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17 February 2016

Ms. Dena Thompson
CESAS-PM-H
100 W. Oglethorpe Ave.
Savannah, GA 31401-3640

Subject: Submittal of the *Long-term Monitoring Report, October 2015 Event, SWMU 14c (Cook St. Warehouse), Fort Bragg, North Carolina* (Contract W912QR-12-D-0002, Delivery Order CV02)

Ms. Thompson,

Please find enclosed one hard copy and one electronic copy of the *Long-term Monitoring Report, October 2015 Event, SWMU 14c (Cook St. Warehouse), Fort Bragg, North Carolina.* This document was prepared by Parsons Government Services, Inc. (Parsons) for the U.S. Army Engineer District, Savannah and the Fort Bragg Directorate of Public Works (DPW). A copy of this document was also submitted to the North Carolina Department of Environmental Quality (NCDEQ).

If you have any questions or require additional information, please contact me at (801) 572-5999 or at ross.miller@parsons.com.

Sincerely,

PARSONS

Ross Miller PhD, P.E.
Project Manager

cc:

Mr. Paul Humphrey – Fort Bragg DPW (1 electronic copy)
Ms. Marti Morgan – NCDEQ (1 electronic copy)

LONG-TERM MONITORING REPORT
SWMU 14C
(COOK STREET WAREHOUSE COMPLEX)

OCTOBER 2015 SAMPLING EVENT

REMEDIATION SERVICES
AT
FORT BRAGG, NORTH CAROLINA

Prepared For:

USACE Savannah District

and

Fort Bragg

Prepared By:

PARSONS

February 2016

LONG-TERM MONITORING REPORT

SWMU 14c

Project Title: Performance Based Remediation of 66 Sites, Fort Bragg-Pope AAF, North Carolina

Project Number: 748776

Client Name: U.S. Army Corps of Engineers, Savannah District

Contract Number: W912QR-12-D-0002, Task Order CV02

Contractor: Parsons Government Services, Inc.

Task Order Period: 21 September 2012 – 30 September 2017

Original Submission: NA

REVIEWED AND APPROVED BY:

Project Manager: _____ February 4, 2016
Ross Miller, PhD, P.E. Date

Task Manager: _____ February 4, 2016
Angie M. Welch, P.G. Date

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ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
bgs	below ground surface
cis-1,2-DCE	cis-1,2-dichloroethene
COC	Contamination of Concern
CMIP	Corrective Measures Implementation Plan
CMIR	Corrective Measures Implementation Report
CMS	Corrective Measures Study
IDW	Investigation derived waste
LDPE	Low density polyethylene
LTM	Long Term Monitoring
LUCs	Land Use Controls
MCL	Maximum Contaminant Level
MNA	Monitored Natural Attenuation
MW	Monitoring Wells
N.C. 2L	North Carolina Subchapter 2L groundwater standards
NCDEQ	North Carolina Department of Environmental Quality
Parsons	Parsons Government Services, Inc.
PCE	Tetrachloroethene
PDB	Passive diffusion bag
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
SI	Site Investigation
SWMU	Solid Waste Management Unit
TCE	Trichloroethene
ug/L	Micrograms per liter
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compound

LONG-TERM MONITORING REPORT
SWMU 14c
October 2015 SAMPLING EVENT
FORT BRAGG, NORTH CAROLINA

1.0 INTRODUCTION

This Long-term Monitoring (LTM) report presents the results of groundwater monitoring conducted by Parsons at Solid Waste Management Unit (SWMU) 14c during the October 2015 monitoring event. This report was prepared by Parsons Government Services, Inc. (Parsons) to meet the format and content requirements identified in the United States Army Corps of Engineers (USACE) Performance Work Statement issued for this Task Order, and the Project Management Plan for Remediation Services at Fort Bragg, North Carolina for Task Order CV02 issued under contract number W912QR-12-D-0002.

1.1 Project Description and Objectives

Remediation at SWMU 14c is being conducted pursuant to Resource Conservation and Recovery Act (RCRA) Hazardous Waste corrective action requirements, with the North Carolina Department of Environmental Quality (NCDEQ) as the lead regulatory agency. The LTM activities are being performed to monitor contaminant concentration trends over time and to determine if contamination is migrating offsite. The analytical results from the groundwater samples for each sampling event will be compared to the North Carolina Subchapter 2L Groundwater Standards (N.C. 2L standards), or the federal Maximum Contaminant Levels (MCLs) in the absence of N.C. 2L standards.

1.2 Site Description and Summary of Previous Investigations

1.2.1 Fort Bragg

The U.S. Army Reservation at Fort Bragg was established in 1918 as a major logistic, training, and mobilization deployment center for the XVIII Airborne Corps, which is part of the U.S. Army's mobile infantry, assault, and armored forces. Fort Bragg occupies approximately 161,024 acres in southeast North Carolina. Approximately 143,140 acres are designated for field maneuvers and military exercises. The cantonment area, which is in the eastern part of Fort Bragg, occupies 11,354 acres and includes approximately 6,195 buildings. Most military maintenance and production facilities, supply facilities, operation and training facilities, community installations, and family and troop housing are located within the cantonment area.

Fort Bragg lies within the Sand Hills section of the North Carolina Coastal Plain (**Figure 1**). The Sand Hills area is characterized by deep, sandy soil and has variable elevations. The topography at Fort Bragg is characterized by gently to steeply sloping ridges. Elevations across the base range from 550 feet above mean sea level (amsl) in the western part to about 150 feet amsl in the northeastern part of the military reservation. The Fort Bragg area is underlain by three freshwater aquifers: the saprolite-basement, the Cape Fear, and the Middendorf aquifers. The subsurface material consists primarily of saprolite, sand, silty sand, clay, and sandy clay. The major water-bearing strata at Fort Bragg are in the Middendorf Formation (Bhate, 2005).

1.2.2 SWMU 14c Overview

SWMU 14c, the Cook Street Warehouse Complex, is located near the intersection of Knox and Cook Streets within the central receiving complex on Fort Bragg (**Figure 2**) and was formerly called CCFTBR0074, or Site 74. A RCRA Facility Investigation (RFI) conducted at the Cook Street Warehouse Complex was considered an Extended RFI for existing SWMUs 14a and 14b, Knox Street Demolition Landfills, since these landfills are downgradient of the Cook Street Warehouse source area and groundwater at the landfills is impacted by the release from this source area. As such, the Cook Street Warehouse release is now identified as SWMU 14c on Appendix A of Fort Bragg's Hazardous Waste Management Permit. SWMU 14c is part of the collective SWMU 14 which also includes SWMUs 14a and 14b.

Land use in the vicinity of SWMU 14c consists of a central receiving complex containing several warehouse buildings and gravel roadways. Vehicles, shipping containers, and equipment staged on pallets on the ground surface are also stored onsite. The site is bounded on the east/northeast by warehouse buildings and on the south by wooded areas. The site is bounded on the west/northwest by SWMUs 14a and 14b which is an unlined construction debris landfill with a vegetative cover consisting of grasses and scrub pines. In addition, the Defense Reutilization and Marketing Office is located approximately 1,500 feet northeast of the site.

1.2.3 SWMU 14c Previous Characterization History

1.2.3.1 Site Investigation

Historically, tetrachloroethene (PCE) has been detected in the most upgradient well associated with SWMUs 14a and 14b. The 2003 Decision Document for SWMUs 14a and 14b states that the source of PCE "is not believed to be SWMU 14" as wastes contained within SWMUs 14a and 14b were reported as general construction debris. Based on these data, a site investigation (SI) was conducted in 2009 to isolate a potential source(s) of PCE located upgradient of SWMUs 14a and 14b (Parsons, 2009). This source area has was originally designated as CCFTBR0074 (Site 74), but is now referred to as SWMU 14c.

Groundwater sampling in support of the SI was conducted by Parsons between 21 September and 2 October 2009. The goal of the SI was to confirm the presence of PCE in groundwater and to determine the location of the source. Based on a memorandum from Fort Bragg Department of Public Works describing the past and present uses of the buildings, the source was suspected to be Building J-2050, the Hazardous Materials Control Center, located within the Cook Street Warehouse Complex. The SI Work Plan proposed collection of groundwater grab samples arranged in a grid-like structure between Building J-2050 and well 14MW2. Initially, 8 grab samples were collected at an average depth of 40 feet bgs (directly above a basal clay or aquiclude layer). The PCE concentrations in these samples were either low level or non-detect at this interval. Based on these data, the investigation depth was revised to target the zone of the highest concentrations at SMWUs 14 a and b (i.e., the screened interval of 49 to 59 ft bgs (197 to 187 ft amsl at 14MW2)). This interval translated to a sample depth of 63 feet bgs in the

SI investigation area and grab samples were collocated with the shallow groundwater grab samples and designated as either "D" or "B" to denote a reading at a greater depth. The results of samples are shown in **Appendix A, Figure 3.1 and Table 4.1**. The highest concentrations of PCE were 153 micrograms per liter (µg/L) and 110 µg/L at wells 14SP5B and 14SP4B respectively. These wells samples were located side and down gradient from Building J2844 (a storage shed) which suggests a possible source near this building (**Appendix A, Figure 3.1**). While PCE was the predominant contaminant detected, other substances were found in the samples at low concentrations. These include common laboratory contaminants (i.e. acetone and carbon disulfide), as well as chloroform, methyl ethyl ketone, and 1,1,2-trichloro-1,2,2-triflouroethane.

1.2.3.2 Pre RFI Groundwater Characterization

In order to establish the appropriate investigation depth for the RFI, three monitoring wells (74MW1, 74MW1D, and 74MW2) were installed in June 2010. Monitoring wells 74MW1 and 74MW1D were installed in the vicinity of 14MW2, a SWMUs 14 a and b upgradient well historically containing the highest PCE concentrations which is likely attributed to the SWMU 14c source. Well 74MW1 was installed with a screened interval at 70 to 80 feet bgs or 173.69 to 163.69 ft amsl and 74MW1D was installed with a screened interval at 97 to 107 feet bgs or 146.46 to 136.46 ft amsl (depth of the Cape Fear Formation basal clay) in order to supplement data collected from approximately 40 and 60 feet bgs during the SI. Monitoring well 74MW2 was installed at the location of Geoprobe sample 14SP5B which contained the highest PCE concentration during the SI (153 µg/L). The groundwater sample from 14SP5B was collected at an interval of approximately 55 to 59 ft bgs (182.72 -178.72 ft amsl). In order to better define vertical extent at this location, 74MW2 was installed with a screened interval of 70 to 80 feet bgs (169.86 to 159.86 ft amsl).

The highest PCE concentration (101 µg/L) was detected in 74MW2, located near the suspected source area. This was less than the concentration measured at this location in the more shallow interval of 55 to 59 feet bgs (182.72 -178.72 ft amsl) during the SI which was 153 µg/L at 14SP15B. PCE was detected at a concentration of 59.8 µg/L at 74MW1 and at an estimated concentration of 1.53J µg/L at 74MW1D. Results indicated that the vertical extent of PCE contamination is bounded at the 175 – 160 ft amsl interval because only an estimated detection of PCE was found in 74MW1D (screened at 146 to 136 ft amsl). In addition to PCE, only acetone and methyl ethyl ketone were detected in the wells at low level concentrations.

1.2.3.3 RFI

The nature and extent of contamination associated with SWMU 14c were characterized in a RFI conducted between June 2010 and May 2012 (Parsons, 2012). Subsequent to the installation of pre-RFI monitoring wells 74MW1, 74MW1D, and 74MW2, additional review of the lithology in the vicinity of 14MW1 and 14MW2 was conducted, and it was noted that the Cape Fear Formation confining unit (compact clay) occurs at approximately 70 to 76 feet bgs (174 to 168 ft amsl) at this location. A saturated

clay layer was also noted at this same interval during the installation of 74MW1, 74MW1D, and 74MW2. Because PCE concentrations were relatively low in the sample collected from 74MW1D (screened at the basal clay at 107 feet bgs or 136 ft amsl) it was presumed that a competent clay was likely present site-wide at approximately 174 to 168 ft AMSL and that the highest concentrations of PCE may occur at or above this interval. Accordingly, two additional monitoring wells (74MW2S and 74MW2I) were installed in February 2011 in the source area adjacent to 74MW2 and screened at a more shallow depth than 74MW2.

Monitoring well 74MW2S was screened at 50 to 60 feet bgs (188 to 178 ft amsl) to correspond with the SI investigation depth containing the highest PCE concentrations. Monitoring well 74MW2I was screened directly above the clay confining unit at a depth of 61 to 71 feet bgs (176.5 to 166.5 ft amsl) in order to determine if the highest PCE concentrations in groundwater correspond to the interval directly above the Cape Fear Formation confining unit. PCE was the only constituent detected in either well at a concentration of 319 µg/L in 74MW2I and 131 µg/L in 74MW2S (**Appendix A, Figure 5.2**). These data indicated that the investigation depth for the RFI should target the top of the confining clay unit. These data also fulfilled the RFI requirement of successfully defining the extent of vertical contamination.

Once the target investigation depth was determined, five additional monitoring wells were installed in May 2011 to define the horizontal extent of contamination at the site. Monitoring wells 74MW4 and 74MW6 were installed downgradient of the source area, 74MW3 and 74MW5 were installed sidegradient of the source area, and 74MW7 serves as an upgradient well. Each well was installed such that the base of the screened interval is situated directly above the Cape Fear Formation clay confining unit. In response to comments on the Draft version of the RFI report, monitoring well 74MW8 was installed in March 2012 to define the horizontal extent of contamination in the saturated zone located between the Cape Fear Formation clay confining unit at approximately 170 feet amsl and the competent basal clay at approximately 136 feet amsl. Monitoring wells 74MW1 and 74MW2 were screened within this zone and contained PCE concentrations of 59.8 µg/L and 101 µg/L, respectively. Monitoring well 74MW8 was installed approximately 700 feet downgradient of the suspected source area and screened at approximately 160.5 to 150.5 ft amsl.

The results of the March 2011, June 2011, and May 2012 (74MW8 only) sampling events indicate that the highest PCE concentrations were observed in source area wells 74MW2I (319 to 324 µg/L) and 74MW2S (131 to 191 µg/L) and downgradient wells 74MW4 (218 µg/L) and 14MW2 (210 µg/L). Monitoring wells 74MW2I and 74MW4 are screened directly above the confining clay unit and 74MW2S and 14MW2 are screened at a shallower interval. The concentration of PCE was observed to decline sharply in 74MW6 (26.1 µg/L) which is located approximately 400 feet downgradient from 74MW4 (218 µg/L) (**Appendix A, Figure 5.2**). Concentrations of PCE in sidegradient wells 74MW5 and 74MW3 and upgradient well 74MW7 were low-level estimated detections. The concentration of PCE in 74MW8, which is screened below the Cape Fear Formation clay confining unit, was 7.78 µg/L. Trichloroethene (TCE) and cis-1,2-

dichloroethene (cis-1,2-DCE) were also measured in this well at concentrations of 48.4 µg/L and 38.5 µg/L, respectively. This is an indication that PCE in this interval is likely dechlorinating as TCE and cis-1,2-DCE are daughter products of PCE degradation.

PCE contamination is constrained horizontally by Beaver Creek, which acts as a hydraulic barrier. Surface water samples were collected in Beaver Creek upstream, adjacent to, and downstream of SWMU 14c and results were non-detect. Therefore, PCE is either not entering surface water, or if it does enter, it is rapidly volatilizing, diluting and dispersing so as to prevent detectable concentrations.

1.2.3.4 Corrective Measures Study (CMS)

A CMS was completed for SWMU 14c, and the selected remedy for the site is land use controls (LUCs) and groundwater and surface water monitoring (Parsons, 2014a). This alternative relies upon natural attenuation processes to control migration of the PCE contamination, emplaces LUCs to prevent future development of SWMU 14c groundwater for drinking water and other purposes, and requires periodic monitoring to ensure that these controls remain effective.

1.2.3.5 Corrective Measures Implementation Plan (CMIP)

A CMIP and Corrective Measure Implementation Report (CMIR) were completed for SWMU 14c to detail how the selected corrective measures from the CMS would be implemented (Parsons, 2014b and 2015). Groundwater and surface water monitoring in October 2015 was conducted in accordance with the CMIP.

2.0 FIELD ACTIVITIES AND SAMPLING METHODOLOGY

A long-term monitoring event for groundwater was conducted in October 2015. Monitoring activities were conducted by Parsons in accordance with the Final Quality Assurance Project Plan/Sampling and Analysis Plan for Performance Based Remediation of 66 Sites at Fort Bragg-Pope AAF (Parsons, 2013) and the CMIP (Parsons, 2014b). Groundwater samples were collected from ten wells and three surface water locations at SWMU 14c and analyzed for volatile organic compound (VOCs).

2.1 Water Level Gauging

Depth to groundwater was measured on October 21 -22, 2015 at all site monitoring wells prior to the sampling activities. Static groundwater level measurements were collected using an electronic water level indicator. The indicator probe was lowered into each monitoring well until the alarm sounded and/or the indicator light illuminated. The probe was then withdrawn several feet and slowly lowered again until the groundwater surface was contacted, as noted by the alarm and/or indicator light. Water level measurements were estimated to the nearest 0.01 ft from the top of the well casing. Depth to water and groundwater elevation measurements from each monitoring well are summarized in **Table 1**. Well construction data, including screened intervals of each well, is provided in **Table 2**. A potentiometric surface map depicting groundwater flow is provided in **Figure 3**. Groundwater flow at the site is generally toward the west.

2.2 Monitoring Well Sampling and Analysis

2.2.1 Passive Diffusion Bag (PDB) Sample Collection

EQUILIBRATOR™ brand PDBs manufactured by EON Products, Inc. consisting of a semi-permeable low-density polyethylene (LDPE) membrane were used to sample wells 74MW2I, 74MW4, 74MW6, 74MW7, 14MW4, 14MW5, 14MW12, 14MW13, 14MW14, and 14MW15. The following steps constitute deployment of this device and subsequent sample collection:

- The PBDs were deployed such that the midpoint of the PDB was aligned with the interval corresponding to three feet above the bottom of the well screen in accordance with the approved Standard Operating Procedure. Standard nylon bailer rope was used as a tether, and a stainless steel weight was tied to the bottom of the PDB mesh housing to ensure that the PDB remained vertical and did not float upwards in the water column.
- The PDB membrane was filled with 350 mL of distilled water, sealed, and then lowered into each well. Under natural groundwater flow, the membrane allows for diffusion of VOCs into the distilled water contained within the PDB.
- The PDBs were deployed in August 17 and 20, 2015 and were retrieved on October 21 – 22, 2015 constituting a deployment of approximately nine weeks which is within the recommended range of deployment times. Upon retrieval, the PDB was punctured with a small "straw" and sample vials were filled via the straw.
- New PDBs were deployed in the wells for sample collection during the next monitoring round.

Immediately after collection of samples, each container was placed into an ice-filled cooler to ensure preservation. Groundwater samples were shipped to Gulf Coast Analytical Laboratories, Inc. in Baton Rouge, Louisiana under standard chain of custody procedures. Gulf Coast Analytical Laboratories, Inc. is currently accredited by the North Carolina Division of Water Quality and holds certificate number 618. In accordance with the Final Quality Assurance Project Plan (Parsons 2013), Gulf Coast Analytical Laboratories, Inc. provided analyses for VOCs by United States Environmental Protection Agency (USEPA) Method 8260B. Results of the groundwater analysis are presented in Section 3.0.

2.2.2 Sample Handling and Analysis

Immediately after collection of samples, each container was placed into an ice-filled cooler to ensure proper preservation. Groundwater samples were shipped to Gulf Coast Analytical Laboratories, Inc. (GCAL) in Baton Rouge, Louisiana under standard chain of custody procedures. GCAL is currently accredited by the North Carolina Division of Water Quality and holds certificate number 618. In accordance with the Final Quality Assurance Project Plan (Parsons 2013), GCAL provided analyses for VOCs by the USEPA Method 8260B. Results of the groundwater analysis are presented in Section 3.1.

2.3 Investigative Derived Waste (IDW)

Excess water from PDBs not needed for samples was containerized within 55-gallon drums and properly sealed and labeled. Drums were staged at the post drum storage yard adjacent to Building 3-1137. The IDW was classified as non-hazardous based on previous analytical profiles and transported to an appropriate disposal facility.

2.4 Surface Water Sampling and Analysis

Surface water sampling was conducted at SWMU 14c based on guidance provided by the USEPA Region 4 (USEPA, 2001). At each location the sampling process started with the field team donning a new pair of latex or nitrile gloves. The sampler then faced upstream and submerged each pre-labeled bottle associated with the subject sampling location. Bottles were submerged in an upright position. Each bottle was allowed to fill slowly until the bottle was filled but not overfilled to avoid losing any chemical preservative. VOC bottles were topped off using the lid such that they could be capped with zero head space. Each bottle was capped immediately after filling and placed in an ice filled cooler. The sampler took care to avoid disturbing any sediment while filling bottles so that the samples were collected as turbidity free as possible. Results of the stormwater analysis are presented in Section 3.2.

3.0 RESULTS SUMMARY

3.1 Groundwater Results

This section presents the results of groundwater analysis from the October 2015 event at SWMU 14c. A summary of the groundwater analytical data is presented in **Table 3**, and PCE concentrations are presented on **Figure 4**. Laboratory data sheets are included in **Appendix B**. A summary of N.C. 2L exceedances is included below.

- **Monitoring Well 14MW4 –** One VOC was detected at a concentration above the N.C. 2L Standard:
  - Tetrachloroethene (PCE).
- **Monitoring Well 14MW5 –** None of the VOCs were detected at a concentration above the N.C. 2L Standard:
- **Monitoring Well 14MW12 –** One VOC was detected at a concentration above the N.C. 2L Standard:
  - Tetrachloroethene (PCE).
- **Monitoring Well 14MW13 –** One VOC was detected at a concentration above the N.C. 2L Standard:
  - Tetrachloroethene (PCE).
- **Monitoring Well 14MW14 –** One VOC was detected at a concentration above the N.C. 2L Standard:
  - Tetrachloroethene (PCE).
- **Monitoring Well 14MW15 –** One VOC was detected at a concentration above the N.C. 2L Standard:

  - Tetrachloroethene (PCE).
- **Monitoring Well 74MW2I –** One VOC was detected at a concentration above the N.C. 2L Standard:
  - Tetrachloroethene (PCE).
- **Monitoring Well 74MW4 –** One VOC was detected at a concentration above the N.C. 2L Standard:
  - Tetrachloroethene (PCE).
- **Monitoring Well 74MW6 –** One VOC was detected at a concentration above the N.C. 2L Standard:
  - Tetrachloroethene (PCE).
- **Monitoring Well 74MW7 –** None of the VOCs were detected at a concentration above the N.C. 2L Standard:

PCE concentrations ranged from 1.64 µg/L to 266 µg/L in the source area. TCE was not detected in site groundwater during the current event. Acetone was the only other analyte detected in site groundwater at an estimated concentration in one well.

3.2 Surface Water Results

A summary of the surface water analytical data is presented in **Table 3**, and PCE concentrations are presented on **Figure 4**. Historical data are summarized in **Table 4**. PCE was not detected in the surface water samples during the October 2015 event.

3.3 Data Review

Data review was performed by the Parsons project chemist. Laboratory analytical results were reviewed for project compliance and usability with respect to the guidance presented in the following documents, as applicable to the analyses performed: project QAPP, DoD QSM Version 4.2, Laboratory Standard Operating Procedures, and the USEPA National Functional Guidelines for Data Review. The requirements listed in the DoD Quality Systems Manual (QSM) Version 4.2 Appendix DOD-A for each applicable method, GCAL's internal control limits, and project-required reporting limits were used as the quality control criteria. The accuracy, precision, representativeness, and completeness of the water sample data is considered adequate. No data were qualified for data quality deficiencies.

3.4 Historical Analytical Data

Historical data for SWMU 14c is summarized in **Table 4 and Figure 5**. PCE is the predominant Contamination of Concern (COC) in SWMU 14c groundwater. Contaminant levels suggest downgradient movement within the plume, with concentrations on the upgradient side of the plume decreasing with time. The concentration of PCE in 74MW2I decreased by 86 percent between the 2011 and 2014

monitoring events with a slight increase in 2015. The concentration of PCE at downgradient well 74MW4 increased between 2011 and 2013, but decreased between 2013 and 2015 demonstrating that attenuation is occurring on the downgradient edge of the plume as well.

4.0 CONCLUSIONS AND RECOMMENDATIONS

During the October 2015 monitoring round, PCE was the only compound detected at a concentration exceeding the NC 2L standard. Monitoring will continue at the site on an annual basis in accordance with the requirements outlined in the CMIP.

