E+00 | -429.8 | 0.187 | -1.0E-02 | -3.7 | 0.189 | 6.2E+01 | 22584.5 | 0.131 | -2.3E-02 | -8.4 | 0.189 |
| MW-C34 | C | North Lagoon | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects | 0.0E+00 | 0.0 | No Detects |
| MW-C35 | C | North Lagoon | 2.4E-04 | 0.1 | 0.539 | -9.5E-05 | 0.0 | 0.018 | -2.4E-03 | -0.9 | 0.416 | -3.3E-05 | 0.0 | 0.001 | -8.4E-03 | -3.1 | 0.708 |
| MW-C37 | C | Plume Core/Heisler | 0.0E+00 | 0.0 | No Detects | -3.7E-03 | -1.4 | 0.031 | 5.0E-03 | 1.8 | 0.580 | -3.2E-01 | -115.6 | 0.273 | 1.7E-02 | 6.1 | 0.159 |
| MW-C38 | C | Plume Core/Heisler | -5.6E-03 | -2.0 | 0.538 | -8.5E-03 | -3.1 | 0.461 | 2.3E-04 | 0.1 | 0.550 | -1.1E-01 | -40.1 | 0.806 | 0.0E+00 | 0.0 | No Detects |
| MWC-4(SeepArea) | C | Pre-Seep Area | 0.0E+00 | 0.0 | No Detects | 9.7E-03 | 3.6 | 0.163 | 4.6E-04 | 0.2 | 0.350 | -1.2E-01 | -43.5 | 0.274 | 3.6E-03 | 1.3 | 0.543 |
| MW-C5 | C | Lateral Extent | -8.2E-02 | -30.0 | 0.576 | -1.0E-02 | -3.8 | 0.602 | 9.3E-05 | 0.0 | 0.350 | -2.3E-01 | -83.6 | 0.919 | 1.4E-02 | 5.2 | 0.306 |
| MWC-5(SeepArea) | C | Pre-Seep Area | 0.0E+00 | 0.0 | No Detects | -1.3E-03 | -0.5 | 0.007 | 0.0E+00 | 0.0 | No Detects | -2.5E-01 | -90.8 | 0.470 | 1.6E-03 | 0.6 | 0.255 |
| MW-C6 | C | Plume Core | -7.8E-04 | -0.3 | 0.358 | -6.0E-03 | -2.2 | 0.366 | 0.0E+00 | 0.0 | No Detects | -1.2E-01 | -42.9 | 0.232 | 0.0E+00 | 0.0 | No Detects |
| MW-C7 | C | Lateral Extent | 0.0E+00 | 0.0 | No Detects | 1.2E-03 | 0.4 | 0.023 | 3.4E-04 | 0.1 | 0.344 | 5.6E-02 | 20.3 | 0.029 | 0.0E+00 | 0.0 | No Detects |
| MW-D1 | D | D Zone | 0.0E+00 | 0.0 | No Detects | -2.7E-04 | -0.1 | 0.583 | 0.0E+00 | 0.0 | No Detects | -7.9E-03 | -2.9 | 0.750 | -4.4E-05 | 0.0 | 0.583 |
| MW-D10 | D | D Zone | 0.0E+00 | 0.0 | No Detects | -1.7E-05 | 0.0 | 0.899 | 0.0E+00 | 0.0 | No Detects | -8.2E-05 | 0.0 | 0.082 | 0.0E+00 | 0.0 | No Detects |
| MW-D3 | D | D Zone | -1.7E-05 | 0.0 | 0.005 | -7.9E-03 | -2.9 | 0.579 | 2.9E-04 | 0.1 | 0.752 | -5.0E-01 | -181.3 | 0.583 | 0.0E+00 | 0.0 | No Detects |
| MW-D5 | D | D Zone | -1.2E-01 | -44.1 | 0.549 | -2.7E-03 | -1.0 | 0.426 | 4.4E-02 | 16.1 | 0.876 | -1.3E-01 | -46.0 | 0.975 | 7.4E-03 | 2.7 | 0.366 |
| MW-D6 | D | D Zone | -1.4E-03 | -0.5 | 0.351 | -6.6E-03 | -2.4 | 0.760 | ID | ID | ID | -2.3E-01 | -83.2 | 0.862 | 0.0E+00 | 0.0 | No Detects |
| MW-D7 | D | D Zone | -1.6E-03 | -0.6 | 0.171 | -1.8E-03 | -0.7 | 0.866 | 2.6E-04 | 0.1 | 0.751 | -8.5E-02 | -30.9 | 0.937 | 0.0E+00 | 0.0 | No Detects |
| P-B16 | B | Plume Core | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID | ID |
| P-SC16 | C | Plume Core | 0.0E+00 | 0.0 | No Detects | -9.3E-02 | -33.8 | 0.907 | 2.5E-03 | 0.9 | 0.651 | -2.0E+00 | -731.2 | 0.989 | 1.2E-03 | 0.5 | 0.365 |
| P-SC17 | C | Plume Core | 0.0E+00 | 0.0 | No Detects | -3.2E-02 | -11.8 | 0.716 | -2.1E-04 | -0.1 | 0.002 | -1.9E+00 | -675.8 | 0.901 | 2.7E-02 | 9.9 | 0.107 |
| PW-B15 | B | Plume Core | 0.0E+00 | 0.0 | No Detects | -3.2E-02 | -11.8 | 0.806 | 1.0E-03 | 0.4 | 0.715 | -7.7E-01 | -280.0 | 0.908 | -1.0E-02 | -3.7 | 0.016 |
| PW-SC15 | C | Plume Core | -1.1E-04 | 0.0 | 0.353 | -3.7E-02 | -13.6 | 0.667 | 1.3E-03 | 0.5 | 0.415 | -7.0E-01 | -257.3 | 0.757 | 1.3E-02 | 4.8 | 0.110 |
| TW-2 | C | North Lagoon | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 | 0.0E+00 | 0.0 | 0.000 |
| 1 | 2 | 3 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |

| SUMMARY | Methylene Chloride | Tetrachloroethene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl Chloric |
|---|---|---|---|---|---|
| Number of Wells | 64 | 64 | 64 | 64 | 64 |
| Number ID or ND | 36 | 9 | 30 | 3 | 28 |
| Number Decreasing > | 7 | 27 | 2 | 40 | 7 |
| Number Increasing >1 | 4 | 7 | 3 | 8 | 12 |
| Number Stable (does r | 16 | 20 | 28 | 12 | 16 |
| % ID/ND, Decreasing ( | 94% | 89% | 95% | 88% | 81% |



Golder Associates

Table D-1
Linear Regression Analysis Results
Concentration Time Trends: Caldwell Trucking Site

| WELL ID | Screend Zone | Location | total | | |
|---|---|---|---|---|---|
| | | | slope ug/L.d | slope ug/L/Y | $R^2$ |
| CTBR total | C | Plume Core | -8.0E-01 | -2.9E+02 | 1.2E-01 |
| CTMW-1 total | B | Plume Core | -2.0E-02 | -7.2E+00 | 4.1E-01 |
| GH-2 total | B | North Lagoon | -3.6E+00 | -1.3E+03 | 5.6E-01 |
| GH-7 total | B | North Lagoon | -7.1E-02 | -2.6E+01 | 3.2E-03 |
| GH-8 total | B | North Lagoon | 1.5E+00 | 5.6E+02 | 8.9E-01 |
| MW-1 total | C | Lateral Extent | 7.6E-02 | 2.8E+01 | 5.0E-01 |
| MW-1A total | B | Lateral Extent | 9.6E-03 | 3.5E+00 | 8.6E-01 |
| MW-4A total | B | Up-gradient | -9.6E-03 | -3.5E+00 | 4.2E-01 |
| MW-A10 total | A | A zone | 2.9E-04 | 1.1E-01 | 9.9E-02 |
| MW-A11 total | A | A zone | -4.5E-04 | -1.6E-01 | 2.1E-01 |
| MW-A3 Total | A | A zone | 6.1E-03 | 2.2E+00 | 1.4E-01 |
| MW-A4 total | A | A zone | 1.7E-01 | 6.2E+01 | 5.5E-02 |
| MW-A9 total | A | A zone | 7.3E-06 | 2.7E-03 | 2.7E-03 |
| MWB-1(SeepA | B | Pre-Seep Area | -1.6E+00 | -5.7E+02 | 6.1E-01 |
| MW-B1 total | B | Plume Core | -2.5E+00 | -9.2E+02 | 6.8E-01 |
| MW-B10 total | B | Lateral Extent | -1.6E-04 | -5.8E-02 | 2.2E-01 |
| MW-B12 total | B | North Lagoon | -1.3E+00 | -4.6E+02 | 7.3E-01 |
| MW-B16 total | B | Source Area | -9.9E-01 | -3.6E+02 | 5.5E-01 |
| MWB-2(SeepA | B | Pre-Seep Area | -1.9E+00 | -6.8E+02 | 6.0E-01 |
| MW-B3 total | B | Toe of Plume | -7.0E-01 | -2.5E+02 | 4.7E-01 |
| MW-B4 total | B | Plume Core | -6.5E-01 | -2.4E+02 | 4.0E-01 |
| MW-B5 total | B | Lateral Extent | -9.0E-02 | -3.3E+01 | 8.0E-02 |
| MW-B6 total | B | Plume Core | -1.3E-01 | -4.7E+01 | 2.2E-01 |
| MW-B7 total | B | Toe of Plume | 4.9E-02 | 1.8E+01 | 9.2E-01 |
| MW-B9 total | B | Toe of Plume | 1.2E-04 | 4.5E-02 | 5.8E-03 |
| MW-BL1 total | B | Plume Core | -3.9E+00 | -1.4E+03 | 4.7E-01 |