5.0 REFERENCES

Bhate Environmental Associates, Inc. 2005. *Compliance Monitoring Report Sampling Event1 SWMU 14, Within Operable Unit 3, Fort Bragg, North Carolina*, December 2005.

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Parsons 2013. *Sampling and Analysis Plan/Quality Assurance Project Plan for Performance Based Remediation of 66 Sites at Fort Bragg-Pope AAF, North Carolina*, January 2013.

Parsons 2014a. *Final Corrective Measures Study for Cook Street Warehouse Complex, Solid Waste Management Unit (SWMU) 14c at Fort Bragg Military Reservation, North Carolina (USACE Contract W912QR-12-D-0002-CV02).* February 2014.

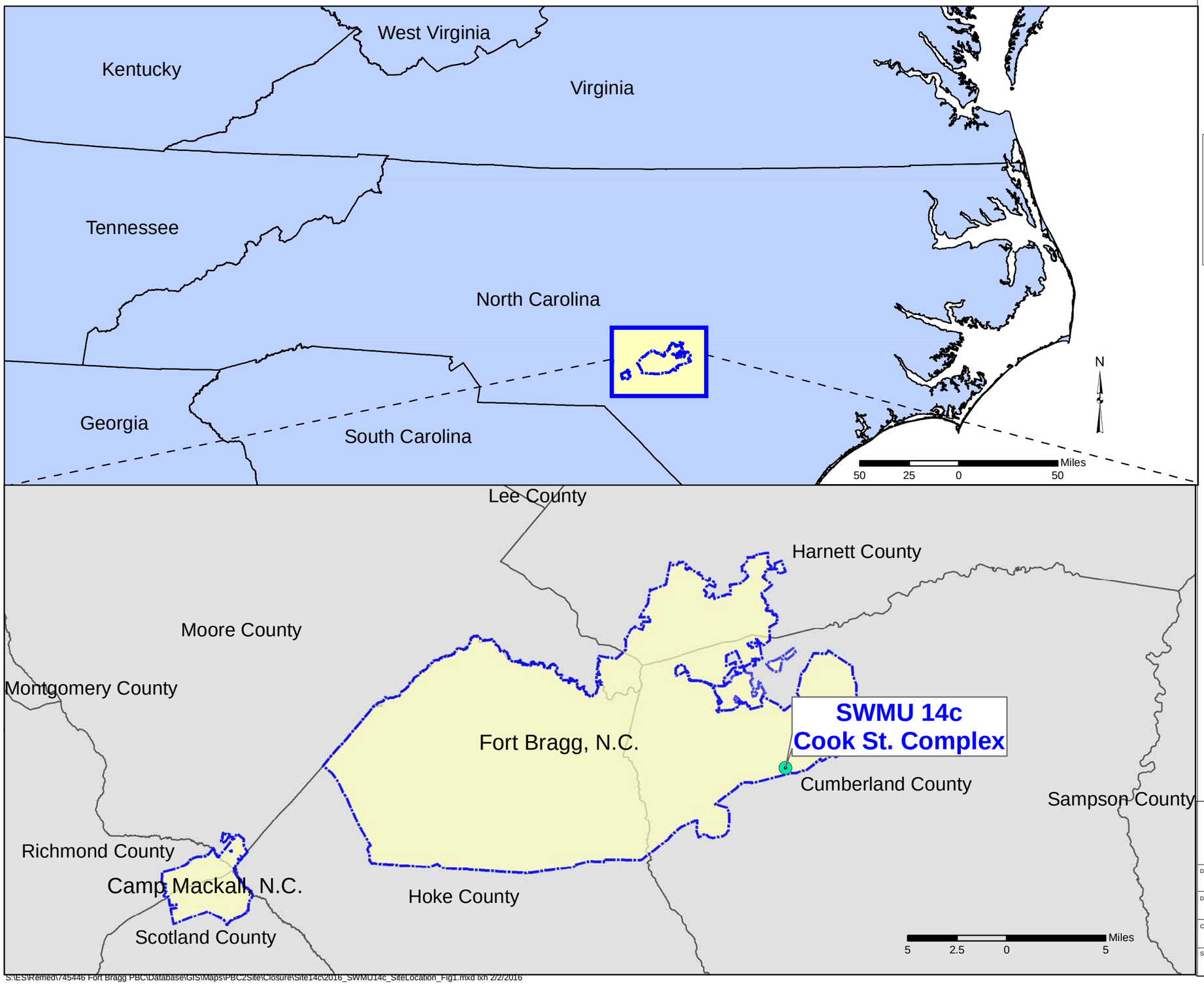
Parsons, 2014b. *Final Corrective Measures Implementation Plan for Cook Street Warehouse Complex, Solid Waste Management Unit (SWMU) 14c at Fort Bragg Military Reservation, North Carolina* (USACE Contract W912QR-12-D-0002-CV02). May 2014.

Parsons, 2015. *Final Corrective Measures Implementation Report, Long Term Monitoring Report, SWMU 14C (Cook Street Warehouse Complex), June 2014 Sampling Event, North Carolina* (USACE Contract W912QR-12-D-0002-CV02). July 2015.

USGS (U. S. Geological Survey). 1996a. *RCRA Facility Investigation at Operable Unit 3, Fort Bragg Installation Restoration Program, Fort Bragg, North Carolina, Volume 1*.

USGS. 1996b. *RCRA Facility Investigation at Operable Unit 3, Fort Bragg Installation Restoration Program, Fort Bragg, North Carolina, Volume 2.*

FIGURES



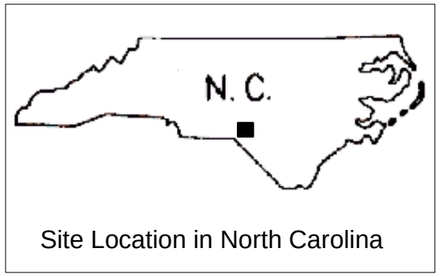
S:\ES\Remed\745446 Fort Bragg PBC\Database\GIS\Maps\PBC2Site\Closure\Site14c\2016_SWMU14c_SiteLocation_Fig1.mxd lxh 2/2/2016

Figure 1

Site Location
SWMU 14c
Cook Street Warehouse Complex
Fort Bragg, North Carolina

Legend

- Site Location
- Installation Boundary
- County Boundary
- State Boundary



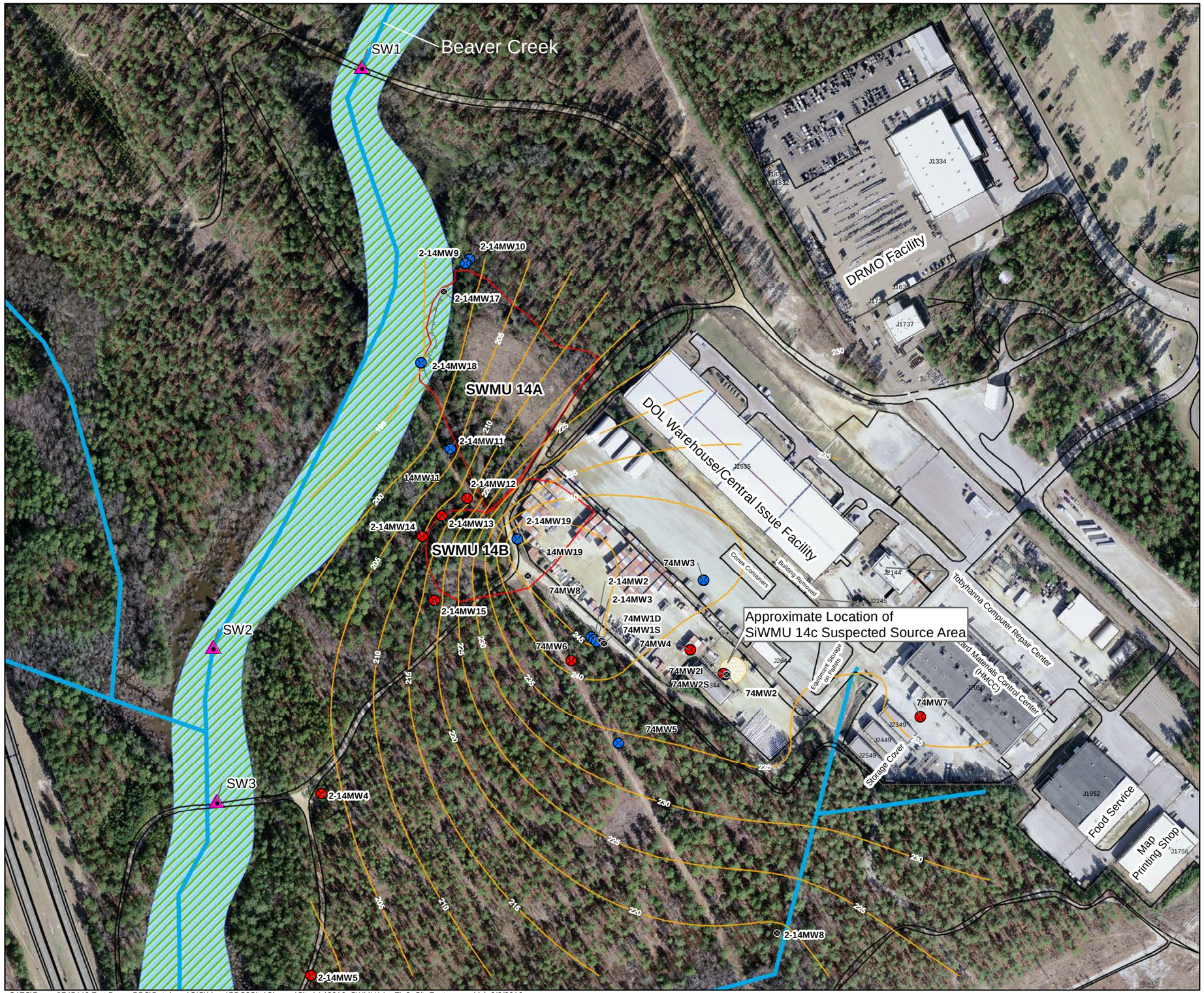
Coordinate System: North Carolina State Plane, NAD83, Feet

N

PARSONS		748776.10000	
DESIGNED BY: BT	Site Location SWMU 14c Cook Street Warehouse Complex		
DRAWN BY: LH			
CHECKED BY: AW	SCALE: As Shown	PROJECT NUMBER: 748776.10000	
SUBMITTED BY: AW	DATE: February 2016	FIGURE NUMBER:	1
	FILE: SWMU14c_SiteLocation		

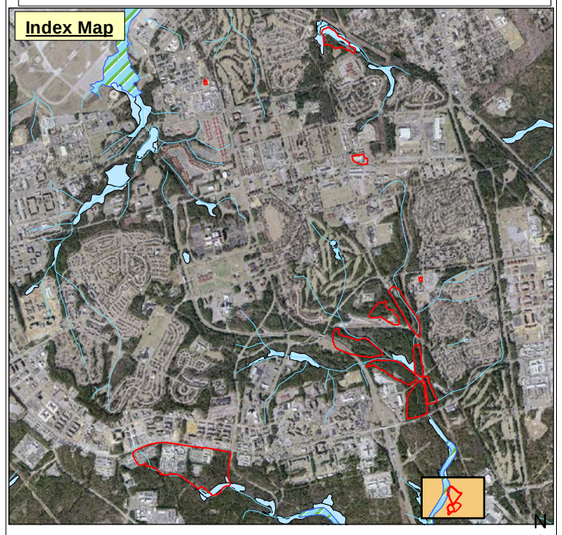
Figure 2

Site Features
SWMU 14c
Cook Street Warehouse Complex
Fort Bragg, North Carolina



Legend

- Well Abandoned/Destroyed
- SWMU 14c Long-Term Monitoring Well Location
- Not Included in SWMU 14c Long-Term Monitoring
- Surface Water Sampling Point
- SWMU 14 Boundary
- Fence
- Street/Road
- Rail Road
- Stream
- Building
- Wetlands
- 201 Ground Surface Elevation (ft amsl)



Coordinate System: North Carolina State Plane, NAD83, Feet

300 150 0 300 Feet

N

PARSONS

748776.10000

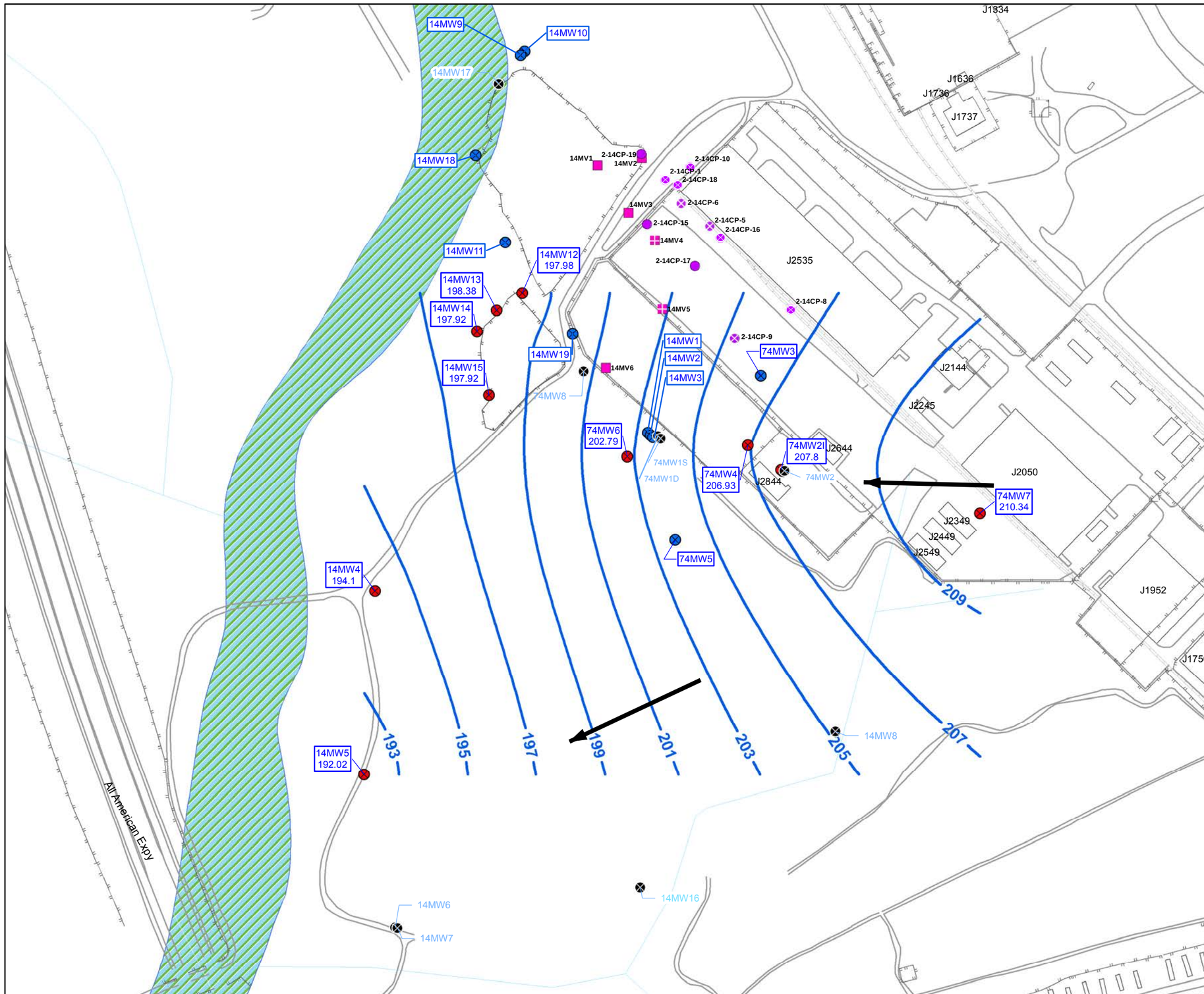
DESIGNED BY: BT	Site Features SWMU 14c Cook Street Warehouse Complex		
DRAWN BY: LH			
CHECKED BY: AW	SCALE: As Shown	PROJECT NUMBER: 748776.10000	
SUBMITTED BY: AW	DATE: February 2016	FIGURE NUMBER:	2
	FILE: SAP_CCFTBR_0074_Fig2.mxd		

S:\ES\Remed\745446 Fort Bragg PBC\Database\GIS\Maps\PBC2Site\Closure\Site14c\2016_SWMU14c_Fig2_SiteFeature.mxd lxh 2/2/2016

Figure 3

Groundwater Potentiometric Map
SWMU 14c
October 2015

Fort Bragg, North Carolina



Legend

- SWMU 14c Long-Term Monitoring Well Location
- Not Included in SWMU 14c Long-Term Monitoring
- Monitoring Well Abandoned or Destroyed
- Soil Gas Point Location
- Methane Vent Location
- Soil Gas Point – Destroyed/Unable to Locate
- Methane Vent – Destroyed/Unable to Locate
- Site Boundary
- Fence
- Street/Road
- Rail Road
- Stream
- Building
- Wetlands
- 205 — 205 Groundwater Elevation Contour, Dashed Where Inferred
- 14MW14 197.92 — Well ID / Groundwater Elevation (feet above mean sea level)
- Direction of Groundwater Flow

Coordinate System: North Carolina State Plane, NAD83, Feet

300 150 0 300 Feet

N

PARSONS

SWMU 14c
Fort Bragg
North Carolina

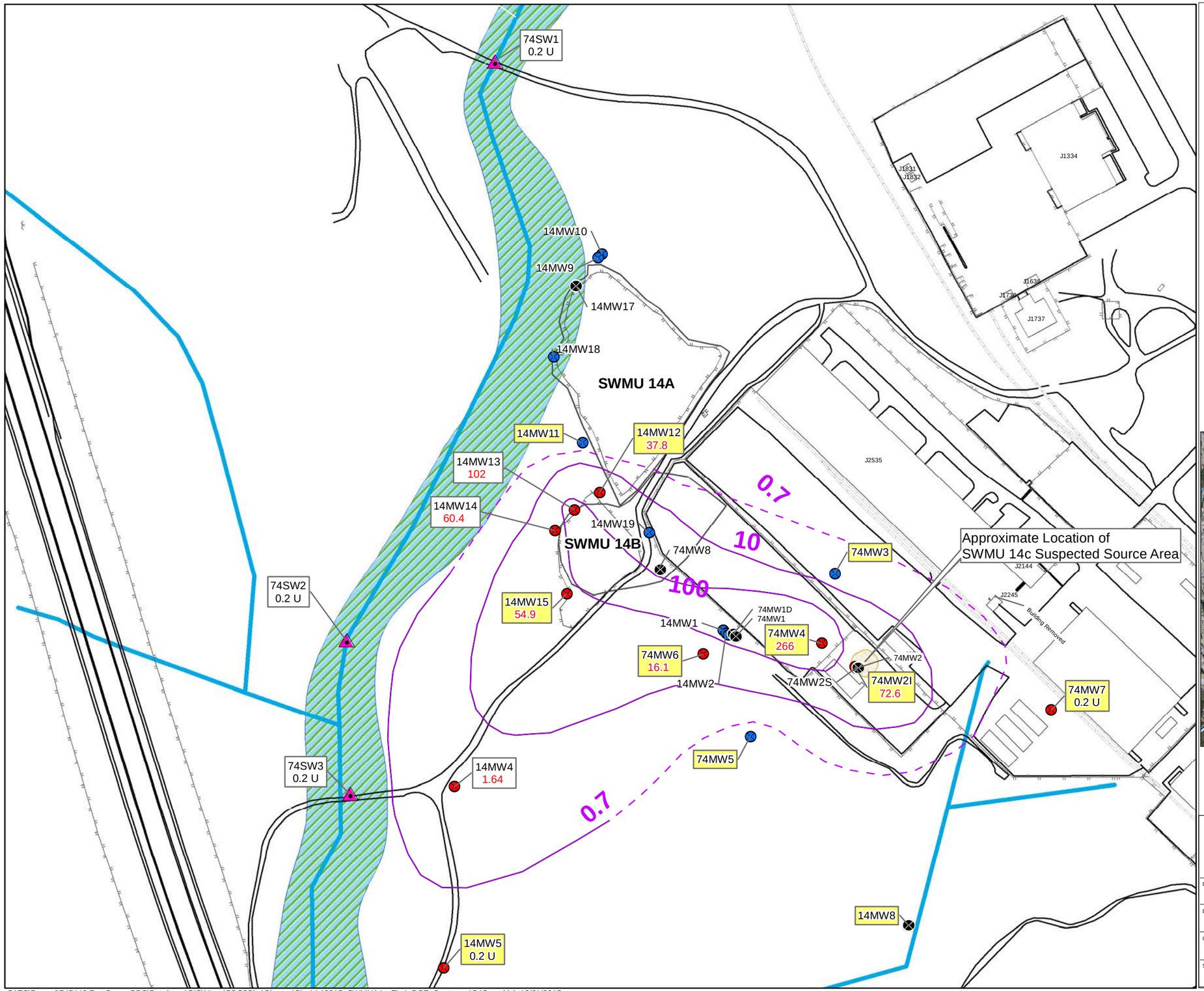
DESIGNED BY: BT	Groundwater Potentiometric Map SWMU 14c October 2015
DRAWN BY: LH	
CHECKED BY: AW	SCALE: As Shown — PROJECT NUMBER: 748776.10000
SUBMITTED BY: AW	DATE: January 2016 — FIGURE NUMBER: 3
	FILE: Fig_14_Final_GWE.mxd

S:\ES\Remed\745446 Fort Bragg PBC\Database\GIS\Maps\PBC2Site\Closure\Site14c\2015_SWMU14c_GWE_4Q15_Fig3.mxd lxh 12/31/2015

Figure 4

Groundwater PCE Isoconcentration October 2015 Data SWMU 14c

Fort Bragg, North Carolina



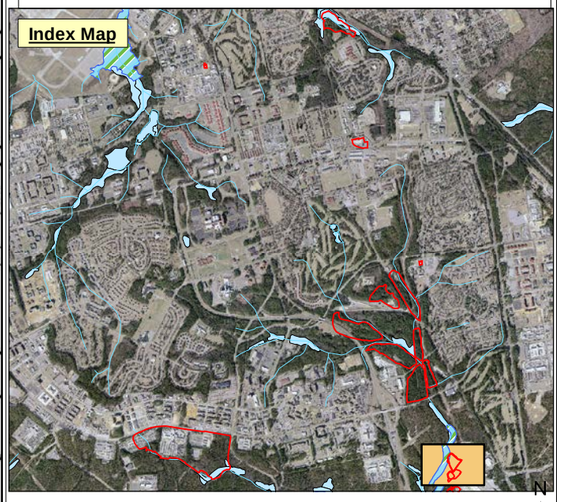
Legend

- Abandoned Well Location
- SWMU 14c Long-Term Monitoring Well Location
- Not Included in SWMU 14c Long-Term Monitoring
- Surface Water Sampling Point
- SWMU 14 Boundary
- Fence
- PCE Groundwater Isocontour (Dashed where inferred)
- Rail Road
- Wetlands
- Stream

PCE = TETRACHLOROETHENE
Concentration in ug/L
U = Undetected. The analyte was analyzed for, but not detected at the stated method detection limit.
B = Indicates the analyte was detected in the associated method blank.
J = Indicates an estimated value.

Red text signifies the value exceeds the NC 2L Standard of 0.7 ug/L

74MW4 266 — Wells that are screened at the top of the clay confining unit (bottom of the screen at approximately 166 to 176 ft amsl)



Coordinate System: North Carolina State Plane, NAD83, Feet

300 150 0 300 Feet

N

PARSONS

748776.09000

DESIGNED BY: BT	Groundwater PCE Isoconcentration Map 2015 Data SWMU 14c
DRAWN BY: LH	
CHECKED BY: AW	SCALE: As Shown — PROJECT NUMBER: 748776.09000
SUBMITTED BY: AW	DATE: January 2016 — FIGURE NUMBER: 4
	FILE: SAP_CCFTBR_0074_Fig5.4.mxd

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Figure 5

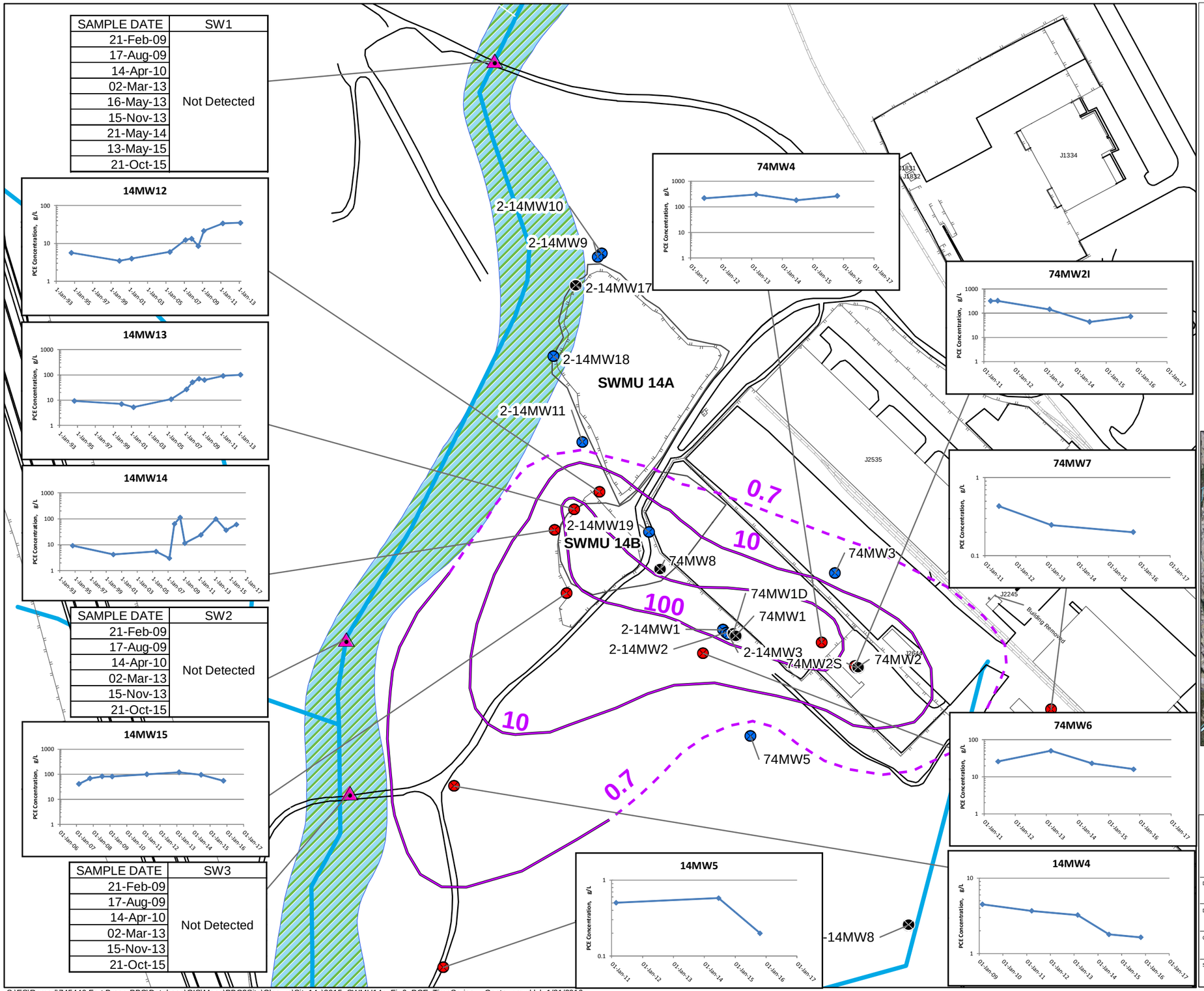
PCE Concentrations versus Time
SWMU 14c

Fort Bragg, North Carolina

SAMPLE DATE	SW1
21-Feb-09	Not Detected
17-Aug-09	
14-Apr-10	
02-Mar-13	
16-May-13	
15-Nov-13	
21-May-14	
13-May-15	
21-Oct-15	

SAMPLE DATE	SW2
21-Feb-09	Not Detected
17-Aug-09	
14-Apr-10	
02-Mar-13	
15-Nov-13	
21-Oct-15	

SAMPLE DATE	SW3
21-Feb-09	Not Detected
17-Aug-09	
14-Apr-10	
02-Mar-13	
15-Nov-13	
21-Oct-15	

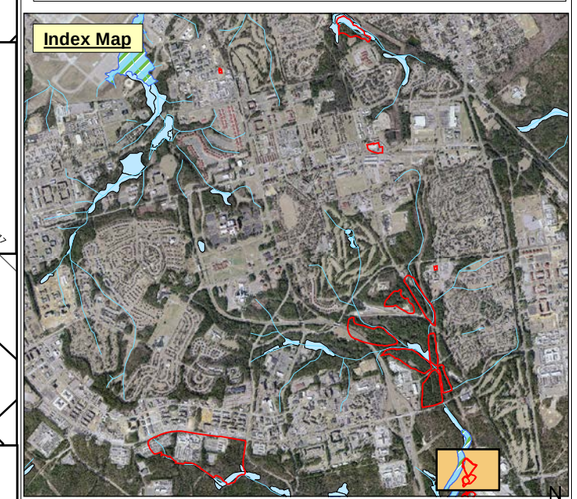


Legend

- Abandoned Well Location
- SWMU 14c Long-Term Monitoring Well Location
- Not Included in SWMU 14c Long-Term Monitoring
- Surface Water Sampling Point
- SWMU 14 Boundary
- Fence
- PCE Groundwater Isocontour (Dashed where inferred)

PCE = TETRACHLOROETHENE
Concentration in ug/L

- Rail Road
- Wetlands
- Stream



Coordinate System: North Carolina State Plane, NAD83, Feet

300 150 0 300 Feet

N

PARSONS

748776.10000

DESIGNED BY: BT	PCE Concentrations versus Time SWMU 14c
DRAWN BY: LH	
CHECKED BY: EH	SCALE: As Shown — PROJECT NUMBER: 748776.10000
SUBMITTED BY: EH	DATE: January 2016 — FIGURE NUMBER: 5
	FILE: SAP_CCFTBR_0074_Fig5.1.mxd

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TABLES

Table 1
SWMU 14c (Cook Street Warehouse Complex)
Well Gauging Summary
Fort Bragg, N.C.

Monitoring Well	Screen Interval (ft bgs)	Top of Casing Elevation (ft AMSL)	Well Depth (ft btoc)	Date Measured	Depth to Water (ft btoc)	Water Elevation (ft AMSL)
14MW4	27.0 - 37.0	202.93	40.50	02/23/09	9.10	193.83
				03/20/11	9.38	193.55
				02/24/13	9.63	193.30
				06/19/14	8.86	194.07
				10/21/15	8.83	194.10
14MW5	11.5 - 21.5	197.75	22.94	02/23/09	6.56	191.19
				03/09/11	6.60	191.15
				02/22/13	6.51	191.24
				06/19/14	6.63	191.12
				10/21/15	5.73	192.02
14MW12	27.0 -37.0	212.58	40.51	02/23/09	14.67	197.91
				03/21/11	14.95	197.63
				02/22/13	15.52	197.06
				06/19/14	14.13	198.45
				10/21/15	14.60	197.98
14MW13	19.5 - 24.5	212.28	26.62	02/23/09	13.03	199.25
				03/21/11	14.37	197.91
				02/22/13	13.81	198.47
				06/19/14	13.47	198.81
				10/21/15	13.90	198.38
14MW14	9.5 -19.5	209.71	21.55	02/23/09	11.96	197.75
				03/21/11	12.19	197.52
				02/22/13	12.77	196.94
				06/19/14	11.40	198.31
				10/21/15	11.79	197.92
14MW15	33.0 - 43.0	217.42	45.40	02/23/09	19.59	197.83
				03/21/11	20.06	197.36
				02/22/13	20.67	196.75
				06/19/14	18.85	198.57
				10/21/15	19.50	197.92
74MW2I	61.2 - 71.2	237.28	71.20	02/17/11	30.56	206.72
				03/23/11	30.59	206.69
				07/28/11	30.73	206.55
				02/25/13	31.72	205.56
				06/19/14	28.95	208.33
				10/22/15	29.48	207.80
74MW4	57.0 - 67.0	238.03	67.59	05/24/11	32.52	205.51
				07/28/11	32.28	205.75
				02/25/13	33.31	204.72
				06/19/14	30.55	207.48
				10/22/15	31.10	206.93
74MW6	61.0 - 71.0	246.69	71.41	05/24/11	45.34	201.35
				07/28/11	45.27	201.42
				02/24/13	45.85	200.84
				06/19/14	42.90	203.79
				10/21/15	43.90	202.79
74MW7	59.0 - 69.0	234.37	69.02	05/24/11	25.45	208.92
				07/28/11	25.21	209.16
				02/25/13	26.34	208.03
				06/19/14	NM	--
				10/21/15	24.03	210.34

Notes:
ft bgs = feet below ground surface.
ft AMSL = feet above mean sea level.
ft btoc = feet below top of casing.
NM= Not measured.

Table 2
SWMU 14c Well Construction Summary
Fort Bragg, North Carolina

Monitoring Well	Date Installed	Date Abandoned	Northing (N.C. State Plane feet)	Easting (N.C. State Plane feet)	Surface Elevation (ft msl)	TOC Elevation (ft msl)	Screened Interval (ft bgs)	Screened Interval (ft msl)	Well Depth (ft bgs)	Elevation of Bottom Depth (ft msl)	Depth to Water (ft btoc)	Date Measured	Water Elevation (ft msl)
14MW4	8/4/1993	--	496880	2007950	202.93	202.93	27.0-37.0	175.93 - 165.93	40.50	162.43	10.05	12/14/2002	192.88
14MW5	8/4/1993	--	496329	2007918	197.75	197.75	11.5-21.5	186.25 - 176.25	22.94	174.81	7.15	12/14/2002	190.60
14MW12	8/13/1993	--	497775	2008392	212.58	212.58	27.0-37.0	185.58 - 175.58	40.51	172.07	14.14	12/14/2002	198.44
14MW13	8/12/1993	--	497723	2008316	212.28	212.28	19.5-24.5	192.78 - 187.78	26.62	185.66	13.80	12/14/2002	198.48
14MW14	8/13/1993	--	497660	2008257	209.71	209.71	9.5-19.5	200.21 - 190.21	21.55	188.16	12.16	12/14/2002	197.55
14MW15	8/16/1993	--	497468	2008292	217.42	217.42	33.0-43.0	184.42 - 174.42	45.40	172.02	--	12/14/2002	NA
74MW1	6/23/2010	5/23/2011	497337.5990	2008807.2730	243.69	246.09	70.0-80.0	173.69 - 163.69	80.00	163.69	28.95	6/23/2010	217.14
74MW1D	6/22/2010	5/23/2011	497345.8290	2008799.4710	243.46	245.96	97.0-107.0	146.46 - 136.46	107.00	136.46	38.31	6/22/2010	207.65
74MW2	6/24/2010	5/23/2011	497242.3580	2009179.2150	239.86	239.86	70.0-80.0	169.86 - 159.86	80.00	159.86	41.95	6/24/2010	197.91
74MW2I	2/16/2011	--	497244.6743	2009169.7548	237.68	237.28	61.20-71.20	176.48 - 166.48	71.20	166.48	30.65	2/16/2011	206.63
74MW2S	2/16/2011	--	497240.9556	2009174.0664	237.68	237.38	50.0-60.0	187.66 - 177.66	60.02	177.66	30.54	2/16/2011	206.84
74MW3	5/18/2011	--	497527.7879	2009109.0078	241.13	240.73	56.0-66.0	185.13 - 175.13	66.71	174.42	35.81	5/18/2011	204.92
74MW4	5/24/2011	--	497317.4140	2009069.1940	238.42	238.03	57.0-67.0	181.42 - 171.42	67.59	170.83	33.00	5/24/2011	205.03
74MW5	5/20/2011	--	497032.7900	2008851.5026	239.67	243.19	59.0-69.0	180.67 - 170.67	69.12	170.55	36.16	5/20/2011	207.03
74MW6	5/19/2011	--	497284.2203	2008708.0252	243.47	246.69	61.0-71.0	182.47 - 172.47	71.41	172.06	42.13	5/19/2011	204.56
74MW7	5/17/2011	--	497113.4231	2009766.3971	234.95	234.37	59.0-69.0	175.95 - 165.95	69.02	165.93	26.03	5/17/2011	208.34
74MW8	3/20/2012	11/14/2014	497540.9420	2008576.6210	245.55	248.55	84.0-94.0	161.55 - 151.55	94.00	151.55	48.82	5/31/2012	199.73

Notes:
ft bgs = feet below ground surface.
ft msl = feet above mean sea level.
ft btoc = feet below top of casing.
NA = Not available because of base restrictions.

Table 3
Groundwater Analytical Results, October 2015
SWMU 14c
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID	NC 2L Groundwater Standard (ug/L)	14MW4 10/21/2015 ug/L 21510230702	14MW5 10/21/2015 ug/L 21510230703	14MW12 10/21/2015 ug/L 21510230704	14MW13 10/21/2015 ug/L 21510230705	14MW14 10/21/2015 ug/L 21510230706	14MW15-DUP 10/21/2015 ug/L 21510230708	14MW15 10/21/2015 ug/L 21510230707	74MW2I 10/22/2015 ug/L 21510230714	74MW4 10/22/2015 ug/L 21510230715	74MW6 10/21/2015 ug/L 21510230709	74MW7 10/21/2015 ug/L 21510230710	74SW1 10/21/2015 ug/L 21510230711	74SW2 10/21/2015 ug/L 21510230712	74SW3 10/21/2015 ug/L 21510230713
Analyte (ug/L)															
VOCs (SW8260B)															
1,1,1-TRICHLOROETHANE	200	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-TETRACHLOROETHANE	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-TRICHLOROETHANE	0.6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-DICHLOROETHANE	6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-DICHLOROETHENE	350	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-DICHLOROPROPENE	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-TRICHLOROBENZENE	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-TRICHLOROPROPANE	0.005	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-TRICHLOROBENZENE	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-TRIMETHYLBENZENE	400	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.02	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-DICHLOROBENZENE	20	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-DICHLOROETHANE	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-DICHLOROPROPANE	0.6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	400	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DICHLOROBENZENE	200	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DICHLOROPROPANE	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-DICHLOROBENZENE	6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,2-DICHLOROPROPANE	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-CHLOROTOLUENE	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-HEXANONE	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-CHLOROTOLUENE	24	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ACETONE	6000	0.5 U	0.5 U	0.5 U	**7.19**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BENZENE	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BROMOBENZENE	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BROMOCHLOROMETHANE	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BROMODICHLOROMETHANE	0.6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BROMOFORM	4	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
BROMOMETHANE	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON TETRACHLORIDE	0.3	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROBENZENE	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
CHLOROETHANE	3000	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROFORM	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
CHLOROMETHANE	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-DICHLOROETHYLENE	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-DICHLOROPROPENE	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DIBROMOCHLOROMETHANE	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DICHLORODIFLUOROMETHANE	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ETHYLBENZENE	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ISOPROPYL ETHER	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ISOPROPYLBENZENE (CUMENE)	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
M,P-XYLENE (SUM OF ISOMERS)	500	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYL ETHYL KETONE (2-BUTANONE)	4000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
n-BUTYLBENZENE	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
n-PROPYLBENZENE	70	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	500	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
P-CYMENE (p-ISOPROPYLTOLUENE)	25	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
SEC-BUTYLBENZENE	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
STYRENE	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
t-BUTYLBENZENE	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
tert-BUTYL METHYL ETHER	20	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

Table 3
Groundwater Analytical Results, October 2015
SWMU 14c
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID	NC 2L Groundwater Standard (ug/L)	14MW4 10/21/2015 ug/L 21510230702	14MW5 10/21/2015 ug/L 21510230703	14MW12 10/21/2015 ug/L 21510230704	14MW13 10/21/2015 ug/L 21510230705	14MW14 10/21/2015 ug/L 21510230706	14MW15-DUP 10/21/2015 ug/L 21510230708	14MW15 10/21/2015 ug/L 21510230707	74MW2I 10/22/2015 ug/L 21510230714	74MW4 10/22/2015 ug/L 21510230715	74MW6 10/21/2015 ug/L 21510230709	74MW7 10/21/2015 ug/L 21510230710	74SW1 10/21/2015 ug/L 21510230711	74SW2 10/21/2015 ug/L 21510230712	74SW3 10/21/2015 ug/L 21510230713
Analyte (ug/L)															
VOCs (SW8260B)															
TETRACHLOROETHYLENE (PCE)	0.7	**1.64**	0.2 U	**37.8**	**102**	**60.4**	**54.9**	**53.8**	**72.6**	**266**	**16.1**	0.2 U	0.2 U	0.2 U	0.2 U
TOLUENE	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-DICHLOROETHENE	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-DICHLOROPROPENE	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
TRICHLOROETHYLENE (TCE)	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
TRICHLOROFLUOROMETHANE	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VINYL ACETATE	88	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VINYL CHLORIDE	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
XYLENES, TOTAL	500	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

Bolded value = detectable concentration.
Red value = an NC 2L Groundwater Standard exceedance.
NA = an NC 2L Groundwater Standard does not exist for this analyte.
U = Undetected. The analyte was analyzed for, but not detected at the stated method detection limit (MDL).
NC 2L = North Carolina subchapter 2L groundwater standards.
ug/L = micrograms per liter