| MW-BL2 total | B | Plume Core | -6.0E+00 | -2.2E+03 | 8.9E-01 |
| MWC-1(SeepA | C | Pre-Seep Area | -3.0E-01 | -1.1E+02 | 3.6E-02 |
| MW-C10 total | C | Lateral Extent | -4.3E-04 | -1.6E-01 | 5.0E-01 |
| MW-C11 total | C | Plume Core | -5.9E-01 | -2.2E+02 | 3.9E-01 |
| MW-C13 total | C | North Lagoon | -8.7E-01 | -3.2E+02 | 6.1E-01 |
| MW-C16 total | C | Source Area | -3.8E+00 | -1.4E+03 | 7.5E-01 |
| MW-C3 total | C | Toe of Plume | -3.1E-01 | -1.1E+02 | 2.9E-01 |
| MWC-4(SeepA | C | Pre-Seep Area | 1.1E-02 | 4.1E+00 | 6.6E-04 |
| MWC-5(SeepA | C | Pre-Seep Area | 4.0E-01 | 1.5E+02 | 1.9E-01 |
| MW-C5 total | C | Lateral Extent | -3.8E-01 | -1.4E+02 | 9.7E-01 |
| MW-C6 total | C | Plume Core | -2.5E-01 | -9.0E+01 | 4.4E-01 |
| MW-C7 total | C | Toe of Plume | 8.3E-02 | 3.0E+01 | 3.5E-02 |
| MW-D1 total | C | D-zone | -1.4E-02 | -5.2E+00 | 6.9E-01 |
| MW-D10 total | D | D-zone | -2.3E-04 | -8.5E-02 | 4.0E-01 |
| MW-D3 total | C | D-zone | -7.5E-01 | -2.7E+02 | 5.8E-01 |
| MW-D5 total | D | D-zone | -3.2E-01 | -1.2E+02 | 8.0E-01 |
| MW-D6 total | D | D-zone | -3.5E-01 | -1.3E+02 | 8.1E-01 |
| MW-D7 total | D | D-zone | -1.2E-01 | -4.4E+01 | 9.3E-01 |
| P-SC17 total | C | Plume Core | -2.5E+00 | -9.2E+02 | 7.5E-01 |
| PW-B15 total | B | Plume Core | -1.4E+00 | -5.0E+02 | 7.4E-01 |
| PW-SC15 total | C | Plume Core | -1.1E+00 | -4.0E+02 | 8.5E-01 |
| TW-2 total | C | North Lagoon | 0.0E+00 | 0.0E+00 | 0.0E+00 |

| SUMMARY | | | total |
|---|---|---|---|
| | | | |
| Number of Wells | | | 48 |
| Number ID or ND | | | 0 |
| Number Decreasing >1 ug/L.yr | | | 31 |
| Number Increasing >1 ug/L.yr | | | 9 |
| Number Stable (does not include ND) | | | 7 |
| % ID/ND, Decreasing or Stable | | | 81% |

Notes:
$R^2$ signifies the goodness-of-fit of the linear correlation (Uses the Pearson Product Moment correlation coefficient; 0=lowest, 1=highest).
Slopes reported on Figures are in units of ug/L/d. Slopes tabulated here were converted from units of ug/L/d to ug/L/yr.
ID denotes "insufficient data" for trend analysis, i.e. less than or equal to 2 data points
ND denotes "non-detected" concentration of contaminants throughout the data record
"Number Decreasing" denotes cases where the negative magnitude of the slopes was greater than or equal t
"Number Stable" denotes cases where the magnitude of the slopes was less than or equal to 1 ug/L/yr



Golder Associates