Table 4
Historical Analytical Results for Groundwater and Surface Water
February 2009 - October 2015
SWMU 14c
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID		14MW4 2/21/2009 ug/L 20902253901	14MW4 3/20/2011 ug/L 21103220902	14MW4 2/24/2013 ug/L 21302261304	14MW4 6/19/2014 ug/L 21406202719	14MW4 10/21/2015 ug/L 21510230702	14MW5 3/23/2011 ug/L 21103240703	14MW5 6/19/2014 ug/L 21406202718	14MW5 10/21/2015 ug/L 21510230703	14MW12 2/20/2009 ug/L 20902211202	14MW12 3/21/2011 ug/L 21103220907	14MW12 2/22/2013 ug/L 21302231602	14MW12 6/19/2014 ug/L 21406202720	14MW12-DUP 6/19/2014 ug/L 21406202721	14MW12 10/21/2015 ug/L 21510230704	14MW13 2/20/2009 ug/L 20902211203	14MW13-DUP 2/20/2009 ug/L 20902211209	14MW13 3/21/2011 ug/L 21103220908	14MW13-DUP 3/21/2011 ug/L 21103220911	14MW13 2/22/2013 ug/L 21302231603	14MW13 6/19/2014 ug/L 21406202722	14MW13 10/21/2015 ug/L 21510230705
Analyte (ug/L) VOCs (SW8260B)	**NC 2L Groundwater Standard (ug/L)**																					
1,1,1-TRICHLOROETHANE	200	0.096 U	0.078 U	0.123 U	0.123 U	0.2 U	0.078 U	0.123 U	0.2 U	0.096 U	0.078 U	0.123 U	0.123 U	0.123 U	0.2 U	0.096 U	0.096 U	0.078 U	0.078 U	0.123 U	0.123 U	0.2 U
1,1,2,2-TETRACHLOROETHANE	0.2	0.154 U	0.112 U	0.109 U	0.109 U	0.2 U	0.112 U	0.109 U	0.2 U	0.154 U	0.112 U	0.109 U	0.109 U	0.109 U	0.2 U	0.154 U	0.154 U	0.112 U	0.112 U	0.109 U	0.109 U	0.2 U
1,1,2-TRICHLOROETHANE	0.6	0.093 U	0.179 U	0.159 U	0.159 U	0.2 U	0.179 U	0.159 U	0.2 U	0.093 U	0.179 U	0.159 U	0.159 U	0.159 U	0.2 U	0.093 U	0.093 U	0.179 U	0.179 U	0.159 U	0.159 U	0.2 U
1,1-DICHLOROETHANE	6	0.086 U	0.064 U	0.171 U	0.171 U	0.2 U	0.064 U	0.171 U	0.2 U	0.086 U	0.064 U	0.171 U	0.171 U	0.171 U	0.2 U	0.086 U	0.086 U	0.064 U	0.064 U	0.171 U	0.171 U	0.2 U
1,1-DICHLOROETHENE	7	0.201 U	0.183 U	0.208 U	0.2 U	0.2 U	0.183 U	0.2 U	0.2 U	0.201 U	0.183 U	0.208 U	0.2 U	0.2 U	0.2 U	0.201 U	0.201 U	0.183 U	0.183 U	0.208 U	0.2 U	0.2 U
1,1-DICHLOROPROPENE	NA	0.07 U	0.071 U	0.052 U	0.052 U	0.2 U	0.071 U	0.052 U	0.2 U	0.07 U	0.071 U	0.052 U	0.052 U	0.052 U	0.2 U	0.07 U	0.07 U	0.071 U	0.071 U	0.052 U	0.052 U	0.2 U
1,2,3-TRICHLOROBENZENE	NA	--	--	--	0.079 U	0.2 U	--	0.079 U	0.2 U	--	--	--	0.079 U	0.079 U	0.2 U	--	--	--	--	--	0.079 U	0.2 U
1,2,3-TRICHLOROPROPANE	0.005	0.091 U	0.063 U	0.065 U	0.065 U	0.2 U	0.063 U	0.065 U	0.2 U	0.091 U	0.063 U	0.065 U	0.065 U	0.065 U	0.2 U	0.091 U	0.091 U	0.063 U	0.063 U	0.065 U	0.065 U	0.2 U
1,2,4-TRICHLOROBENZENE	70	0.091 U	0.138 U	0.105 U	0.105 U	0.2 U	0.138 U	0.105 U	0.2 U	0.091 U	0.138 U	0.105 U	0.105 U	0.105 U	0.2 U	0.091 U	0.091 U	0.138 U	0.138 U	0.105 U	0.105 U	0.2 U
1,2,4-TRIMETHYLBENZENE	400	0.082 U	0.08 U	0.084 U	0.084 U	0.2 U	0.08 U	0.084 U	0.2 U	0.082 U	0.08 U	0.084 U	0.084 U	0.084 U	0.2 U	0.082 U	0.082 U	0.08 U	0.08 U	0.084 U	0.084 U	0.2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.02	0.202 U	0.169 U	0.102 U	0.102 U	0.2 U	0.169 U	0.102 U	0.2 U	0.202 U	0.169 U	0.102 U	0.102 U	0.102 U	0.2 U	0.202 U	0.202 U	0.169 U	0.169 U	0.102 U	0.102 U	0.2 U
1,2-DICHLOROBENZENE	20	0.069 U	0.086 U	0.135 U	0.135 U	0.2 U	0.086 U	0.135 U	0.2 U	0.069 U	0.086 U	0.135 U	0.135 U	0.135 U	0.2 U	0.069 U	0.069 U	0.086 U	0.086 U	0.135 U	0.135 U	0.2 U
1,2-DICHLOROETHANE	0.4	0.09 U	0.121 U	0.116 U	0.116 U	0.2 U	0.121 U	0.116 U	0.2 U	0.09 U	0.121 U	0.116 U	0.116 U	0.116 U	0.2 U	0.09 U	0.09 U	0.121 U	0.121 U	0.116 U	0.116 U	0.2 U
1,2-DICHLOROPROPANE	0.6	0.096 U	0.114 U	0.15 U	0.15 U	0.2 U	0.114 U	0.15 U	0.2 U	0.096 U	0.114 U	0.15 U	0.15 U	0.15 U	0.2 U	0.096 U	0.096 U	0.114 U	0.114 U	0.15 U	0.15 U	0.2 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	400	0.106 U	0.053 U	0.066 U	0.066 U	0.2 U	0.053 U	0.066 U	0.2 U	0.106 U	0.053 U	0.066 U	0.066 U	0.066 U	0.2 U	0.106 U	0.106 U	0.053 U	0.053 U	0.066 U	0.066 U	0.2 U
1,3-DICHLOROBENZENE	200	0.132 U	0.08 U	0.138 U	0.138 U	0.2 U	0.08 U	0.138 U	0.2 U	0.132 U	0.08 U	0.138 U	0.138 U	0.138 U	0.2 U	0.132 U	0.132 U	0.08 U	0.08 U	0.138 U	0.138 U	0.2 U
1,3-DICHLOROPROPANE	NA	0.158 U	0.113 U	0.059 U	0.059 U	0.2 U	0.113 U	0.059 U	0.2 U	0.158 U	0.113 U	0.059 U	0.059 U	0.059 U	0.2 U	0.158 U	0.158 U	0.113 U	0.113 U	0.059 U	0.059 U	0.2 U
1,4-DICHLOROBENZENE	6	0.057 U	0.058 U	0.083 U	0.083 U	0.2 U	0.058 U	0.083 U	0.2 U	0.057 U	0.058 U	0.083 U	0.083 U	0.083 U	0.2 U	0.057 U	0.057 U	0.058 U	0.058 U	0.083 U	0.083 U	0.2 U
2,2-DICHLOROPROPANE	NA	0.129 U	0.112 U	0.17 U	0.17 U	0.2 U	0.112 U	0.17 U	0.2 U	0.129 U	0.112 U	0.17 U	0.17 U	0.17 U	0.2 U	0.129 U	0.129 U	0.112 U	0.112 U	0.17 U	0.17 U	0.2 U
2-CHLOROTOLUENE	100	0.086 U	0.09 U	0.08 U	0.08 U	0.2 U	0.09 U	0.08 U	0.2 U	0.086 U	0.09 U	0.08 U	0.08 U	0.08 U	0.2 U	0.086 U	0.086 U	0.09 U	0.09 U	0.08 U	0.08 U	0.2 U
2-HEXANONE	40	0.105 U	0.302 U	0.122 U	0.122 U	0.5 U	0.302 U	0.122 U	0.5 U	0.105 U	0.302 U	0.122 U	0.122 U	0.122 U	0.5 U	0.105 U	0.105 U	0.302 U	.0302 U	0.122 U	0.122 U	0.5 U
4-CHLOROTOLUENE	24	0.084 U	0.046 U	0.124 U	0.124 U	0.2 U	0.046 U	0.124 U	0.2 U	0.084 U	0.046 U	0.124 U	0.124 U	0.124 U	0.2 U	0.084 U	0.084 U	0.046 U	0.046 U	0.124 U	0.124 U	0.2 U
ACETONE	6000	0.914 U	0.322 UQ	0.193 U	0.193 U	0.5 U	0.322 UQ	0.193 U	0.5 U	0.914 U	0.322 U	0.193 U	0.193 U	0.193 U	0.5 U	0.914 U	0.914 U	0.322 U	0.322 U	0.193 U	0.193 U	**7.19**
BENZENE	1	0.065 U	0.049 U	0.111 U	0.111 U	0.2 U	0.049 U	0.111 U	0.2 U	0.065 U	0.049 U	0.111 U	0.111 U	0.111 U	0.2 U	0.065 U	0.065 U	0.049 U	0.049 U	0.111 U	0.111 U	0.2 U
BROMOBENZENE	NA	0.098 U	0.095 U	0.145 U	0.145 U	0.2 U	0.095 U	0.145 U	0.2 U	0.098 U	0.095 U	0.145 U	0.145 U	0.145 U	0.2 U	0.098 U	0.098 U	0.095 U	0.095 U	0.145 U	0.145 U	0.2 U
BROMOCHLOROMETHANE	NA	0.267 U	0.238 U	0.127 U	0.127 U	0.2 U	0.238 U	0.127 U	0.2 U	0.267 U	0.238 U	0.127 U	0.127 U	0.127 U	0.2 U	0.267 U	0.267 U	0.238 U	0.238 U	0.127 U	0.127 U	0.2 U
BROMODICHLOROMETHANE	0.6	0.144 U	0.071 UQ	0.083 U	0.083 U	0.2 U	0.071 U	0.083 U	0.2 U	0.144 U	0.071 U	0.083 U	0.083 U	0.083 U	0.2 U	0.144 U	0.144 U	0.071 U	0.071 U	0.083 U	0.083 U	0.2 U
BROMOFORM	4	0.172 U	0.278 UQ	0215 U	0.215 U	0.25 U	0.278 U	0.215 U	0.25 U	0.172 U	0.278 U	0.215 U	0.215 U	0.215 U	0.25 U	0.172 U	0.172 U	0.278 U	0.278 U	0.215 U	0.215 U	0.25 U
BROMOMETHANE	10	0.271 U	0.276 U	0.427 U	0.427 U	0.5 U	0.276 U	0.427 U	0.5 U	0.271 U	0.276 U	0.427 U	0.427 U	0.427 U	0.5 U	0.271 U	0.271 U	0.276 U	0.276 U	0.427 U	0.427 U	0.5 U
CARBON TETRACHLORIDE	0.3	0.156 U	0.056 U	0.248 U	0.248 U	0.25 U	0.056 U	0.248 U	0.25 U	0.156 U	0.056 U	0.248 U	0.248 U	0.248 U	0.25 U	0.156 U	0.156 U	0.056 U	0.056 U	0.248 U	0.248 U	0.25 U
CHLOROBENZENE	50	0.287 U	0.055 U	0.083 U	0.083 U	0.2 U	0.055 U	0.083 U	0.2 U	0.287 U	0.055	0.083 U	0.083 U	0.083 U	0.2 U	0.287 U	0.287 U	0.055 U	0.055 U	0.083 U	0.083 U	0.2 U
CHLOROETHANE	3000	0.181 U	0.279 U	0.235 U	0.235 U	0.25 U	0.279 U	0.235 U	0.25 U	0.181 U	0.279 U	0.235 U	0.235 U	0.235 U	0.25 U	0.181 U	0.181 U	0.279 U	0.279 U	0.235 U	0.235 U	0.25 U
CHLOROFORM	70	0.164 U	0.062 U	0.155 U	0.155 U	0.2 U	.062 U	0.155 U	0.2 U	0.164 U	0.062 U	0.155 U	0.155 U	0.155 U	0.2 U	0.164 U	0.164 U	0.062 U	0.062 U	0.155 U	**0.259 J**	0.2 U
CHLOROMETHANE	3	0.101 U	0.076 U	0.144 U	0.144 U	0.2 U	0.076 U	0.144 U	0.2 U	0.101 U	0.076 U	0.144 U	0.144 U	0.144 U	0.2 U	**1.59 J**	0.101 U	0.076 U	0.076 U	0.144 U	0.144 U	0.2 U
cis-1,2-DICHLOROETHYLENE	70	0.162 U	0.104 U	0.103 U	0.103 U	0.2 U	0.104 U	0.103 U	0.2 U	0.162 U	0.104 U	0.103 U	0.103 U	0.103 U	0.2 U	0.162 U	0.162 U	0.104 U	0.104 U	0.103 U	0.103 U	0.2 U
cis-1,3-DICHLOROPROPENE	0.4	0.116 U	0.105 U	0.124 U	0.124 U	0.2 U	0.105 U	0.124 U	0.2 U	0.116 U	0.105 U	0.124 U	0.124 U	0.124 U	0.2 U	0.116 U	0.116 U	0.105 U	0.105 U	0.124 U	0.124 U	0.2 U
DIBROMOCHLOROMETHANE	0.4	0.098 U	0.133 U	0.054 U	0.054 U	0.2 U	0.133 U	0.054 U	0.2 U	0.098 U	0.133 U	0.054 U	0.054 U	0.054 U	0.2 U	0.098 U	0.098 U	0.133 U	0.133 U	0.054 U	0.054 U	0.2 U
DICHLORODIFLUOROMETHANE	1000	0.083 U	0.088 U	0.145 U	0.145 U	0.2 U	0.088 U	0.145 U	0.2 U	0.083 U	0.088 U	0.145 U	0.145 U	0.145 U	0.2 U	0.083 U	0.083 U	0.088 U	0.088 U	0.145 U	0.145 U	0.2 U
ETHYLBENZENE	600	0.065 U	0.18 U	0.109 U	0.109 U	0.2 U	0.18 U	0.109 U	0.2 U	0.065 U	0.18 U	0.109 U	0.109 U	0.109 U	0.2 U	0.065 U	0.065 U	0.18 U	0.18 U	0.109 U	0.109 U	0.2 U
ISOPROPYL ETHER	70	--	--	--	0.479 U	0.5 U	--	0.479 U	0.5 U	--	--	--	0.479 U	0.479 U	0.5 U	--	--	--	--	--	0.479 U	0.5 U
ISOPROPYLBENZENE (CUMENE)	70	0.135 U	0.058 U	0.13 U	0.13 U	0.2 U	0.058 U	0.13 U	0.2 U	0.135 U	0.058 U	0.13 U	0.13 U	0.13 U	0.2 U	0.135 U	0.135 U	0.058 U	0.058 U	0.13 U	0.13 U	0.2 U
M,P-XYLENE (SUM OF ISOMERS)	500	0.123 U	0.099 U	0.123 U	0.123 U	0.2 U	0.099 U	0.123 U	0.2 U	0.123 U	0.099 U	0.123 U	0.123 U	0.123 U	0.2 U	0.123 U	0.123 U	0.099 U	0.099 U	0.123 U	0.123 U	0.2 U
METHYL ETHYL KETONE (2-BUTANONE)	4000	0.176 U	0.235 UQ	0.142 U	0.142 U	0.2 U	0.235 U	0.142 U	0.2 U	0.176 U	0.235 U	0.142 U	0.142 U	0.142 U	0.2 U	0.176 U	0.176 U	0.235 U	0.235 U	0.142 U	0.142 U	0.2 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	100	0.078 U	0.142 U	0.12 U	0.12 U	0.2 U	0.142 U	0.12 U	0.2 U	0.078 U	0.142 U	0.12 U	0.12 U	0.12 U	0.2 U	0.078 U	0.078 U	0.142 U	0.142 U	0.12 U	0.12 U	0.2 U
METHYLENE CHLORIDE	5	0.096 U	0.102 U	0.149 U	0.149 U	0.2 U	0.102 U	0.149 U	0.2 U	0.096 U	0.102 U	0.149 U	0.149 U	0.149 U	0.2 U	0.096 U	0.096 U	0.102 U	0.102 U	0.149 U	0.149 U	0.2 U
n-BUTYLBENZENE	70	0.124 U	0.068 U	0.123 U	0.123 U	0.2 U	0.068 U	0.123 U	0.2 U	0.124 U	0.068 U	0.123 U	0.123 U	0.123 U	0.2 U	0.124 U	0.124 U	0.068 U	0.068 U	0.123 U	0.123 U	0.2 U
n-PROPYLBENZENE	70	0.123 U	0.069 U	0.727 U	0.727 U	1 U	0.069 U	0.727 U	1 U	0.123 U	0.069 U	0.727 U	0.727 U	0.727 U	1 U	0.123 U	0.123 U	0.069 U	0.069 U	0.727 U	0.727 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	NA	0.061 U	0.077 U	0.055 U	0.055 U	0.2 U	0.077 U	0.055 U	0.2 U	0.061 U	0.077 U	0.055 U	0.055 U	0.055 U	0.2 U	0.061 U	0.061 U	0.077 U	0.077 U	0.055 U	0.055 U	0.2 U
P-CYMENE (p-ISOPROPYLTOLUENE)	25	0.064 U	0.175 U	0.07 U	0.07 U	0.2 U	0.175 U	0.07 U	0.2 U	0.064 U	0.175 U	0.07 U	0.07 U	0.07 U	0.2 U	0.064 U	0.064 U	0.175 U	0.175 U	0.07 U	0.07 U	0.2 U
SEC-BUTYLBENZENE	70	0.056 U	0.088 U	0.107 U	0.107 U	0.2 U	0.088 U	0.107 U	0.2 U	0.056 U	0.088 U	0.107 U	0.107 U	0.107 U	0.2 U	0.056 U	0.056 U	0.088 U	0.088 U	0.107 U	0.107 U	0.2 U
STYRENE	70	0.058 U	0.058 U	0.089 U	0.089 U	0.2 U	0.058 U	0.089 U	0.2 U	0.058 U	0.058 U	0.089 U	0.089 U	0.089 U	0.2 U	0.058 U	0.058 U	0.058 U	0.058 U	0.089 U	0.089 U	0.2 U
t-BUTYLBENZENE	70	0.101 U	0.058 U	0.087 U	0.087 U	0.2 U	0.058 U	0.087 U	0.2 U	0.101 U	0.058 U	0.087 U	0.087 U	0.087 U	0.2 U	0.101 U	0.101 U	0.058 U	0.058 U	0.087 U	0.087 U	0.2 U
tert-BUTYL METHYL ETHER	20	0.077 U	0.084 U	0.078 U	0.078 U	0.2 U	0.084 U	0.078 U	0.2 U	0.077 U	0.084 U	0.078 U	0.078 U	0.078 U	0.2 U	0.077 U	0.077 U	0.084 U	0.084 U	0.078 U	0.078 U	0.2 U
TETRACHLOROETHENE (PCE)	0.7	**4.49**	**3.68 J**	**3.24**	**1.79**	**1.64**	**0.506 J**	**0.582 J**	0.2 U	**21.6**	**34**	**35.1**	**41.5**	**41.9**	**37.8**	**63.4**	0.153 U	**92**	**90.1**	**102**	**106**	**102**
TOLUENE	600	0.076 U	0.078 U	0.122 U	0.122 U	0.2 U	0.078 U	0.122 U	0.2 U	0.076 U	0.078 U	0.122 U	0.122 U	0.122 U	0.2 U	0.076 U	0.076 U	0.078 U	0.078 U	0.122 U	0.122 U	0.2 U
trans-1,2-DICHLOROETHENE	100	0.122 U	0.096 U	0.077 U	0.077 U	0.2 U	0.096 U	0.077 U	0.2 U	0.122 U	0.096 U	0.077 U	0.077 U	0.077 U	0.2 U	0.122 U	0.122 U	0.096 U	0.096 U	0.077 U	0.077 U	0.2 U
trans-1,3-DICHLOROPROPENE	0.4	0.062 U	0.068 U	0.128 U	0.128 U	0.2 U	0.068 U	0.128 U	0.2 U	0.062 U	0.068 U	0.128 U	0.128 U	0.128 U	0.2 U	0.062 U	0.062 U	0.068 U	0.068 U	0.128 U	0.128 U	0.2 U
TRICHLOROETHYLENE (TCE)	3	0.118 U	0.094 U	0.161 U	0.161 U	0.2 U	0.094 U	0.161 U	0.2 U	0.118 U	0.094 U	0.161 U	0.161 U	0.161 U	0.2 U	0.118 U	0.118 U	0.094 U	0.094 U	**0.541 J**	0.161 U	0.2 U
TRICHLOROFLUOROMETHANE	2000	0.138 U	0.094 U	0.157 U	0.157 U	0.2 U	0.094 U	0.157 U	0.2 U	0.138 U	0.094 U	0.157 U	0.157 U	0.157 U	0.2 U	0.138 U	0.138 U	0.094 U	0.094 U	0.157 U	0.157 U	0.2 U
VINYL ACETATE	88	0.215 U	0.197 UQ	0.151 U	0.151 U	0.2 U	0.197 U	0.151 U	0.2 U	0.215 U	0.197 U	0.151 UQJ	0.151 U	0.151 U	0.2 U	0.215 U	0.215 U	0.197 U	0.197 U	0.151 UQ	0.151 U	0.2 U
VINYL CHLORIDE	0.03	0.155 U	0.104 U	0.127 U	0.127 U	0.2 U	0.104 U	0.127 U	0.2 U	0.155 U	0.104 U	0.127 U	0.127 U	0.127 U	0.2 U	0.155 U	0.155 U	0.104 U	0.104 U	0.127 U	0.127 U	0.2 U
XYLENES, TOTAL	500	0.183 U	0.123 U	0.179 U	0.179 U	0.4 U	0.123 U	0.179 U	0.4 U	0.183 U	0.123 U	0.179 U	0.179 U	0.179 U	0.4 U	0.183 U	0.183 U	0.123 U	0.123 U	0.179 U	0.179 U	0.4 U

Bolded value = detectable concentration.
Red value = an NC 2L Groundwater Standard exceedance.
NA = an NC 2L Groundwater Standard does not exist for this analyte.
U = Undetected. The analyte was analyzed for, but not detected at the stated method detection limit (MDL).
J = Indicates an estimated value.
B = Indicates the analyte was detected in the associated Method Blank
Q= LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.
NC 2L = North Carolina subchapter 2L groundwater standards.
ug/L = micrograms per liter

Table 4
Historical Analytical Results for Groundwater and Surface Water
February 2009 - October 2015
SWMU 14c
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID		14MW14 2/20/2009 ug/L 20902211204	14MW14 3/21/2011 ug/L 21103220909	14MW14 2/22/2013 ug/L 21302231604	14MW14 6/19/2014 ug/L 21406202723	14MW14 10/21/2015 ug/L 21510230706	14MW15 2/20/2009 ug/L 20902211205	14MW15 3/21/2011 ug/L 21103220910	14MW15 2/22/2013 ug/L 21302231605	14MW15 6/19/2014 ug/L 21406202724	14MW15-DUP 10/21/2015 ug/L 21510230708	14MW15 10/21/2015 ug/L 21510230707	74MW1 8/25/2010 ug/L 21008270801	74MW1D 8/25/2010 ug/L 21008270802	74MW2 8/25/2010 ug/L 21008270803	74MW2I 3/23/2011 ug/L 21103241202	74MW2I 6/16/2011 ug/L 21106171403	74MW2I-DUP 6/16/2011 ug/L 21106171404	74MW2I 2/25/2013 ug/L 21302261004	74MW2I 6/19/2014 ug/L 21406202727	74MW2I 10/22/2015 ug/L 21510230714	74MW4 6/16/2011 ug/L 21106171406
Analyte (ug/L) **VOCs (SW8260B)**	**NC 2L Groundwater Standard (ug/L)**																					
1,1,1-TRICHLOROETHANE	200	0.096 U	0.078 U	0.123 U	0.123 U	0.2 U	0.096 U	0.078 U	0.123 U	0.123 U	0.2 U	0.2 U	0.106 U	0.106 U	0.106 U	0.155 U	0.155 U	0.155 U	0.123 U	0.123 U	0.2 U	0.155 U
1,1,2,2-TETRACHLOROETHANE	0.2	0.154 U	0.112 U	0.109 U	0.109 U	0.2 U	0.154 U	0.112 U	0.109 U	0.109 U	0.2 U	0.2 U	0.073 U	0.073 U	0.073 U	0.224 U	0.224 U	0.224 U	0.109 U	0.109 U	0.2 U	0.224 U
1,1,2-TRICHLOROETHANE	0.6	0.093 U	0.179 U	0.159 U	0.159 U	0.2 U	0.093 U	0.179 U	0.159 U	0.159 U	0.2 U	0.2 U	0.095 U	0.095 U	0.095 U	0.358 U	0.358 U	0.358 U	0.159 U	0.159 U	0.2 U	0.358 U
1,1-DICHLOROETHANE	6	0.086 U	0.064 U	0.171 U	0.171 U	0.2 U	0.086 U	0.064 U	0.171 U	0.171 U	0.2 U	0.2 U	0.031 U	0.031 U	0.031 U	0.127 U	0.127 U	0.127 U	0.171 U	0.171 U	0.2 U	0.127 U
1,1-DICHLOROETHENE	7	0.201 U	0.183 U	0.208 U	0.2 U	0.2 U	0.201 U	0.183 U	0.208 U	0.2 U	0.2 U	0.2 U	0.164 U	0.164 U	0.164 U	0.366 U	0.366 U	0.366 U	0.208 U	0.2 U	0.2 U	0.366 U
1,1-DICHLOROPROPENE	NA	0.07 U	0.071 U	0.052 U	0.052 U	0.2 U	0.07 U	0.071 U	0.052 U	0.052 U	0.2 U	0.2 U	0.067 U	0.067 U	0.067 U	0.143 U	0.143 U	0.143 U	0.052 U	0.052 U	0.2 U	0.143 U
1,2,3-TRICHLOROBENZENE	NA	--	--	--	0.079 U	0.2 U	--	--	--	0.079 U	0.2 U	0.2 U	0.11 U	0.11 U	0.11 U	0.214 U	0.214 U	0.214 U	--	0.079 U	0.2 U	0.214 U
1,2,3-TRICHLOROPROPANE	0.005	0.091 U	0.063 U	0.065 U	0.065 U	0.2 U	0.091 U	0.063 U	0.065 U	0.065 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.127 U	0.127 U	0.127 U	0.065 U	0.065 U	0.2 U	0.127 U
1,2,4-TRICHLOROBENZENE	70	0.091 U	0.138 U	0.105 U	0.105 U	0.2 U	0.091 U	0.138 U	0.105 U	0.105 U	0.2 U	0.2 U	0.119 U	0.119 U	0.119 U	0.276 U	0.276 U	0.276 U	0.105 U	0.105 U	0.2 U	0.276 U
1,2,4-TRIMETHYLBENZENE	400	0.082 U	0.08 U	0.084 U	0.084 U	0.2 U	0.082 U	0.08 U	0.084 U	0.084 U	0.2 U	0.2 U	0.027 U	0.027 U	0.027 U	0.161 U	0.161 U	0.161 U	0.084 U	0.084 U	0.2 U	0.161 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.02	0.202 U	0.169 U	0.102 U	0.102 U	0.2 U	0.202 U	0.169 U	0.102 U	0.102 U	0.2 U	0.2 U	0.047 U	0.047 U	0.047 U	0.338 U	0.338 U	0.338 U	0.102 U	0.102 U	0.2 U	0.338 U
1,2-DICHLOROBENZENE	20	0.069 U	0.086 U	0.135 U	0.135 U	0.2 U	0.069 U	0.086 U	0.135 U	0.135 U	0.2 U	0.2 U	0.079 U	0.079 U	0.079 U	0.172 U	0.172 U	0.172 U	0.135 U	0.135 U	0.2 U	0.172 U
1,2-DICHLOROETHANE	0.4	0.09 U	0.121 U	0.116 U	0.116 U	0.2 U	0.09 U	0.121 U	0.116 U	0.116 U	0.2 U	0.2 U	0.086 U	0.086 U	0.086 U	0.242 U	0.242 U	0.242 U	0.116 U	0.116 U	0.2 U	0.242 U
1,2-DICHLOROPROPANE	0.6	0.096 U	0.114 U	0.15 U	0.15 U	0.2 U	0.096 U	0.114 U	0.15 U	0.15 U	0.2 U	0.2 U	0.064 U	0.064 U	0.064 U	0.228 U	0.228 U	0.228 U	0.15 U	0.15 U	0.2 U	0.228 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	400	0.106 U	0.053 U	0.066 U	0.066 U	0.2 U	0.106 U	0.053 U	0.066 U	0.066 U	0.2 U	0.2 U	0.021 U	0.021 U	0.021 U	0.105 U	0.105 U	0.105 U	0.066 U	0.066 U	0.2 U	0.105 U
1,3-DICHLOROBENZENE	200	0.132 U	0.08 U	0.138 U	0.138 U	0.2 U	0.132 U	0.08 U	0.138 U	0.138 U	0.2 U	0.2 U	0.099 U	0.099 U	0.099 U	0.16 U	0.16 U	0.16 U	0.138 U	0.138 U	0.2 U	0.16 U
1,3-DICHLOROPROPANE	NA	0.158 U	0.113 U	0.059 U	0.059 U	0.2 U	0.158 U	0.113 U	0.059 U	0.059 U	0.2 U	0.2 U	0.042 U	0.042 U	0.042 U	0.226 U	0.226 U	0.226 U	0.059 U	0.059 U	0.2 U	0.226 U
1,4-DICHLOROBENZENE	6	0.057 U	0.058 U	0.083 U	0.083 U	0.2 U	0.057 U	0.058 U	0.083 U	0.083 U	0.2 U	0.2 U	0.118 U	0.118 U	0.118 U	0.117 U	0.117 U	0.117 U	0.083 U	0.083 U	0.2 U	0.117 U
2,2-DICHLOROPROPANE	NA	0.129 U	0.112 U	0.17 U	0.17 U	0.2 U	0.129 U	0.112 U	0.17 U	0.17 U	0.2 U	0.2 U	0.117 U	0.117 U	0.117 U	0.224 U	0.224 U	0.224 U	0.17 U	0.17 U	0.2 U	0.224 U
2-CHLOROTOLUENE	100	0.086 U	0.09 U	0.08 U	0.08 U	0.2 U	0.086 U	0.09 U	0.08 U	0.08 U	0.2 U	0.2 U	0.045 U	0.045 U	0.045 U	0.18 U	0.18 U	0.18 U	0.08 U	0.08 U	0.2 U	0.18 U
2-HEXANONE	40	0.105 U	0.302 U	0.122 U	0.122 U	0.5 U	0.105 U	0.302 U	0.122 U	0.122 U	0.5 U	0.5 U	0.503 U	0.503 U	0.503 U	0.604 U	0.604 U	0.604 U	0.122 U	0.122 U	0.5 U	0.604 U
4-CHLOROTOLUENE	24	0.084 U	0.046 U	0.124 U	0.124 U	0.2 U	0.084 U	0.046 U	0.124 U	0.124 U	0.2 U	0.2 U	0.052 U	0.052 U	0.052 U	0.092 U	0.092 U	0.092 U	0.124 U	0.124 U	0.2 U	0.092 U
ACETONE	6000	0.914 U	0.322 U	0.193 U	0.193 U	0.5 U	0.914 U	0.322 U	0.193 U	0.193 U	0.5 U	0.5 U	1.15 U	**8.47 J**	**1.47 J**	0.644 UQ	0.644 U	0.644 U	0.193 UK	**5.01**	0.5 U	0.644 U
BENZENE	1	0.065 U	0.049 U	0.111 U	0.111 U	0.2 U	0.065 U	0.049 U	0.111 U	0.111 U	0.2 U	0.2 U	0.054 U	0.054 U	0.054 U	0.098 U	0.098 U	0.098 U	0.111 U	0.111 U	0.2 U	0.098 U
BROMOBENZENE	NA	0.098 U	0.095 U	0.145 U	0.145 U	0.2 U	0.098 U	0.095 U	0.145 U	0.145 U	0.2 U	0.2 U	0.084 U	0.084 U	0.084 U	0.189 U	0.189 U	0.189 U	0.145 U	0.145 U	0.2 U	0.189 U
BROMOCHLOROMETHANE	NA	0.267 U	0.238 U	0.127 U	0.127 U	0.2 U	0.267 U	0.238 U	0.127 U	0.127 U	0.2 U	0.2 U	0.095 U	0.095 U	0.095 U	0.476 U	0.476 U	0.476 U	0.127 U	0.127 U	0.2 U	0.476 U
BROMODICHLOROMETHANE	0.6	0.144 U	0.071 U	0.083 U	0.083 U	0.2 U	0.144 U	0.071 U	0.083 U	0.083 U	0.2 U	0.2 U	0.053 U	0.053 U	0.053 U	0.141 U	0.141 U	0.141 U	0.083 U	0.083 U	0.2 U	0.141 U
BROMOFORM	4	0.172 U	0.278 U	0.215 U	0.215 U	0.25 U	0.172 U	0.278 U	0.215 U	0.215 U	0.25 U	0.25 U	0.104 U	0.104 U	0.104 U	0.556 U	0.556 U	0.556 U	0.215 U	0.215 U	0.25 U	0.556 U
BROMOMETHANE	10	0.271 U	0.276 U	0.427 U	0.427 U	0.5 U	0.271 U	0.276 U	0.427 U	0.427 U	0.5 U	0.5 U	0.264 U	0.264 U	0.264 U	0.552 UQ	0.552 U	0.552 U	0.427 U	0.427 U	0.5 U	0.552 U
CARBON TETRACHLORIDE	0.3	0.156 U	0.056 U	0.248 U	0.248 U	0.25 U	0.156 U	0.056 U	0.248 U	0.248 U	0.25 U	0.25 U	0.148 U	0.148 U	0.148 U	0.113 U	0.113 U	0.113 U	0.248 U	0.248 U	0.25 U	0.113 U
CHLOROBENZENE	50	0.287 U	0.055 U	0.083 U	0.083 U	0.2 U	0.287 U	0.055 U	0.083 U	0.083 U	0.2 U	0.2 U	0.027 U	0.027 U	0.027 U	0.11 U	0.11 U	0.11 U	0.083 U	0.083 U	0.2 U	0.11 U
CHLOROETHANE	3000	0.181 U	0.279 U	0.235 U	0.235 U	0.25 U	0.181 U	0.279 U	0.235 U	0.235 U	0.25 U	0.25 U	0.351 U	0.351 U	0.351 U	0.558 U	0.558 U	0.558 U	0.235 U	0.235 U	0.25 U	0.558 U
CHLOROFORM	70	0.164 U	0.062 U	0.155 U	0.155 U	0.2 U	0.164 U	0.062 U	0.155 U	0.155 U	0.2 U	0.2 U	0.057 U	0.057 U	0.057 U	0.123 U	0.123 U	0.123 U	0.155 U	0.155 U	0.2 U	0.123 U
CHLOROMETHANE	3	**1.52 J**	0.076 U	0.144 U	0.144 U	0.2 U	0.101 U	0.076 U	0.144 U	0.144 U	0.2 U	0.2 U	0.089 U	0.089 U	0.089 U	0.151 UQ	0.151 U	0.151 U	0.144 U	0.144 U	0.2 U	0.151 U
cis-1,2-DICHLOROETHYLENE	70	0.162 U	0.104 U	0.103 U	0.103 U	0.2 U	0.162 U	0.104 U	0.103 U	0.103 U	0.2 U	0.2 U	0.061 U	0.061 U	0.061 U	0.208 U	0.208 U	0.208 U	0.103 U	0.103 U	0.2 U	0.208 U
cis-1,3-DICHLOROPROPENE	0.4	0.116 U	0.105 U	0.124 U	0.124 U	0.2 U	0.116 U	0.105 U	0.124 U	0.124 U	0.2 U	0.2 U	0.031 U	0.031 U	0.031 U	0.21 U	0.21 U	0.21 U	0.124 U	0.124 U	0.2 U	0.21 U
DIBROMOCHLOROMETHANE	0.4	0.098 U	0.133 U	0.054 U	0.054 U	0.2 U	0.098 U	0.133 U	0.054 U	0.054 U	0.2 U	0.2 U	0.041 U	0.041 U	0.041 U	0.266 U	0.266 U	0.266 U	0.054 U	0.054 U	0.2 U	0.266 U
DICHLORODIFLUOROMETHANE	1000	0.083 U	0.088 U	0.145 U	0.145 U	0.2 U	0.083 U	0.088 U	0.145 U	0.145 U	0.2 U	0.2 U	0.096 U	0.096 U	0.096 U	0.176 UQ	0.176 U	0.176 U	0.145 U	0.145 U	0.2 U	0.176 U
ETHYLBENZENE	600	0.065 U	0.18 U	0.109 U	0.109 U	0.2 U	0.065 U	0.18 U	0.109 U	0.109 U	0.2 U	0.2 U	0.063 U	0.063 U	0.063 U	0.36 U	0.36 U	0.36 U	0.109 U	0.109 U	0.2 U	0.36 U
ISOPROPYL ETHER	70	--	--	--	0.479 U	0.5 U	--	--	--	0.479 U	0.5 U	0.5 U	0.529 U	0.529 U	0.529 U	0.21 U	0.21 U	0.21 U	--	0.479 U	0.5 U	0.21 U
ISOPROPYLBENZENE (CUMENE)	70	0.135 U	0.058 U	0.13 U	0.13 U	0.2 U	0.135 U	0.058 U	0.13 U	0.13 U	0.2 U	0.2 U	0.035 U	0.035 U	0.035 U	0.117 U	0.117 U	0.117 U	0.13 U	0.13 U	0.2 U	0.117 U
M,P-XYLENE (SUM OF ISOMERS)	500	0.123 U	0.099 U	0.123 U	0.123 U	0.2 U	0.123 U	0.099 U	0.123 U	0.123 U	0.2 U	0.2 U	0.058 U	0.058 U	0.058 U	0.197 U	0.197 U	0.197 U	0.123 U	0.123 U	0.2 U	0.197 U
METHYL ETHYL KETONE (2-BUTANONE)	4000	0.176 U	0.235 U	0.142 U	0.142 U	0.2 U	0.176 U	0.235 U	0.142 U	0.142 U	0.2 U	0.2 U	0.093 U	**6.19**	0.093 U	0.47 U	0.47 U	0.47 U	0.142 U	0.142 U	0.2 U	0.47 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	100	0.078 U	0.142 U	0.12 U	0.12 U	0.2 U	0.078 U	0.142 U	0.12 U	0.12 U	0.2 U	0.2 U	0.065 U	0.065 U	0.065 U	0.284 U	0.284 U	0.284 U	0.12 U	0.12 U	0.2 U	0.284 U
METHYLENE CHLORIDE	5	0.096 U	0.102 U	0.149 U	0.149 U	0.2 U	0.096 U	0.102 U	0.149 U	0.149 U	0.2 U	0.2 U	0.327 U	0.327 U	0.327 U	0.204 U	0.204 U	0.204 U	0.149 U	0.149 U	0.2 U	0.204 U
n-BUTYLBENZENE	70	0.124 U	0.068 U	0.123 U	0.123 U	0.2 U	0.124 U	0.068 U	0.123 U	0.123 U	0.2 U	0.2 U	0.037 U	0.037 U	0.037 U	0.137 U	0.137 U	0.137 U	0.123 U	0.123 U	0.2 U	0.137 U
n-PROPYLBENZENE	70	0.123 U	0.069 U	0.727 U	0.727 U	1 U	0.123 U	0.069 U	0.727 U	0.727 U	1 U	1 U	0.054 U	0.054 U	0.054 U	0.137 U	0.137 U	0.137 U	0.727 U	0.727 U	1 U	0.137 U
O-XYLENE (1,2-DIMETHYLBENZENE)	NA	0.061 U	0.077 U	0.055 U	0.055 U	0.2 U	0.061 U	0.077 U	0.055 U	0.055 U	0.2 U	0.2 U	0.027 U	0.027 U	0.027 U	0.155 U	0.155 U	0.155 U	0.055 U	0.055 U	0.2 U	0.155 U
P-CYMENE (p-ISOPROPYLTOLUENE)	25	0.064 U	0.175 U	0.07 U	0.07 U	0.2 U	0.064 U	0.175 U	0.07 U	0.07 U	0.2 U	0.2 U	0.037 U	0.037 U	0.037 U	0.35 U	0.35 U	0.35 U	0.07 U	0.07 U	0.2 U	0.35 U
SEC-BUTYLBENZENE	70	0.056 U	0.088 U	0.107 U	0.107 U	0.2 U	0.056 U	0.088 U	0.107 U	0.107 U	0.2 U	0.2 U	0.027 U	0.027 U	0.027 U	0.176 U	0.176 U	0.176 U	0.107 U	0.107 U	0.2 U	0.176 U
STYRENE	70	0.058 U	0.058 U	0.089 U	0.089 U	0.2 U	0.058 U	0.058 U	0.089 U	0.089 U	0.2 U	0.2 U	0.051 U	0.051 U	0.051 U	0.115 U	0.115 U	0.115 U	0.089 U	0.089 U	0.2 U	0.115 U
t-BUTYLBENZENE	70	0.101 U	0.058 U	0.087 U	0.087 U	0.2 U	0.101 U	0.058 U	0.087 U	0.087 U	0.2 U	0.2 U	0.078 U	0.078 U	0.078 U	0.116 U	0.116 U	0.116 U	0.087 U	0.087 U	0.2 U	0.116 U
tert-BUTYL METHYL ETHER	20	0.077 U	0.084 U	0.078 U	0.078 U	0.2 U	0.077 U	0.084 U	0.078 U	0.078 U	0.2 U	0.2 U	0.052 U	0.052 U	0.052 U	0.168 U	0.168 U	0.168 U	0.078 U	0.078 U	0.2 U	0.168 U
TETRACHLOROETHENE (PCE)	0.7	**11.5**	**24**	**98.5**	**36.6**	**60.4**	**81.1**	**99.6**	**120**	**94.9**	**54.9**	**53.8**	**59.8**	**1.53 J**	**101**	**319**	**326**	**324**	**144**	**43.6 B**	**72.6**	**218**
TOLUENE	600	0.076 U	0.078 U	0.122 U	0.122 U	0.2 U	0.076 U	0.078 U	0.122 U	0.122 U	0.2 U	0.2 U	0.059 U	0.059 U	0.059 U	0.155 U	0.155 U	0.155 U	0.122 U	0.122 U	0.2 U	0.155 U
trans-1,2-DICHLOROETHENE	100	0.122 U	0.096 U	0.077 U	0.077 U	0.2 U	0.122 U	0.096 U	0.077 U	0.077 U	0.2 U	0.2 U	0.107 U	0.107 U	0.107 U	0.191 U	0.191 U	0.191 U	0.077 U	0.077 U	0.2 U	0.191 U
trans-1,3-DICHLOROPROPENE	0.4	0.062 U	0.068 U	0.128 U	0.128 U	0.2 U	0.062 U	0.068 U	0.128 U	0.128 U	0.2 U	0.2 U	0.054 U	0.054 U	0.054 U	0.136 U	0.136 U	0.136 U	0.128 U	0.128 U	0.2 U	0.136 U
TRICHLOROETHYLENE (TCE)	3	0.118 U	0.094 U	0.161 U	0.161 U	0.2 U	0.118 U	0.094 U	0.161 U	0.161 U	0.2 U	0.2 U	0.062 U	0.062 U	0.062 U	0.189 U	0.189 U	0.189 U	0.161 U	0.161 U	0.2 U	0.189 U
TRICHLOROFLUOROMETHANE	2000	0.138 U	0.094 U	0.157 U	0.157 U	0.2 U	0.138 U	0.094 U	0.157 U	0.157 U	0.2 U	0.2 U	0.123 U	0.123 U	0.123 U	0.187 U	0.187 U	0.187 U	0.157 U	0.157 U	0.2 U	0.187 U
VINYL ACETATE	88	0.215 U	0.197 U	0.151 UQ	0.151 U	0.2 U	0.215 U	0.197 U	0.151 UQ	0.151 U	0.2 U	0.2 U	0.202 U	0.202 U	0.202 U	0.394 UQ	0.394 U	0.394 U	0.151 UQJ	0.151 U	0.2 U	0.394 U
VINYL CHLORIDE	0.03	0.155 U	0.104 U	0.127 U	0.127 U	0.2 U	0.155 U	0.104 U	0.127 U	0.127 U	0.2 U	0.2 U	0.093 U	0.093 U	0.093 U	0.208 UQ	0.208 U	0.208 U	0.127 U	0.127 U	0.2 U	0.208 U
XYLENES, TOTAL	500	0.183 U	0.123 U	0.179 U	0.179 U	0.4 U	0.183 U	0.123 U	0.179 U	0.179 U	0.4 U	0.4 U	0.05 U	0.05 U	0.05 U	0.246 U	0.246 U	0.246 U	0.179 U	0.179 U	0.4 U	0.246 U

Bolded value = detectable concentration.
Red value = an NC 2L Groundwater Standard exceedance.
NA = an NC 2L Groundwater Standard does not exist for this analyte.
U = Undetected. The analyte was analyzed for, but not detected at the stated method detection limit (MDL).
J = Indicates an estimated value.
B = Indicates the analyte was detected in the associated Method Blank
Q= LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.
NC 2L = North Carolina subchapter 2L groundwater standards.
ug/L = micrograms per liter

Table 4
Historical Analytical Results for Groundwater and Surface Water
February 2009 - October 2015
SWMU 14c
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID		74MW4 2/25/2013 ug/L 21302261007	74MW4 6/19/2014 ug/L 21406202726	74MW4 10/22/2015 ug/L 21510230715	74MW6 6/16/2011 ug/L 21106171408	74MW6 2/24/2013 ug/L 21302261002	74MW6 6/19/2014 ug/L 21406202725	74MW6 10/21/2015 ug/L 21510230709	74MW7 6/16/2011 ug/L 21106171409	74MW7 2/25/2013 ug/L 21302261008	74MW7 10/21/2015 ug/L 21510230710	74MW8 5/31/2012 ug/L 21206011103	74MW8 2/24/2013 ug/L 21302261003	74SW1 6/16/2011 ug/L 21106171410	74SW1 6/19/2014 ug/L 21406202715	74SW1 10/21/2015 ug/L 21510230711	74SW2 6/16/2011 ug/L 21106171411	74SW2 6/19/2014 ug/L 21406202717	74SW2 10/21/2015 ug/L 21510230712	74SW3 6/16/2011 ug/L 21106171412	74SW3 6/19/2014 ug/L 21406202716
Analyte (ug/L) VOCs (SW8260B)	**NC 2L Groundwater Standard (ug/L)**																				
1,1,1-TRICHLOROETHANE	200	0.246 U	0.246 U	0.2 U	0.078 U	0.123 U	0.123 U	0.2 U	0.078 U	0.123 U	0.2 U	0.085 U	0.123 U	0.078 U	0.123 U	0.2 U	0.078 U	0.123 U	0.2 U	0.096 U	0.123 U
1,1,2,2-TETRACHLOROETHANE	0.2	0.218 U	0.218 U	0.2 U	0.112 U	0.109 U	0.109 U	0.2 U	0.112 U	0.109 U	0.2 U	0.108 U	0.109 U	0.112 U	0.109 U	0.2 U	0.112 U	0.109 U	0.2 U	0.154 U	0.109 U
1,1,2-TRICHLOROETHANE	0.6	0.318 U	0.318 U	0.2 U	0.179 U	0.159 U	0.159 U	0.2 U	0.179 U	0.159 U	0.2 U	0.147 U	0.159 U	0.179 U	0.159 U	0.2 U	0.179 U	0.159 U	0.2 U	0.093 U	0.159 U
1,1-DICHLOROETHANE	6	0.342 U	0.342 U	0.2 U	0.064 U	0.171 U	0.171 U	0.2 U	0.064 U	0.171 U	0.2 U	0.138 U	0.171 U	0.064 U	0.171 U	0.2 U	0.064 U	0.171 U	0.2 U	0.086 U	0.171 U
1,1-DICHLOROETHENE	7	0.416 U	0.4 U	0.2 U	0.183 U	0.208 U	0.2 U	0.2 U	0.183 U	0.208 U	0.2 U	0.208 U	0.208 U	0.183 U	0.2 U	0.2 U	0.183 U	0.2 U	0.2 U	0.201 U	0.2 U
1,1-DICHLOROPROPENE	NA	0.105 U	0.105 U	0.2 U	0.071 U	0.052 U	0.052 U	0.2 U	0.071 U	0.052 U	0.2 U	0.121 U	0.052 U	0.071 U	0.052 U	0.2 U	0.071 U	0.052 U	0.2 U	0.07 U	0.052 U
1,2,3-TRICHLOROBENZENE	NA	0.159 U	0.159 U	0.2 U	0.107 U	0.079 U	0.079 U	0.2 U	0.107 U	0.079 U	0.2 U	0.086 U	0.079 U	0.107 U	0.079 U	0.2 U	0.107 U	0.079 U	0.2 U	--	0.079 U
1,2,3-TRICHLOROPROPANE	0.005	0.13 U	0.13 U	0.2 U	0.063 U	0.065 U	0.065 U	0.2 U	0.063 U	0.065 U	0.2 U	0.098 U	0.065 U	0.063 U	0.065 U	0.2 U	0.063 U	0.065 U	0.2 U	0.091 U	0.065 U
1,2,4-TRICHLOROBENZENE	70	0.21 U	0.21 U	0.2 U	0.138 U	0.105 U	0.105 U	0.2 U	0.138 U	0.105 U	0.2 U	0.156 U	0.105 U	0.138 U	0.105 U	0.2 U	0.138 U	0.105 U	0.2 U	0.091 U	0.105 U
1,2,4-TRIMETHYLBENZENE	400	0.169 U	0.169 U	0.2 U	0.08 U	0.084 U	0.084 U	0.2 U	0.08 U	0.084 U	0.2 U	0.102 U	0.084 U	0.08 U	0.084 U	0.2 U	0.08 U	0.084 U	0.2 U	0.082 U	0.084 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.02	0.205 U	0.205 U	0.2 U	0.169 U	0.102 U	0.102 U	0.2 U	0.169 U	0.102 U	0.2 U	0.1 U	0.102 U	0.169 U	0.102 U	0.2 U	0.169 U	0.102 U	0.2 U	0.202 U	0.102 U
1,2-DICHLOROBENZENE	20	0.27 U	0.27 U	0.2 U	0.086 U	0.135 U	0.135 U	0.2 U	0.086 U	0.135 U	0.2 U	0.117 U	0.135 U	0.086 U	0.135 U	0.2 U	0.086 U	0.135 U	0.2 U	0.069 U	0.135 U
1,2-DICHLOROETHANE	0.4	0.232 U	0.232 U	0.2 U	0.121 U	0.116 U	0.116 U	0.2 U	0.121 U	0.116 U	0.2 U	0.119 U	0.116 U	0.121 U	0.116 U	0.2 U	0.121 U	0.116 U	0.2 U	0.09 U	0.116 U
1,2-DICHLOROPROPANE	0.6	0.301 U	0.301 U	0.2 U	0.114 U	0.15 U	0.15 U	0.2 U	0.114 U	0.15 U	0.2 U	0.15 U	0.15 U	0.114 U	0.15 U	0.2 U	0.114 U	0.15 U	0.2 U	0.096 U	0.15 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	400	0.132 U	0.132 U	0.2 U	0.053 U	0.066 U	0.066 U	0.2 U	0.053 U	0.066 U	0.2 U	0.075 U	0.066 U	0.053 U	0.066 U	0.2 U	0.053 U	0.066 U	0.2 U	0.106 U	0.066 U
1,3-DICHLOROBENZENE	200	0.275 U	0.275 U	0.2 U	0.08 U	0.138 U	0.138 U	0.2 U	0.08 U	0.138 U	0.2 U	0.135 U	0.138 U	0.08 U	0.138 U	0.2 U	0.08 U	0.138 U	0.2 U	0.132 U	0.138 U
1,3-DICHLOROPROPANE	NA	0.118 U	0.118 U	0.2 U	0.113 U	0.059 U	0.059 U	0.2 U	0.113 U	0.059 U	0.2 U	0.072 U	0.059 U	0.113 U	0.059 U	0.2 U	0.113 U	0.059 U	0.2 U	0.158 U	0.059 U
1,4-DICHLOROBENZENE	6	0.166 U	0.166 U	0.2 U	0.058 U	0.083 U	0.083 U	0.2 U	0.058 U	0.083 U	0.2 U	0.11 U	0.083 U	0.058 U	0.083 U	0.2 U	0.058 U	0.083 U	0.2 U	0.057 U	0.083 U
2,2-DICHLOROPROPANE	NA	0.341 U	0.341 U	0.2 U	0.112 U	0.17 U	0.17 U	0.2 U	0.112 U	0.17 U	0.2 U	0.181 U	0.17 U	0.112 U	0.17 U	0.2 U	0.112 U	0.17 U	0.2 U	0.129 U	0.17 U
2-CHLOROTOLUENE	100	0.161 U	0.161 U	0.2 U	0.09 U	0.08 U	0.08 U	0.2 U	0.09 U	0.08 U	0.2 U	0.108 U	0.08 U	0.09 U	0.08 U	0.2 U	0.09 U	0.08 U	0.2 U	0.086 U	0.08 U
2-HEXANONE	40	0.245 U	0.245 U	0.5 U	0.302 U	0.122 U	0.122 U	0.5 U	0.302 U	0.122 U	0.5 U	0.093 U	0.122 U	0.302 U	0.122 U	0.5 U	0.302 U	0.122 U	0.5 U	0.105 U	0.122 U
4-CHLOROTOLUENE	24	0.248 U	0.248 U	0.2 U	0.046 U	0.124 U	0.124 U	0.2 U	0.046 U	0.124 U	0.2 U	0.117 U	0.124 U	0.046 U	0.124 U	0.2 U	0.046 U	0.124 U	0.2 U	0.084 U	0.124 U
ACETONE	6000	0.387 U	0.387 U	0.5 U	0.322 U	0.193 U	0.193 U	0.5 U	0.322 U	0.193 U	0.5 U	**1.56 J**	**1.06 J**	0.322 U	**5.01**	0.5 U	0.322 U	0.193 U	0.5 U	0.914 U	0.193 U
BENZENE	1	0.222 U	0.222 U	0.2 U	0.049 U	0.111 U	0.111 U	0.2 U	0.049 U	0.111 U	0.2 U	0.099 U	0.111 U	0.049 U	0.111 U	0.2 U	0.049 U	0.111 U	0.2 U	0.065 U	0.111 U
BROMOBENZENE	NA	0.29 U	0.29 U	0.2 U	0.095 U	0.145 U	0.145 U	0.2 U	0.095 U	0.145 U	0.2 U	0.109 U	0.145 U	0.095 U	0.145 U	0.2 U	0.095 U	0.145 U	0.2 U	0.098 U	0.145 U
BROMOCHLOROMETHANE	NA	0.254 U	0.254 U	0.2 U	0.238 U	0.127 U	0.127 U	0.2 U	0.238 U	0.127 U	0.2 U	0.127 U	0.127 U	0.238 U	0.127 U	0.2 U	0.238 U	0.127 U	0.2 U	0.267 U	0.127 U
BROMODICHLOROMETHANE	0.6	0.167 U	0.167 U	0.2 U	0.071 U	0.083 U	0.083 U	0.2 U	0.071 U	0.083 U	0.2 U	0.076 U	0.083 U	0.071 U	0.083 U	0.2 U	0.071 U	0.083 U	0.2 U	0.144 U	0.083 U
BROMOFORM	4	0.43 U	0.43 U	0.25 U	0.278 U	0.215 U	0.215 U	0.25 U	0.278 U	0.215 U	0.25 U	0.15 U	0.215 U	0.278 U	0.215 U	0.25 U	0.278 U	0.215 U	0.25 U	0.172 U	0.215 U
BROMOMETHANE	10	0.854 U	0.854 U	0.5 U	0.276 U	0.427 U	0.427 U	0.5 U	0.276 U	0.427 U	0.5 U	0.427 U	0.427 U	0.276 U	0.427 U	0.5 U	0.276 U	0.427 U	0.5 U	0.271 U	0.427 U
CARBON TETRACHLORIDE	0.3	0.496 U	0.496 U	0.25 U	0.056 U	0.248 U	0.248 U	0.25 U	0.056 U	0.248 U	0.25 U	0.146 U	0.248 U	0.056 U	0.248 U	0.25 U	0.056 U	0.248 U	0.25 U	0.156 U	0.248 U
CHLOROBENZENE	50	0.166 U	0.166 U	0.2 U	0.055 U	0.083 U	0.083 U	0.2 U	0.055 U	0.083 U	0.2 U	0.089 U	0.083 U	0.055 U	0.083 U	0.2 U	0.055 U	0.083 U	0.2 U	0.287 U	0.083 U
CHLOROETHANE	3000	0.47 U	0.47 U	0.25 U	0.279 U	0.235 U	0.235 U	0.25 U	0.279 U	0.235 U	0.25 U	0.235 U	0.235 U	0.279 U	0.235 U	0.25 U	0.279 U	0.235 U	0.25 U	0.181 U	0.235 U
CHLOROFORM	70	0.31 U	0.31 U	0.2 U	0.062 U	0.155 U	0.155 U	0.2 U	0.062 U	0.155 U	0.2 U	**0.564 J**	0.155 U	0.062 U	0.155 U	0.2 U	0.062 U	0.155 U	0.2 U	0.164 U	0.155 U
CHLOROMETHANE	3	0.287 U	0.287 U	0.2 U	0.076 U	0.144 U	0.144 U	0.2 U	0.076 U	0.144 U	0.2 U	0.058 U	0.144 U	0.076 U	0.144 U	0.2 U	0.076 U	0.144 U	0.2 U	0.101 U	0.144 U
cis-1,2-DICHLOROETHYLENE	70	0.207 U	0.207 U	0.2 U	0.104 U	0.103 U	0.103 U	0.2 U	0.104 U	0.103 U	0.2 U	**38.5**	0.103 U	0.104 U	0.103 U	0.2 U	0.104 U	0.103 U	0.2 U	0.162 U	0.103 U
cis-1,3-DICHLOROPROPENE	0.4	0.248 U	0.248 U	0.2 U	0.105 U	0.124 U	0.124 U	0.2 U	0.105 U	0.124 U	0.2 U	0.092 U	0.124 U	0.105 U	0.124 U	0.2 U	0.105 U	0.124 U	0.2 U	0.116 U	0.124 U
DIBROMOCHLOROMETHANE	0.4	0.108 U	0.108 U	0.2 U	0.133 U	0.054 U	0.054 U	0.2 U	0.133 U	0.054 U	0.2 U	0.076 U	0.054 U	0.133 U	0.054 U	0.2 U	0.133 U	0.054 U	0.2 U	0.098 U	0.054 U
DICHLORODIFLUOROMETHANE	1000	0.29 U	0.29 U	0.2 U	0.088 U	0.145 U	0.145 U	0.2 U	0.088 U	0.145 U	0.2 U	0.154 U	0.145 U	0.088 U	0.145 U	0.2 U	0.088 U	0.145 U	0.2 U	0.083 U	0.145 U
ETHYLBENZENE	600	0.218 U	0.218 U	0.2 U	0.18 U	0.109 U	0.109 U	0.2 U	0.18 U	0.109 U	0.2 U	0.119 U	0.109 U	0.18 U	0.109 U	0.2 U	0.18 U	0.109 U	0.2 U	0.065 U	0.109 U
ISOPROPYL ETHER	70	0.958 U	0.958 U	0.5 U	0.105 U	0.479 U	0.479 U	0.5 U	0.105 U	0.479 U	0.5 U	0.275 U	0.479 U	0.105 U	0.479 U	0.5 U	0.105 U	0.479 U	0.5 U	--	0.479 U
ISOPROPYLBENZENE (CUMENE)	70	0.26 U	0.26 U	0.2 U	0.058 U	0.13 U	0.13 U	0.2 U	0.058 U	0.13 U	0.2 U	0.123 U	0.13 U	0.058 U	0.13 U	0.2 U	0.058 U	0.13 U	0.2 U	0.135 U	0.13 U
M,P-XYLENE (SUM OF ISOMERS)	500	0.247 U	0.247 U	0.2 U	0.099 U	0.123 U	0.123 U	0.2 U	0.099 U	0.123 U	0.2 U	0.237 U	0.123 U	0.099 U	0.123 U	0.2 U	0.099 U	0.123 U	0.2 U	0.123 U	0.123 U
METHYL ETHYL KETONE (2-BUTANONE)	4000	0.284 U	0.284 U	0.2 U	0.235 U	0.142 U	0.142 U	0.2 U	0.235 U	0.142 U	0.2 U	0.362 U	0.142 U	0.235 U	0.142 U	0.2 U	0.235 U	0.142 U	0.2 U	0.176 U	0.142 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	100	0.24 U	0.24 U	0.2 U	0.142 U	0.12 U	0.12 U	0.2 U	0.142 U	0.12 U	0.2 U	0.079 U	0.12 U	0.142 U	0.12 U	0.2 U	0.142 U	0.12 U	0.2 U	0.078 U	0.12 U
METHYLENE CHLORIDE	5	0.298 U	0.298 U	0.2 U	0.102 U	0.149 U	0.149 U	0.2 U	0.102 U	0.149 U	0.2 U	0.149 U	0.149 U	0.102 U	0.149 U	0.2 U	0.102 U	0.149 U	0.2 U	0.096 U	0.149 U
n-BUTYLBENZENE	70	0.246 U	0.246 U	0.2 U	0.068 U	0.123 U	0.123 U	0.2 U	0.068 U	0.123 U	0.2 U	0.152 U	0.123 U	0.068 U	0.123 U	0.2 U	0.068 U	0.123 U	0.2 U	0.124 U	0.123 U
n-PROPYLBENZENE	70	1.45 U	1.45 U	1 U	0.069 U	0.727 U	0.727 U	1 U	0.069 U	0.727 U	1 U	0.102 U	0.727 U	0.069 U	0.727 U	1 U	0.069 U	0.727 U	1 U	0.123 U	0.727 U
O-XYLENE (1,2-DIMETHYLBENZENE)	NA	0.111 U	0.111 U	0.2 U	0.077 U	0.055 U	0.055 U	0.2 U	0.077 U	0.055 U	0.2 U	0.147 U	0.055 U	0.077 U	0.055 U	0.2 U	0.077 U	0.055 U	0.2 U	0.061 U	0.055 U
P-CYMENE (p-ISOPROPYLTOLUENE)	25	0.14 U	0.14 U	0.2 U	0.175 U	0.07 U	0.07 U	0.2 U	0.175 U	0.07 U	0.2 U	0.082 U	0.07 U	0.175 U	0.07 U	0.2 U	0.175 U	0.07 U	0.2 U	0.064 U	0.07 U
SEC-BUTYLBENZENE	70	0.214 U	0.214 U	0.2 U	0.088 U	0.107 U	0.107 U	0.2 U	0.088 U	0.107 U	0.2 U	0.111 U	0.107 U	0.088 U	0.107 U	0.2 U	0.088 U	0.107 U	0.2 U	0.056 U	0.107 U
STYRENE	70	0.179 U	0.179 U	0.2 U	0.058 U	0.089 U	0.089 U	0.2 U	0.058 U	0.089 U	0.2 U	0.098 U	0.089 U	0.058 U	0.089 U	0.2 U	0.058 U	0.089 U	0.2 U	0.058 U	0.089 U
t-BUTYLBENZENE	70	0.173 U	0.173 U	0.2 U	0.058 U	0.087 U	0.087 U	0.2 U	0.058 U	0.087 U	0.2 U	0.097 U	0.087 U	0.058 U	0.087 U	0.2 U	0.058 U	0.087 U	0.2 U	0.101 U	0.087 U
tert-BUTYL METHYL ETHER	20	0.155 U	0.155 U	0.2 U	0.084 U	0.078 U	0.078 U	0.2 U	0.084 U	0.078 U	0.2 U	0.06 U	0.078 U	0.084 U	0.078 U	0.2 U	0.084 U	0.078 U	0.2 U	0.077 U	0.078 U
TETRACHLOROETHENE (PCE)	0.7	**305**	**180 B**	**266**	**26.1**	**50.7**	**23.3**	**16.1**	**0.43 J**	**0.247 J**	0.2 U	**7.78**	**27.8**	0.141 U	0.193 U	0.2 U	0.141 U	0.193 U	0.2 U	**4.50**	0.193 U
TOLUENE	600	0.244 U	0.244 U	0.2 U	0.078 U	0.122 U	0.122 U	0.2 U	0.078 U	0.122 U	0.2 U	0.127 U	0.122 U	0.078 U	0.122 U	0.2 U	0.078 U	0.122 U	0.2 U	0.076 U	0.122 U
trans-1,2-DICHLOROETHENE	100	0.154 U	0.154 U	0.2 U	0.096 U	0.077 U	0.077 U	0.2 U	0.096 U	0.077 U	0.2 U	0.075 U	0.077 U	0.096 U	0.077 U	0.2 U	0.096 U	0.077 U	0.2 U	0.122 U	0.077 U
trans-1,3-DICHLOROPROPENE	0.4	0.255 U	0.255 U	0.2 U	0.068 U	0.128 U	0.128 U	0.2 U	0.068 U	0.128 U	0.2 U	0.146 U	0.128 U	0.068 U	0.128 U	0.2 U	0.068 U	0.128 U	0.2 U	0.062 U	0.128 U
TRICHLOROETHYLENE (TCE)	3	0.323 U	0.323 U	0.2 U	0.094 U	0.161 U	0.161 U	0.2 U	0.094 U	0.161 U	0.2 U	**48.4**	0.161 U	0.094 U	0.161 U	0.2 U	0.094 U	0.161 U	0.2 U	0.118 U	0.161 U
TRICHLOROFLUOROMETHANE	2000	0.314 U	0.314 U	0.2 U	0.094 U	0.157 U	0.157 U	0.2 U	0.094 U	0.157 U	0.2 U	0.131 U	0.157 U	0.094 U	0.157 U	0.2 U	0.094 U	0.157 U	0.2 U	0.138 U	0.157 U
VINYL ACETATE	88	0.302 U	0.302 U	0.2 U	0.197 U	0.151 U	0.151 U	0.2 U	0.197 U	0.151 U	0.2 U	0.076 U	0.151 U	0.197 U	0.151 U	0.2 U	0.197 U	0.151 U	0.2 U	0.215 U	0.151 U
VINYL CHLORIDE	0.03	0.254 U	0.254 U	0.2 U	0.104 U	0.127 U	0.127 U	0.2 U	0.104 U	0.127 U	0.2 U	0.137 U	0.127 U	0.104 U	0.127 U	0.2 U	0.104 U	0.127 U	0.2 U	0.104 U	0.127 U
XYLENES, TOTAL	500	0.358 U	0.358 U	0.4 U	0.123 U	0.179 U	0.179 U	0.4 U	0.123 U	0.179 U	0.4 U	0.384 U	0.179 U	0.123 U	0.179 U	0.4 U	0.123 U	0.179 U	0.4 U	0.123 U	0.179 U

Bolded value = detectable concentration.
Red value = an NC 2L Groundwater Standard exceedance.
NA = an NC 2L Groundwater Standard does not exist for this analyte.
U = Undetected. The analyte was analyzed for, but not detected at the stated method detection limit (MDL).
J = Indicates an estimated value.
B = Indicates the analyte was detected in the associated Method Blank
Q= LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.
NC 2L = North Carolina subchapter 2L groundwater standards.
ug/L = micrograms per liter

APPENDIX A
HISTORICAL SITE DATA (SITE INVESTIGATION)

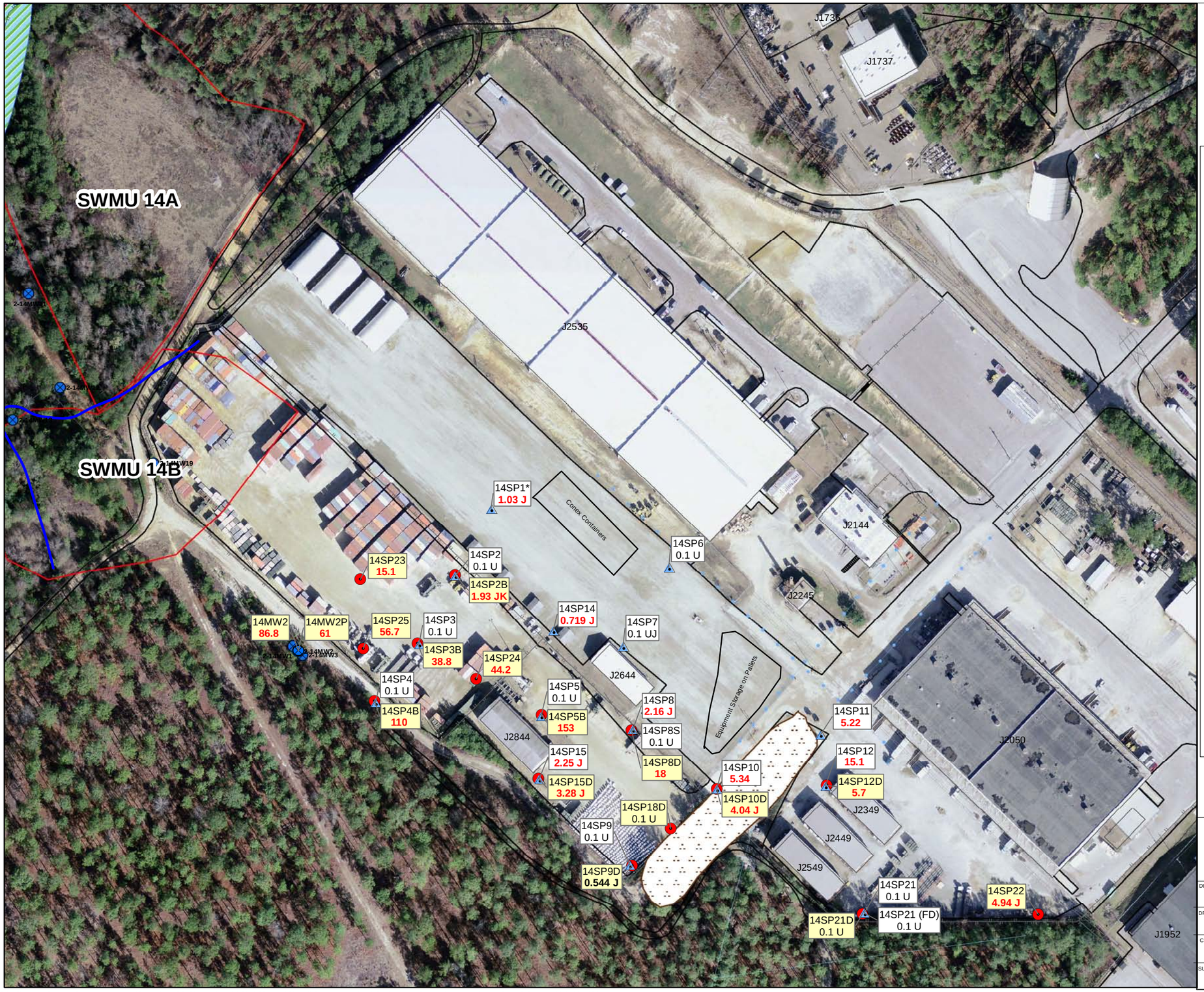


Figure 3.1

PCE Concentrations in Groundwater
2009 SI Results
Site 74

Fort Bragg, North Carolina

Legend

- SWMU-14 Monitoring Well Location
- Geoprobe Shallow Groundwater Sample Locations
- Geoprobe Deep Groundwater Sample Locations
- SWMU 14 Boundary
- Fence
- Street/Road
- Rail Road
- Stream
- Approximate Location of Water Lines
- Building
- Inaccessible Ditch

14SP11 — Sampling Point ID (Shallow Groundwater)
5.22 — September 2009 PCE Concentration (ug/L)
14SP22 — Sampling Point ID (Deep Groundwater)
4.94 J — September 2009 PCE Concentration (ug/L)

"J" = estimated value due to discrepancies in meeting certain analyte-specific quality control criteria.

"K" = An arbitrary qualifier created by Parsons to indicate that the analyte was detected in an associated method or equipment blank. As requested by NCDENR, the K flag is used when the lab inadvertently omitted a "B" flag in their data reporting of organics and to indicate method blank contamination associated with inorganics.

All concentrations are in ug/L.
Concentrations in red indicate an exceedance of the NC 2L groundwater standard.
FD = Field Duplicate
* Location estimated

Coordinate System: North Carolina State Plane, NAD83, Feet

160 80 0 160 Feet

N

PARSONS

747356.01000

DESIGNED BY: BT	PCE Concentrations in Groundwater 2009 SI Results Site 74
DRAWN BY: LH	SCALE: As Shown — PROJECT NUMBER: 747356.01000
CHECKED BY: AC	DATE: September 2011 — FIGURE NUMBER: 3.1
SUBMITTED BY: AC	FILE: SWMU-14_CookSt_PCE_Fig2.5.mxd

S:\ES\Remed\745446 Fort Bragg PBC\Database\GIS\Maps\PBC2Site\Closure\Site42\SWMU-14_CookSt_Survey_Geoprobe_Location_PCE_Fig3-1.mxd lxh 9/14/2011

Table 4.1
Site Investigation Groundwater Analytical Results, September 2009
Site 74
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID			14MW2[1] 10/1/2009 ug/L 20910020402	14MW2P[2] 10/1/2009 ug/L 20910020403	14SP1 9/21/2009 ug/L 20909221803	14SP2 9/22/2009 ug/L 20909233602	14SP2B 9/24/2009 ug/L 20909250702	14SP3 9/22/2009 ug/L 20909233603	14SP3B 9/24/2009 ug/L 20909250703	14SP4 9/22/2009 ug/L 20909233604	14SP4B 9/24/2009 ug/L 20909250701	14SP5 9/22/2009 ug/L 20909233609	14SP5B 9/24/2009 ug/L 20909250704
Analyte	**Federal MCL (ug/L)**	**NC 2L Ground-water Standard (ug/L)**											
VOCs (SW8260B)													
1,1,1,2-TETRACHLOROETHANE	NA	NA	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,1,1-TRICHLOROETHANE	200	200	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
1,1,2,2-TETRACHLOROETHANE	NA	0.17	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	NA	NA	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
1,1,2-TRICHLOROETHANE	5	NA	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U
1,1-DICHLOROETHANE	NA	70	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
1,1-DICHLOROETHENE	7	7	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U
1,1-DICHLOROPROPENE	NA	NA	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
1,2,3-TRICHLOROPROPANE	NA	0.005	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U
1,2,4-TRICHLOROBENZENE	70	70	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U
1,2,4-TRIMETHYLBENZENE	NA	350	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.025	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	NA	0.0004	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,2-DICHLOROBENZENE	600	24	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U
1,2-DICHLOROETHANE	5	0.38	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,2-DICHLOROPROPANE	5	0.51	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	NA	350	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U
1,3-DICHLOROBENZENE	NA	170	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U
1,3-DICHLOROPROPANE	NA	0.19	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,4-DICHLOROBENZENE	75	1.4	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
2,2-DICHLOROPROPANE	NA	NA	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U
2-CHLOROETHYL VINYL ETHER	NA	NA	0.515 U	0.515 U	0.515 UQ	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U
2-CHLOROTOLUENE	NA	140	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
2-HEXANONE	NA	280	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
4-CHLOROTOLUENE	NA	NA	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
ACETONE	NA	700	**44.1**	0.791 U	**7.14 JQ**	0.791 U	**7.44 J**	0.791 U	**11.6 J**	**6.27 JJ**	**8.08 J**	**5.2 JJ**	**10.9 J**
ACROLEIN	NA	NA	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U
ACRYLONITRILE	NA	NA	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U
BENZENE	5	1	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U
BROMOBENZENE	NA	NA	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
BROMOCHLOROMETHANE	NA	NA	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U
BROMODICHLOROMETHANE	80	0.56	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
BROMOFORM	80	4.43	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U
BROMOMETHANE	NA	NA	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U
CARBON DISULFIDE	NA	700	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U
CARBON TETRACHLORIDE	5	0.269	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
CHLOROBENZENE	100	50	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
CHLOROETHANE	NA	2800	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
CHLOROFORM	80	70	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	**0.593 JJ**	0.287 U
CHLOROMETHANE	NA	2.6	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U

Table 4.1
Site Investigation Groundwater Analytical Results, September 2009
Site 74
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID			14MW2[1] 10/1/2009 ug/L 20910020402	14MW2P[2] 10/1/2009 ug/L 20910020403	14SP1 9/21/2009 ug/L 20909221803	14SP2 9/22/2009 ug/L 20909233602	14SP2B 9/24/2009 ug/L 20909250702	14SP3 9/22/2009 ug/L 20909233603	14SP3B 9/24/2009 ug/L 20909250703	14SP4 9/22/2009 ug/L 20909233604	14SP4B 9/24/2009 ug/L 20909250701	14SP5 9/22/2009 ug/L 20909233609	14SP5B 9/24/2009 ug/L 20909250704
Analyte	**Federal MCL (ug/L)**	**NC 2L Ground-water Standard (ug/L)**											
VOCs continued (SW8260B)													
cis-1,2-DICHLOROETHYLENE	70	70	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
cis-1,3-DICHLOROPROPENE	NA	0.19	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
DIBROMOCHLOROMETHANE	NA	0.41	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
DIBROMOMETHANE	NA	NA	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
DICHLORODIFLUOROMETHANE	NA	1400	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
ETHYLBENZENE	700	550	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
HEXACHLOROBUTADIENE	NA	0.44	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U
IODOMETHANE (METHYL IODIDE)	NA	NA	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
ISOPROPYLBENZENE (CUMENE)	NA	70	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
M,P-XYLENE (SUM OF ISOMERS)	10000	530	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U
METHYL ETHYL KETONE (2-BUTANONE)	NA	4200	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	NA	NA	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
METHYLENE CHLORIDE	NA	4.6	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U
NAPHTHALENE	NA	21	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U
n-BUTYLBENZENE	NA	70	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
n-PROPYLBENZENE	NA	70	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U
O-XYLENE (1,2-DIMETHYLBENZENE)	10000	530	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
P-CYMENE (p-ISOPROPYLTOLUENE)	NA	NA	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
SEC-BUTYLBENZENE	NA	70	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U
STYRENE	100	100	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U
t-BUTYLBENZENE	NA	70	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
tert-BUTYL METHYL ETHER	NA	200	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
TETRACHLOROETHYLENE(PCE)	5	0.7	**86.8**	**61**	**1.03 J**	0.1 U	**1.93 JK**	0.1 U	**38.8**	0.1 U	**110**	0.1 U	**153**
TOLUENE	1000	1000	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
TOTAL 1,2-DICHLOROETHENE	NA	NA	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U
trans-1,2-DICHLOROETHENE	100	100	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
trans-1,3-DICHLOROPROPENE	NA	0.19	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
trans-1,4-DICHLORO-2-BUTENE	NA	NA	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U
TRICHLOROETHYLENE (TCE)	5	2.8	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
TRICHLOROFLUOROMETHANE	NA	210	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
VINYL ACETATE	NA	NA	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U
VINYL CHLORIDE	2	0.015	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
XYLENES, TOTAL	10000	530	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U

[1] Groundwater sample collected using a peristaltic pump.

[2] Groundwater sample collected using grab sampling method used for sampling groundwater at the geoproble sample point locations.

Table 4.1
Site Investigation Groundwater Analytical Results, September 2009
Site 74
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID			14SP6 9/23/2009 ug/L 20909241302	14SP7 9/23/2009 ug/L 20909241303	14SP8 9/22/2009 ug/L 20909233606	14SP8S 9/25/2009 ug/L 20909261003	14SP8D 9/25/2009 ug/L 20909261004	14SP9 9/22/2009 ug/L 20909233601	14SP9D 10/1/2009 ug/L 20910020404	14SP10 9/23/2009 ug/L 20909241305	14SP10D 10/1/2009 ug/L 20910020405	14SP11 9/21/2009 ug/L 20909221801	14SP12 9/21/2009 ug/L 20909221802
Analyte	**Federal MCL (ug/L)**	**NC 2L Ground-water Standard (ug/L)**											
VOCs (SW8260B)													
1,1,1,2-TETRACHLOROETHANE	NA	NA	0.06 U	0.06 UJ	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,1,1-TRICHLOROETHANE	200	200	0.043 U	0.043 UJ	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
1,1,2,2-TETRACHLOROETHANE	NA	0.17	0.105 U	0.105 UJ	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	NA	NA	0.068 U	0.068 UJ	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
1,1,2-TRICHLOROETHANE	5	NA	0.055 U	0.055 UJ	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U
1,1-DICHLOROETHANE	NA	70	0.035 U	0.035 UJ	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
1,1-DICHLOROETHENE	7	7	0.119 U	0.119 UJ	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U
1,1-DICHLOROPROPENE	NA	NA	0.043 U	0.043 UJ	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
1,2,3-TRICHLOROPROPANE	NA	0.005	0.127 U	0.127 UJ	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U
1,2,4-TRICHLOROBENZENE	70	70	0.107 U	0.107 UJ	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U
1,2,4-TRIMETHYLBENZENE	NA	350	0.156 U	0.156 UJ	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.025	0.129 U	0.129 UJ	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	NA	0.0004	0.065 U	0.065 UJ	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,2-DICHLOROBENZENE	600	24	0.102 U	0.102 UJ	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U
1,2-DICHLOROETHANE	5	0.38	0.064 U	0.064 UJ	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,2-DICHLOROPROPANE	5	0.51	0.056 U	0.056 UJ	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	NA	350	0.081 U	0.081 UJ	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U
1,3-DICHLOROBENZENE	NA	170	0.094 U	0.094 UJ	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U
1,3-DICHLOROPROPANE	NA	0.19	0.061 U	0.061 UJ	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,4-DICHLOROBENZENE	75	1.4	0.129 U	0.129 UJ	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
2,2-DICHLOROPROPANE	NA	NA	0.139 U	0.139 UJ	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U
2-CHLOROETHYL VINYL ETHER	NA	NA	0.515 U	0.515 UJ	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 UQ	0.515 UQ
2-CHLOROTOLUENE	NA	140	0.079 U	0.079 UJ	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
2-HEXANONE	NA	280	0.066 U	0.066 UJ	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
4-CHLOROTOLUENE	NA	NA	0.073 U	0.073 UJ	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
ACETONE	NA	700	0.791 UQ	0.791 UQJ	0.791 U	**36.6**	**29.2**	0.791 U	**2.24 J**	0.791 UQ	**17.4 J**	0.791 UQ	**5.8 JQ**
ACROLEIN	NA	NA	0.842 U	0.842 UJ	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U
ACRYLONITRILE	NA	NA	0.553 U	0.553 UJ	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U
BENZENE	5	1	0.075 U	0.075 UJ	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U
BROMOBENZENE	NA	NA	0.06 U	0.06 UJ	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
BROMOCHLOROMETHANE	NA	NA	0.137 U	0.137 UJ	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U
BROMODICHLOROMETHANE	80	0.56	0.057 U	0.057 UJ	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
BROMOFORM	80	4.43	0.198 U	0.198 UJ	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U
BROMOMETHANE	NA	NA	0.141 U	0.141 UJ	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U
CARBON DISULFIDE	NA	700	0.179 U	0.179 UJ	0.179 U	**0.391 J**	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U
CARBON TETRACHLORIDE	5	0.269	0.083 U	0.083 UJ	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
CHLOROBENZENE	100	50	0.072 U	0.072 UJ	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
CHLOROETHANE	NA	2800	0.14 U	0.14 UJ	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
CHLOROFORM	80	70	0.287 U	0.287 UJ	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U
CHLOROMETHANE	NA	2.6	0.116 U	0.116 UJ	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U

Table 4.1
Site Investigation Groundwater Analytical Results, September 2009
Site 74
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID			14SP6 9/23/2009 ug/L 20909241302	14SP7 9/23/2009 ug/L 20909241303	14SP8 9/22/2009 ug/L 20909233606	14SP8S 9/25/2009 ug/L 20909261003	14SP8D 9/25/2009 ug/L 20909261004	14SP9 9/22/2009 ug/L 20909233601	14SP9D 10/1/2009 ug/L 20910020404	14SP10 9/23/2009 ug/L 20909241305	14SP10D 10/1/2009 ug/L 20910020405	14SP11 9/21/2009 ug/L 20909221801	14SP12 9/21/2009 ug/L 20909221802
Analyte	**Federal MCL (ug/L)**	**NC 2L Ground-water Standard (ug/L)**											
VOCs continued (SW8260B)													
cis-1,2-DICHLOROETHYLENE	70	70	0.103 U	0.103 UJ	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
cis-1,3-DICHLOROPROPENE	NA	0.19	0.032 U	0.032 UJ	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
DIBROMOCHLOROMETHANE	NA	0.41	0.033 U	0.033 UJ	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
DIBROMOMETHANE	NA	NA	0.074 U	0.074 UJ	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
DICHLORODIFLUOROMETHANE	NA	1400	0.061 U	0.061 UJ	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
ETHYLBENZENE	700	550	0.052 U	0.052 UJ	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
HEXACHLOROBUTADIENE	NA	0.44	0.164 U	0.164 UJ	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U
IODOMETHANE (METHYL IODIDE)	NA	NA	0.39 U	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
ISOPROPYLBENZENE (CUMENE)	NA	70	0.071 U	0.071 UJ	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
M,P-XYLENE (SUM OF ISOMERS)	10000	530	0.243 U	0.243 UJ	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U
METHYL ETHYL KETONE (2-BUTANONE)	NA	4200	0.405 U	0.405 UJ	0.405 U	0.405 U	**1.91 J**	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	NA	NA	0.123 U	0.123 UJ	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
METHYLENE CHLORIDE	NA	4.6	0.142 U	0.142 UJ	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U
NAPHTHALENE	NA	21	0.101 U	0.101 UJ	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U
n-BUTYLBENZENE	NA	70	0.123 U	0.123 UJ	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
n-PROPYLBENZENE	NA	70	0.076 U	0.076 UJ	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U
O-XYLENE (1,2-DIMETHYLBENZENE)	10000	530	0.103 U	0.103 UJ	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
P-CYMENE (p-ISOPROPYLTOLUENE)	NA	NA	0.072 U	0.072 UJ	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
SEC-BUTYLBENZENE	NA	70	0.075 U	0.075 UJ	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U
STYRENE	100	100	0.045 U	0.045 UJ	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U
t-BUTYLBENZENE	NA	70	0.057 U	0.057 UJ	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
tert-BUTYL METHYL ETHER	NA	200	0.077 U	0.077 UJ	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
TETRACHLOROETHYLENE(PCE)	5	0.7	0.1 U	0.1 UJ	**2.16 J**	0.1 U	**18**	0.1 U	**0.544 J**	**5.34**	**4.04 J**	**5.22**	**15.1**
TOLUENE	1000	1000	0.082 U	0.082 UJ	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
TOTAL 1,2-DICHLOROETHENE	NA	NA	0.198 U	0.198 UJ	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U
trans-1,2-DICHLOROETHENE	100	100	0.096 U	0.096 UJ	0.096 U	0.096 UQ	0.096 UQ	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
trans-1,3-DICHLOROPROPENE	NA	0.19	0.056 U	0.056 UJ	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
trans-1,4-DICHLORO-2-BUTENE	NA	NA	0.116 U	0.116 UJ	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U
TRICHLOROETHYLENE (TCE)	5	2.8	0.097 U	0.097 UJ	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
TRICHLOROFLUOROMETHANE	NA	210	0.072 U	0.072 UJ	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
VINYL ACETATE	NA	NA	0.151 U	0.151 UJ	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U
VINYL CHLORIDE	2	0.015	0.077 U	0.077 UJ	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
XYLENES, TOTAL	10000	530	0.334 U	0.334 UJ	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U

Table 4.1
Site Investigation Groundwater Analytical Results, September 2009
Site 74
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID			14SP12D 9/25/2009 ug/L 20909261005	14SP14 9/23/2009 ug/L 20909241306	14SP15 9/23/2009 ug/L 20909241307	14SP15D 9/30/2009 ug/L 20910011702	14SP18D 9/30/2009 ug/L 20910011703	14SP21 9/23/2009 ug/L 20909241301	14SP21-FD 9/23/2009 ug/L 20909241304	14SP21D 9/30/2009 ug/L 20910011701	14SP22 9/25/2009 ug/L 20909261001	14SP23 9/25/2009 ug/L 20909261002	14SP24 9/30/2009 ug/L 20910011704	14SP25 10/1/2009 ug/L 20910020406
Analyte	**Federal MCL (ug/L)**	**NC 2L Ground-water Standard (ug/L)**												
VOCs (SW8260B)														
1,1,1,2-TETRACHLOROETHANE	NA	NA	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,1,1-TRICHLOROETHANE	200	200	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
1,1,2,2-TETRACHLOROETHANE	NA	0.17	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	NA	NA	**1.18 J**	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
1,1,2-TRICHLOROETHANE	5	NA	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U
1,1-DICHLOROETHANE	NA	70	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
1,1-DICHLOROETHENE	7	7	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U	0.119 U
1,1-DICHLOROPROPENE	NA	NA	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
1,2,3-TRICHLOROPROPANE	NA	0.005	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U
1,2,4-TRICHLOROBENZENE	70	70	0.107 U	0.107 U	0.107 U	**1.61 JK**	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U
1,2,4-TRIMETHYLBENZENE	NA	350	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U	0.156 U
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.025	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	NA	0.0004	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,2-DICHLOROBENZENE	600	24	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U
1,2-DICHLOROETHANE	5	0.38	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,2-DICHLOROPROPANE	5	0.51	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	NA	350	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U
1,3-DICHLOROBENZENE	NA	170	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U
1,3-DICHLOROPROPANE	NA	0.19	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,4-DICHLOROBENZENE	75	1.4	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
2,2-DICHLOROPROPANE	NA	NA	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U	0.139 U
2-CHLOROETHYL VINYL ETHER	NA	NA	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U	0.515 U
2-CHLOROTOLUENE	NA	140	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
2-HEXANONE	NA	280	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
4-CHLOROTOLUENE	NA	NA	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
ACETONE	NA	700	**82.4**	0.791 UQ	**7.74 JQ**	**38.5**	**38.9**	0.791 UQ	0.791 UQ	**7.65 J**	**26.3**	**14.8 J**	**32.6**	**54.4**
ACROLEIN	NA	NA	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U	0.842 U
ACRYLONITRILE	NA	NA	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U	0.553 U
BENZENE	5	1	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U
BROMOBENZENE	NA	NA	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
BROMOCHLOROMETHANE	NA	NA	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U	0.137 U
BROMODICHLOROMETHANE	80	0.56	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
BROMOFORM	80	4.43	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U
BROMOMETHANE	NA	NA	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U
CARBON DISULFIDE	NA	700	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U
CARBON TETRACHLORIDE	5	0.269	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 UQ	0.083 UQ	0.083 U	0.083 U
CHLOROBENZENE	100	50	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
CHLOROETHANE	NA	2800	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
CHLOROFORM	80	70	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U	0.287 U
CHLOROMETHANE	NA	2.6	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U

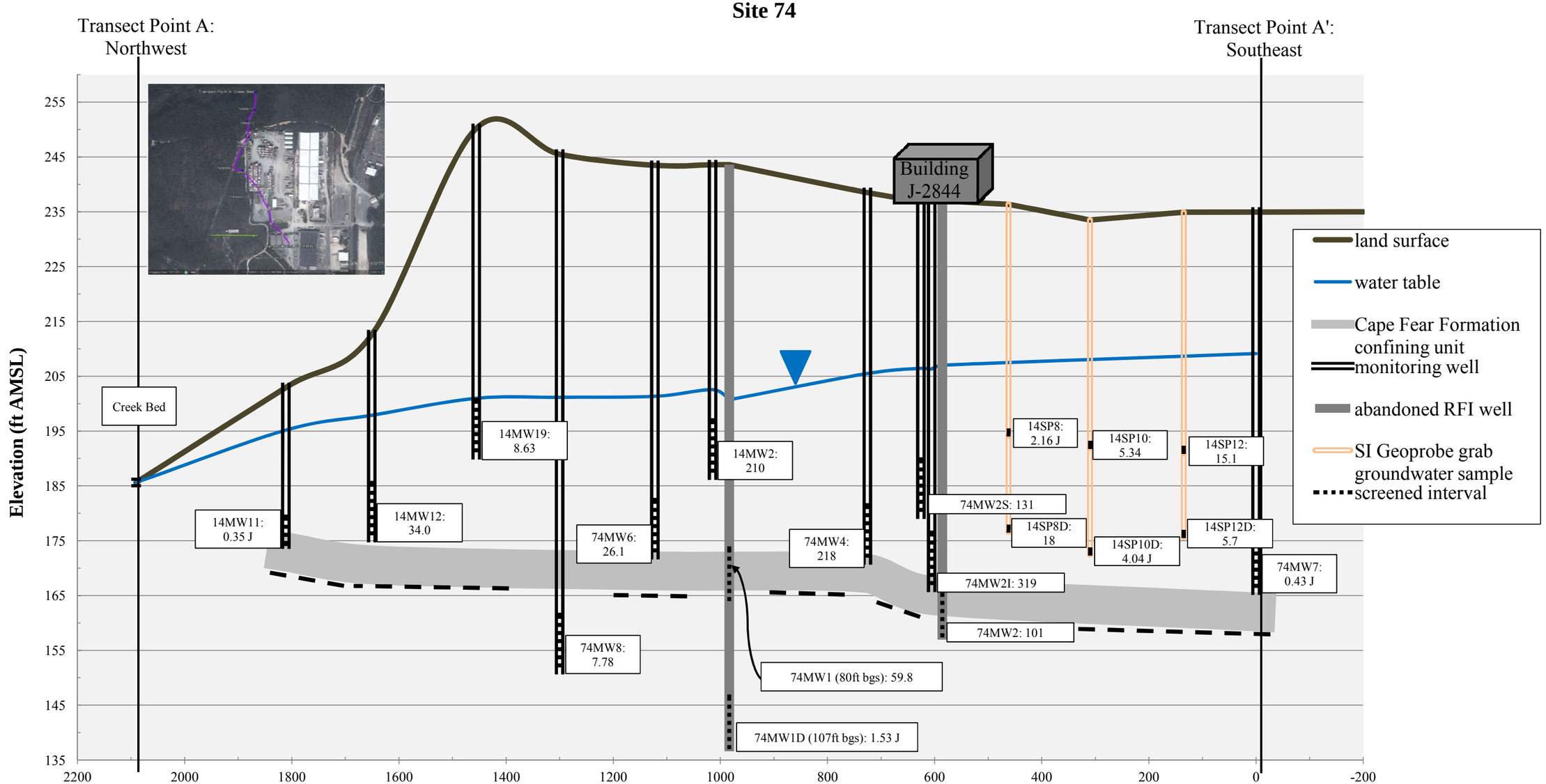
Table 4.1
Site Investigation Groundwater Analytical Results, September 2009
Site 74
Fort Bragg, North Carolina

Well ID Date Sampled units Laboratory Control ID			14SP12D 9/25/2009 ug/L 20909261005	14SP14 9/23/2009 ug/L 20909241306	14SP15 9/23/2009 ug/L 20909241307	14SP15D 9/30/2009 ug/L 20910011702	14SP18D 9/30/2009 ug/L 20910011703	14SP21 9/23/2009 ug/L 20909241301	14SP21-FD 9/23/2009 ug/L 20909241304	14SP21D 9/30/2009 ug/L 20910011701	14SP22 9/25/2009 ug/L 20909261001	14SP23 9/25/2009 ug/L 20909261002	14SP24 9/30/2009 ug/L 20910011704	14SP25 10/1/2009 ug/L 20910020406
Analyte	**Federal MCL (ug/L)**	**NC 2L Ground-water Standard (ug/L)**												
VOCs continued (SW8260B)														
cis-1,2-DICHLOROETHYLENE	70	70	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
cis-1,3-DICHLOROPROPENE	NA	0.19	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
DIBROMOCHLOROMETHANE	NA	0.41	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
DIBROMOMETHANE	NA	NA	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
DICHLORODIFLUOROMETHANE	NA	1400	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
ETHYLBENZENE	700	550	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
HEXACHLOROBUTADIENE	NA	0.44	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U
IODOMETHANE (METHYL IODIDE)	NA	NA	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
ISOPROPYLBENZENE (CUMENE)	NA	70	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
M,P-XYLENE (SUM OF ISOMERS)	10000	530	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U	0.243 U
METHYL ETHYL KETONE (2-BUTANONE)	NA	4200	0.405 U	0.405 U	0.405 U	**2.08 J**	**3.62 J**	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U	0.405 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	NA	NA	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
METHYLENE CHLORIDE	NA	4.6	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U
NAPHTHALENE	NA	21	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U	0.101 U
n-BUTYLBENZENE	NA	70	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
n-PROPYLBENZENE	NA	70	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U
O-XYLENE (1,2-DIMETHYLBENZENE)	10000	530	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
P-CYMENE (p-ISOPROPYLTOLUENE)	NA	NA	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
SEC-BUTYLBENZENE	NA	70	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U
STYRENE	100	100	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U
t-BUTYLBENZENE	NA	70	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
tert-BUTYL METHYL ETHER	NA	200	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
TETRACHLOROETHYLENE(PCE)	5	0.7	**5.7**	**0.719 J**	**2.25 J**	**3.28 J**	0.1 U	0.1 U	0.1 U	0.1 U	**4.94 J**	**15.1**	**44.2**	**56.7**
TOLUENE	1000	1000	0.082 U	0.082 U	0.082 U	0.082 U	**1.04 J**	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
TOTAL 1,2-DICHLOROETHENE	NA	NA	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U	0.198 U
trans-1,2-DICHLOROETHENE	100	100	0.096 UQ	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
trans-1,3-DICHLOROPROPENE	NA	0.19	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
trans-1,4-DICHLORO-2-BUTENE	NA	NA	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U
TRICHLOROETHYLENE (TCE)	5	2.8	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
TRICHLOROFLUOROMETHANE	NA	210	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
VINYL ACETATE	NA	NA	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U
VINYL CHLORIDE	2	0.015	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
XYLENES, TOTAL	10000	530	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U

Notes:

Bolded value = detectable concentration.
Red value = An NC 2L Groundwater Standard exceedance and/or an MCL exceedance.
NA = An NC 2L Groundwater Standard and/or MCL does not exist for this analyte.
U = Undetected. The analyte was analyzed for, but not detected at the stated method detection limit (MDL).
J = Indicates an estimated value.
Q= LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.
K = An arbitrary qualifier created by Parsons to indicate that the analyte was detected in an associated blank. As requested by NCDENR, the K flag is used when the lab inadvertently omitted a "B" flag in their data reporting of organics.
FD = Field duplicate
ug/L = micrograms per Liter
MCL = federal Maximum Contaminant Level
NC 2L = North Carolina subchapter 2L groundwater standards

Figure 5.2 Cross Section Transect A - A'
Cape Fear Formation Confining Unit and PCE Concentrations in Groundwater (March/June 2011, and May 2012)
Site 74



Notes:
1. All concentrations in µg/L
2. Clay thickness dashed where inferred
3. SI Geoprobe groundwater elevation data not used due to innaccuracy of measurement method.

APPENDIX B
LABORATORY DATA SHEETS
(INCLUDED IN ELECTRONIC VERSION ONLY)

NELAP CERTIFICATE NUMBER: 01955
DOD ELAP CERTIFICATE NUMBER: L14-243

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 11/05/2015

GCAL Report 215102307

Project Ft. Bragg - Site 14C (SWMU14C)

Deliver To Ross Miller Parsons 406 W South Jordan Pkwy Suite 300 South Jordan, UT 84095 801-572-5999

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
DL	Diluted analysis – when appended to Client Sample ID
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC Institute standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____
Authorized Signature
GCAL Report 215102307

Case Narrative

Client: Parsons **Report:** 215102307

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, sample 21510230715 (14C-74MW4) had to be diluted to bracket the concentration of a target analyte within the calibration range of the instrument.

Q Flag Summary

NO Q FLAGS FOR THIS WORKORDER

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21510230701	TB-102115-03	Water	10/21/2015 15:00	10/23/2015 09:49
21510230702	14C-14MW4	Water	10/21/2015 16:10	10/23/2015 09:49
21510230703	14C-14MW5	Water	10/21/2015 16:00	10/23/2015 09:49
21510230704	14C-14MW12	Water	10/21/2015 16:00	10/23/2015 09:49
21510230705	14C-14MW13	Water	10/21/2015 16:05	10/23/2015 09:49
21510230706	14C-14MW14	Water	10/21/2015 16:22	10/23/2015 09:49
21510230707	14C-14MW15	Water	10/21/2015 16:30	10/23/2015 09:49
21510230708	14C-14MW150	Water	10/21/2015 16:45	10/23/2015 09:49
21510230709	14C-74MW6	Water	10/21/2015 16:50	10/23/2015 09:49
21510230710	14C-74MW7	Water	10/21/2015 15:30	10/23/2015 09:49
21510230711	14C-SW1	Water	10/21/2015 16:40	10/23/2015 09:49
21510230712	14C-SW2	Water	10/21/2015 16:30	10/23/2015 09:49
21510230713	14C-SW3	Water	10/21/2015 16:15	10/23/2015 09:49
21510230714	14C-74MW2I	Water	10/22/2015 08:10	10/23/2015 09:49
21510230715	14C-74MW4	Water	10/22/2015 08:20	10/23/2015 09:49

Sample Results

TB-102115-03	**Collect Date**	10/21/2015 15:00	**GCAL ID**	21510230701
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 13:53	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

TB-102115-03	**Collect Date**	10/21/2015 15:00	**GCAL ID**	21510230701
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 13:53	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	Tetrachloroethene	0.200U	0.200	1.00	ug/L
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.2	ug/L	88	75 - 120
1868-53-7	Dibromofluoromethane	50	49.9	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.5	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.1	ug/L	104	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 17:03	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.4	ug/L	89	75 - 120
1868-53-7	Dibromofluoromethane	50	50.7	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	50.9	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.2	ug/L	104	70 - 120

Sample Results

14C-14MW4	**Collect Date**	10/21/2015 16:10	**GCAL ID**	21510230702
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 14:12	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-14MW4	**Collect Date**	10/21/2015 16:10	**GCAL ID**	21510230702
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 14:12	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**1.64**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	43.4	ug/L	87	75 - 120
1868-53-7	Dibromofluoromethane	50	49.1	ug/L	98	85 - 115
2037-26-5	Toluene d8	50	50.1	ug/L	100	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.3	ug/L	105	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 17:23	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.9	ug/L	86	75 - 120
1868-53-7	Dibromofluoromethane	50	49.7	ug/L	99	85 - 115
2037-26-5	Toluene d8	50	50.5	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.4	ug/L	105	70 - 120

Sample Results

14C-14MW5	**Collect Date**	10/21/2015 16:00	**GCAL ID**	21510230703
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 14:32	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-14MW5	**Collect Date**	10/21/2015 16:00	**GCAL ID**	21510230703
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 14:32	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	Tetrachloroethene	0.200U	0.200	1.00	ug/L
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.5	ug/L	89	75 - 120
1868-53-7	Dibromofluoromethane	50	49.4	ug/L	99	85 - 115
2037-26-5	Toluene d8	50	51.2	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.3	ug/L	105	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 17:43	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	43.1	ug/L	86	75 - 120
1868-53-7	Dibromofluoromethane	50	49.8	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.6	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52	ug/L	104	70 - 120

Sample Results

14C-14MW12	**Collect Date**	10/21/2015 16:00	**GCAL ID**	21510230704
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 14:51	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-14MW12	**Collect Date**	10/21/2015 16:00	**GCAL ID**	21510230704
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 14:51	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**37.8**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44	ug/L	88	75 - 120
1868-53-7	Dibromofluoromethane	50	50.6	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	50.3	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.8	ug/L	106	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 18:03	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	43.7	ug/L	87	75 - 120
1868-53-7	Dibromofluoromethane	50	50.5	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	50.9	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.7	ug/L	105	70 - 120

Sample Results

14C-14MW13	**Collect Date**	10/21/2015 16:05	**GCAL ID**	21510230705
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 15:11	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-14MW13	Collect Date	10/21/2015 16:05	GCAL ID	21510230705
	Receive Date	10/23/2015 09:49	Matrix	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 15:11	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**102**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.6	ug/L	89	75 - 120
1868-53-7	Dibromofluoromethane	50	49.3	ug/L	99	85 - 115
2037-26-5	Toluene d8	50	50.5	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.6	ug/L	105	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 18:24	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	**Acetone**	**7.19**	**0.500**	**5.00**	**ug/L**
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.9	ug/L	86	75 - 120
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	50.8	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51.4	ug/L	103	70 - 120

Sample Results

14C-14MW14	**Collect Date**	10/21/2015 16:22	**GCAL ID**	21510230706
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 15:30	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-14MW14	**Collect Date**	10/21/2015 16:22	**GCAL ID**	21510230706
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 15:30	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**60.4**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	43.7	ug/L	87	75 - 120
1868-53-7	Dibromofluoromethane	50	49.8	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	49.9	ug/L	100	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.9	ug/L	106	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 18:44	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.7	ug/L	85	75 - 120
1868-53-7	Dibromofluoromethane	50	50.2	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.3	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.2	ug/L	104	70 - 120

Sample Results

14C-14MW15	**Collect Date**	10/21/2015 16:30	**GCAL ID**	21510230707
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 15:50	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-14MW15	**Collect Date**	10/21/2015 16:30	**GCAL ID**	21510230707
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 15:50	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**53.8**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.1	ug/L	88	75 - 120
1868-53-7	Dibromofluoromethane	50	50.1	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.5	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	53.4	ug/L	107	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 19:04	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.5	ug/L	85	75 - 120
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	85 - 115
2037-26-5	Toluene d8	50	51	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.9	ug/L	106	70 - 120

Sample Results

14C-14MW150	**Collect Date**	10/21/2015 16:45	**GCAL ID**	21510230708
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 16:09	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-14MW150	**Collect Date**	10/21/2015 16:45	**GCAL ID**	21510230708
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 16:09	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**54.9**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.4	ug/L	89	75 - 120
1868-53-7	Dibromofluoromethane	50	50.1	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.8	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.3	ug/L	105	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 19:24	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.4	ug/L	85	75 - 120
1868-53-7	Dibromofluoromethane	50	51.1	ug/L	102	85 - 115
2037-26-5	Toluene d8	50	50.7	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51.6	ug/L	103	70 - 120

Sample Results

14C-74MW6	**Collect Date**	10/21/2015 16:50	**GCAL ID**	21510230709
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 16:28	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-74MW6	**Collect Date**	10/21/2015 16:50	**GCAL ID**	21510230709
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 16:28	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**16.1**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	43.7	ug/L	87	75 - 120
1868-53-7	Dibromofluoromethane	50	49.8	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.4	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.7	ug/L	105	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 19:44	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	41.8	ug/L	84	75 - 120
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	50.8	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	53.1	ug/L	106	70 - 120

Sample Results

14C-74MW7	**Collect Date**	10/21/2015 15:30	**GCAL ID**	21510230710
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 16:48	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-74MW7	**Collect Date**	10/21/2015 15:30	**GCAL ID**	21510230710
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 16:48	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	Tetrachloroethene	0.200U	0.200	1.00	ug/L
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.4	ug/L	89	75 - 120
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	51	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	53.4	ug/L	107	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 20:05	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.5	ug/L	85	75 - 120
1868-53-7	Dibromofluoromethane	50	49.7	ug/L	99	85 - 115
2037-26-5	Toluene d8	50	50.8	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.3	ug/L	105	70 - 120

Sample Results

14C-SW1	**Collect Date**	10/21/2015 16:40	**GCAL ID**	21510230711
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 17:07	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-SW1	**Collect Date**	10/21/2015 16:40	**GCAL ID**	21510230711
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 17:07	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	Tetrachloroethene	0.200U	0.200	1.00	ug/L
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	43.5	ug/L	87	75 - 120
1868-53-7	Dibromofluoromethane	50	49.9	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	49.9	ug/L	100	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	53.2	ug/L	106	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 20:25	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.3	ug/L	85	75 - 120
1868-53-7	Dibromofluoromethane	50	50.1	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.2	ug/L	100	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	53.5	ug/L	107	70 - 120

Sample Results

14C-SW2	**Collect Date**	10/21/2015 16:30	**GCAL ID**	21510230712
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 17:27	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-SW2	**Collect Date**	10/21/2015 16:30	**GCAL ID**	21510230712
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 17:27	TJB	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	Tetrachloroethene	0.200U	0.200	1.00	ug/L
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.2	ug/L	88	75 - 120
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	50.3	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.5	ug/L	105	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 20:45	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.4	ug/L	85	75 - 120
1868-53-7	Dibromofluoromethane	50	50.1	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.4	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.9	ug/L	106	70 - 120

Sample Results

14C-SW3	Collect Date	10/21/2015 16:15	GCAL ID	21510230713
	Receive Date	10/23/2015 09:49	Matrix	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 17:46	CLH	571628

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L

Sample Results

14C-SW3	**Collect Date**	10/21/2015 16:15	**GCAL ID**	21510230713
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 17:46	CLH	571628

CAS#	Parameter	Result	DL	LOQ	Units
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	Tetrachloroethene	0.200U	0.200	1.00	ug/L
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	44.2	ug/L	88	75 - 120
1868-53-7	Dibromofluoromethane	50	50	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.5	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.8	ug/L	106	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/02/2015 21:05	TJB	571544

CAS#	Parameter	Result	DL	LOQ	Units
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	42.1	ug/L	84	75 - 120
1868-53-7	Dibromofluoromethane	50	49.9	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	50.3	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	52.9	ug/L	106	70 - 120

Sample Results

14C-74MW2I	Collect Date	10/22/2015 08:10	GCAL ID	21510230714
	Receive Date	10/23/2015 09:49	Matrix	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 01:39	LBH	571561

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L

Sample Results

14C-74MW2I

Collect Date	10/22/2015 08:10	**GCAL ID**	21510230714
Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 01:39	LBH	571561

CAS#	Parameter	Result	DL	LOQ	Units
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
127-18-4	**Tetrachloroethene**	**72.6**	**0.200**	**1.00**	**ug/L**
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.8	ug/L	96	75 - 120
1868-53-7	Dibromofluoromethane	50	51.8	ug/L	104	85 - 115
2037-26-5	Toluene d8	50	51.4	ug/L	103	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	50.9	ug/L	102	70 - 120

14C-74MW4

Collect Date	10/22/2015 08:20	**GCAL ID**	21510230715
Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 02:00	LBH	571561

CAS#	Parameter	Result	DL	LOQ	Units
71-55-6	1,1,1-Trichloroethane	0.200U	0.200	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.200U	0.200	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.200U	0.200	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.200U	0.200	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.200U	0.200	1.00	ug/L
563-58-6	1,1-Dichloropropene	0.200U	0.200	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.200U	0.200	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.200U	0.200	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.200U	0.200	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.200U	0.200	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.200U	0.200	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.200U	0.200	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	1.00	ug/L

Sample Results

14C-74MW4	**Collect Date**	10/22/2015 08:20	**GCAL ID**	21510230715
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 02:00	LBH	571561

CAS#	Parameter	Result	DL	LOQ	Units
78-87-5	1,2-Dichloropropane	0.200U	0.200	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.200U	0.200	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.200U	0.200	1.00	ug/L
142-28-9	1,3-Dichloropropane	0.200U	0.200	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.200U	0.200	1.00	ug/L
594-20-7	2,2-Dichloropropane	0.200U	0.200	1.00	ug/L
78-93-3	2-Butanone	0.200U	0.200	5.00	ug/L
95-49-8	2-Chlorotoluene	0.200U	0.200	1.00	ug/L
591-78-6	2-Hexanone	0.500U	0.500	5.00	ug/L
106-43-4	4-Chlorotoluene	0.200U	0.200	1.00	ug/L
99-87-6	4-Isopropyltoluene	0.200U	0.200	1.00	ug/L
108-10-1	4-Methyl-2-pentanone	0.200U	0.200	5.00	ug/L
67-64-1	Acetone	0.500U	0.500	5.00	ug/L
71-43-2	Benzene	0.200U	0.200	1.00	ug/L
108-86-1	Bromobenzene	0.200U	0.200	1.00	ug/L
74-97-5	Bromochloromethane	0.200U	0.200	1.00	ug/L
75-27-4	Bromodichloromethane	0.200U	0.200	1.00	ug/L
75-25-2	Bromoform	0.250U	0.250	1.00	ug/L
74-83-9	Bromomethane	0.500U	0.500	1.00	ug/L
56-23-5	Carbon tetrachloride	0.250U	0.250	1.00	ug/L
108-90-7	Chlorobenzene	0.200U	0.200	1.00	ug/L
75-00-3	Chloroethane	0.250U	0.250	1.00	ug/L
67-66-3	Chloroform	0.200U	0.200	1.00	ug/L
74-87-3	Chloromethane	0.200U	0.200	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
124-48-1	Dibromochloromethane	0.200U	0.200	1.00	ug/L
75-71-8	Dichlorodifluoromethane	0.200U	0.200	1.00	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.500U	0.500	5.00	ug/L
100-41-4	Ethylbenzene	0.200U	0.200	1.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.200U	0.200	1.00	ug/L
136777-61-2	m,p-Xylene	0.200U	0.200	2.00	ug/L
75-09-2	Methylene chloride	0.200U	0.200	5.00	ug/L
104-51-8	n-Butylbenzene	0.200U	0.200	1.00	ug/L
103-65-1	n-Propylbenzene	1.00U	1.00	5.00	ug/L
95-47-6	o-Xylene	0.200U	0.200	1.00	ug/L
135-98-8	sec-Butylbenzene	0.200U	0.200	1.00	ug/L
100-42-5	Styrene	0.200U	0.200	1.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.200U	0.200	1.00	ug/L
98-06-6	tert-Butylbenzene	0.200U	0.200	1.00	ug/L
108-88-3	Toluene	0.200U	0.200	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.200U	0.200	1.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.200U	0.200	1.00	ug/L
79-01-6	Trichloroethene	0.200U	0.200	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.200U	0.200	1.00	ug/L
108-05-4	Vinyl acetate	0.200U	0.200	1.00	ug/L
75-01-4	Vinyl chloride	0.200U	0.200	1.00	ug/L

Sample Results

14C-74MW4	**Collect Date**	10/22/2015 08:20	**GCAL ID**	21510230715
	Receive Date	10/23/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2015 02:00	LBH	571561

CAS#	Parameter	Result	DL	LOQ	Units
1330-20-7	Xylene (total)	0.400U	0.400	3.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.3	ug/L	97	75 - 120
1868-53-7	Dibromofluoromethane	50	52.9	ug/L	106	85 - 115
2037-26-5	Toluene d8	50	51.3	ug/L	103	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51	ug/L	102	70 - 120

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	11/03/2015 10:49	LBH	571590

CAS#	Parameter	Result	DL	LOQ	Units
127-18-4	**Tetrachloroethene**	**266**	**1.00**	**5.00**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	246	ug/L	98	75 - 120
1868-53-7	Dibromofluoromethane	250	260	ug/L	104	85 - 115
2037-26-5	Toluene d8	250	255	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	250	263	ug/L	105	70 - 120

GC/MS Volatiles QC Summary

Analytical Batch 571544	Client ID	MB571544		LCS571544				LCSD571544				
	GCAL ID	1505250		1505251				1505252				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/02/2015 16:43		11/02/2015 15:22				11/02/2015 15:42				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Acetone	67-64-1	0.500U	0.500	50.0	45.0	90	40 - 140	50.0	45.1	90	0	30
Vinyl acetate	108-05-4	0.200U	0.200	50.0	69.3	139	66 - 145	50.0	66.6	133	4	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	52.1	104	50	50.7	101	70 - 120	50	50.8	102	0	NA
4-Bromofluorobenzene	460-00-4	43.3	87	50	51.4	103	75 - 120	50	51.5	103	0	NA
Dibromofluoromethane	1868-53-7	49.8	100	50	50.8	102	85 - 115	50	50.9	102	0	NA
Toluene d8	2037-26-5	50.5	101	50	49.4	99	85 - 120	50	50	100	1	NA

Analytical Batch 571561	Client ID	MB571561		LCS571561				LCSD571561				
	GCAL ID	1505316		1505317				1505318				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/03/2015 00:36		11/02/2015 22:45				11/02/2015 23:06				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1-Trichloroethane	71-55-6	0.200U	0.200	50.0	47.3	95	65 - 130	50.0	43.1	86	9	30
1,1,2,2-Tetrachloroethane	79-34-5	0.200U	0.200	50.0	44.6	89	65 - 130	50.0	45.0	90	1	30
1,1,2-Trichloroethane	79-00-5	0.200U	0.200	50.0	48.1	96	75 - 125	50.0	47.1	94	2	30
1,1-Dichloroethane	75-34-3	0.200U	0.200	50.0	48.4	97	70 - 135	50.0	44.5	89	8	30
1,1-Dichloroethene	75-35-4	0.200U	0.200	50.0	48.1	96	70 - 130	50.0	44.4	89	8	30
1,1-Dichloropropene	563-58-6	0.200U	0.200	50.0	48.7	97	75 - 130	50.0	44.5	89	9	30
1,2,3-Trichlorobenzene	87-61-6	0.200U	0.200	50.0	52.0	104	55 - 140	50.0	48.7	97	7	30
1,2,3-Trichloropropane	96-18-4	0.200U	0.200	50.0	44.9	90	75 - 125	50.0	46.2	92	3	30
1,2,4-Trichlorobenzene	120-82-1	0.200U	0.200	50.0	52.8	106	65 - 135	50.0	48.6	97	8	30
1,2,4-Trimethylbenzene	95-63-6	0.200U	0.200	50.0	52.4	105	75 - 130	50.0	48.4	97	8	30
1,2-Dibromoethane	106-93-4	0.200U	0.200	50.0	51.4	103	80 - 120	50.0	48.4	97	6	30
1,2-Dichlorobenzene	95-50-1	0.200U	0.200	50.0	50.0	100	70 - 120	50.0	47.2	94	6	30
1,2-Dichloroethane	107-06-2	0.200U	0.200	50.0	46.6	93	70 - 130	50.0	43.8	88	6	30
1,2-Dichloropropane	78-87-5	0.200U	0.200	50.0	49.7	99	75 - 125	50.0	47.8	96	4	30
1,3,5-Trimethylbenzene	108-67-8	0.200U	0.200	50.0	51.7	103	75 - 130	50.0	48.5	97	6	30
1,3-Dichlorobenzene	541-73-1	0.200U	0.200	50.0	50.9	102	75 - 125	50.0	46.8	94	8	30
1,3-Dichloropropane	142-28-9	0.200U	0.200	50.0	49.6	99	75 - 125	50.0	47.9	96	3	30
1,4-Dichlorobenzene	106-46-7	0.200U	0.200	50.0	49.6	99	75 - 125	50.0	45.8	92	8	30
2,2-Dichloropropane	594-20-7	0.200U	0.200	50.0	48.0	96	70 - 135	50.0	44.6	89	7	30
2-Butanone	78-93-3	0.200U	0.200	50.0	42.2	84	30 - 150	50.0	43.1	86	2	30
2-Chlorotoluene	95-49-8	0.200U	0.200	50.0	50.2	100	75 - 125	50.0	47.0	94	7	30
2-Hexanone	591-78-6	0.500U	0.500	50.0	44.5	89	55 - 130	50.0	43.7	87	2	30
4-Chlorotoluene	106-43-4	0.200U	0.200	50.0	50.4	101	75 - 130	50.0	46.8	94	7	30
4-Isopropyltoluene	99-87-6	0.200U	0.200	50.0	52.4	105	75 - 130	50.0	47.7	95	9	30
4-Methyl-2-pentanone	108-10-1	0.200U	0.200	50.0	44.8	90	60 - 135	50.0	45.2	90	1	30
Acetone	67-64-1	0.500U	0.500	50.0	43.6	87	40 - 140	50.0	40.9	82	6	30
Benzene	71-43-2	0.200U	0.200	50.0	49.5	99	80 - 120	50.0	46.4	93	6	30
Bromobenzene	108-86-1	0.200U	0.200	50.0	47.3	95	75 - 125	50.0	44.9	90	5	30
Bromochloromethane	74-97-5	0.200U	0.200	50.0	50.6	101	65 - 130	50.0	46.1	92	9	30
Bromodichloromethane	75-27-4	0.200U	0.200	50.0	50.0	100	75 - 120	50.0	47.2	94	6	30
Bromoform	75-25-2	0.250U	0.250	50.0	48.8	98	70 - 130	50.0	46.8	94	4	30
Bromomethane	74-83-9	0.500U	0.500	50.0	52.9	106	30 - 145	50.0	45.7	91	15	30
Carbon tetrachloride	56-23-5	0.250U	0.250	50.0	48.3	97	65 - 140	50.0	44.0	88	9	30
Chlorobenzene	108-90-7	0.200U	0.200	50.0	49.3	99	80 - 120	50.0	46.3	93	6	30
Chloroethane	75-00-3	0.250U	0.250	50.0	56.3	113	60 - 135	50.0	45.5	91	21	30
Chloroform	67-66-3	0.200U	0.200	50.0	48.7	97	65 - 135	50.0	45.7	91	6	30
Chloromethane	74-87-3	0.200U	0.200	50.0	54.3	109	40 - 125	50.0	46.1	92	16	30
cis-1,2-Dichloroethene	156-59-2	0.200U	0.200	50.0	48.1	96	70 - 125	50.0	45.9	92	5	30
cis-1,3-Dichloropropene	10061-01-5	0.200U	0.200	50.0	51.9	104	70 - 130	50.0	48.7	97	6	30
Dibromochloromethane	124-48-1	0.200U	0.200	50.0	50.3	101	60 - 135	50.0	47.7	95	5	30
Dichlorodifluoromethane	75-71-8	0.200U	0.200	50.0	44.9	90	30 - 155	50.0	39.4	79	13	30

GC/MS Volatiles QC Summary

Analytical Batch 571561	Client ID	MB571561		LCS571561				LCSD571561				
	GCAL ID	1505316		1505317				1505318				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/03/2015 00:36		11/02/2015 22:45				11/02/2015 23:06				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
diisopropyl Ether (DIPE)	108-20-3	0.500U	0.500	50.0	47.0	94	60 - 140	50.0	43.2	86	8	30
Ethylbenzene	100-41-4	0.200U	0.200	50.0	52.9	106	75 - 125	50.0	47.3	95	11	30
Isopropylbenzene (Cumene)	98-82-8	0.200U	0.200	50.0	53.8	108	75 - 125	50.0	48.8	98	10	30
m,p-Xylene	136777-61-2	0.200U	0.200	100	106	106	75 - 130	100	96.2	96	10	30
Methylene chloride	75-09-2	0.200U	0.200	50.0	49.3	99	55 - 140	50.0	41.4	83	17	30
n-Butylbenzene	104-51-8	0.200U	0.200	50.0	52.5	105	70 - 135	50.0	47.3	95	10	30
n-Propylbenzene	103-65-1	1.00U	1.00	50.0	51.2	102	70 - 130	50.0	47.4	95	8	30
o-Xylene	95-47-6	0.200U	0.200	50.0	51.0	102	80 - 120	50.0	46.4	93	9	30
sec-Butylbenzene	135-98-8	0.200U	0.200	50.0	52.0	104	70 - 125	50.0	47.3	95	9	30
Styrene	100-42-5	0.200U	0.200	50.0	54.2	108	65 - 135	50.0	49.8	100	8	30
tert-Butyl methyl ether (MTBE)	1634-04-4	0.200U	0.200	50.0	47.2	94	65 - 125	50.0	44.7	89	5	30
tert-Butylbenzene	98-06-6	0.200U	0.200	50.0	50.3	101	70 - 130	50.0	46.4	93	8	30
Tetrachloroethene	127-18-4	0.200U	0.200	50.0	49.6	99	45 - 150	50.0	45.9	92	8	30
Toluene	108-88-3	0.200U	0.200	50.0	50.3	101	75 - 120	50.0	46.4	93	8	30
trans-1,2-Dichloroethene	156-60-5	0.200U	0.200	50.0	49.7	99	60 - 140	50.0	44.1	88	12	30
trans-1,3-Dichloropropene	10061-02-6	0.200U	0.200	50.0	53.5	107	55 - 140	50.0	49.3	99	8	30
Trichloroethene	79-01-6	0.200U	0.200	50.0	49.4	99	70 - 125	50.0	46.3	93	6	30
Trichlorofluoromethane	75-69-4	0.200U	0.200	50.0	48.9	98	60 - 145	50.0	41.6	83	16	30
Vinyl acetate	108-05-4	0.200U	0.200	50.0	56.5	113	66 - 145	50.0	53.6	107	5	30
Vinyl chloride	75-01-4	0.200U	0.200	50.0	51.3	103	50 - 145	50.0	42.5	85	19	30
Xylene (total)	1330-20-7	0.400U	0.400	150	157	105	75 - 130	150	143	95	9	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	50.7	101	50	50.2	100	70 - 120	50	48.8	98	3	NA
4-Bromofluorobenzene	460-00-4	47.4	95	50	51.7	103	75 - 120	50	50.6	101	2	NA
Dibromofluoromethane	1868-53-7	51.8	104	50	51.3	103	85 - 115	50	51	102	1	NA
Toluene d8	2037-26-5	51.4	103	50	50.7	101	85 - 120	50	50.2	100	1	NA

Analytical Batch 571590	Client ID	MB571590		LCS571590				LCSD571590				
	GCAL ID	1505413		1505414				1505415				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/03/2015 10:25		11/03/2015 09:00				11/03/2015 09:22				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Tetrachloroethene	127-18-4	0.200U	0.200	50.0	49.4	99	45 - 150	50.0	47.5	95	4	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	50.3	101	50	49.3	99	70 - 120	50	49.3	99	0	NA
4-Bromofluorobenzene	460-00-4	48.5	97	50	50.8	102	75 - 120	50	51.3	103	1	NA
Dibromofluoromethane	1868-53-7	51.2	102	50	51.7	103	85 - 115	50	50.6	101	2	NA
Toluene d8	2037-26-5	51.3	103	50	48.3	97	85 - 120	50	49.4	99	2	NA

Analytical Batch 571628	Client ID	MB571628		LCS571628				LCSD571628				
	GCAL ID	1505555		1505556				1505557				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/03/2015 13:33		11/03/2015 12:09				11/03/2015 12:35				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1-Trichloroethane	71-55-6	0.200U	0.200	50.0	48.1	96	65 - 130	50.0	45.6	91	5	30
1,1,2,2-Tetrachloroethane	79-34-5	0.200U	0.200	50.0	51.4	103	65 - 130	50.0	51.1	102	1	30
1,1,2-Trichloroethane	79-00-5	0.200U	0.200	50.0	47.7	95	75 - 125	50.0	46.9	94	2	30
1,1-Dichloroethane	75-34-3	0.200U	0.200	50.0	48.9	98	70 - 135	50.0	47.2	94	4	30
1,1-Dichloroethene	75-35-4	0.200U	0.200	50.0	45.8	92	70 - 130	50.0	43.6	87	5	30
1,1-Dichloropropene	563-58-6	0.200U	0.200	50.0	48.8	98	75 - 130	50.0	46.5	93	5	30

GC/MS Volatiles QC Summary

Analytical Batch 571628	Client ID	MB571628		LCS571628				LCSD571628				
	GCAL ID	1505555		1505556				1505557				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/03/2015 13:33		11/03/2015 12:09				11/03/2015 12:35				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,2,3-Trichlorobenzene	87-61-6	0.200U	0.200	50.0	53.3	107	55 - 140	50.0	53.0	106	1	30
1,2,3-Trichloropropane	96-18-4	0.200U	0.200	50.0	50.9	102	75 - 125	50.0	51.2	102	1	30
1,2,4-Trichlorobenzene	120-82-1	0.200U	0.200	50.0	51.9	104	65 - 135	50.0	50.6	101	3	30
1,2,4-Trimethylbenzene	95-63-6	0.200U	0.200	50.0	51.5	103	75 - 130	50.0	49.6	99	4	30
1,2-Dibromoethane	106-93-4	0.200U	0.200	50.0	46.5	93	80 - 120	50.0	46.6	93	0	30
1,2-Dichlorobenzene	95-50-1	0.200U	0.200	50.0	48.2	96	70 - 120	50.0	48.0	96	0	30
1,2-Dichloroethane	107-06-2	0.200U	0.200	50.0	48.4	97	70 - 130	50.0	47.9	96	1	30
1,2-Dichloropropane	78-87-5	0.200U	0.200	50.0	51.0	102	75 - 125	50.0	48.8	98	4	30
1,3,5-Trimethylbenzene	108-67-8	0.200U	0.200	50.0	50.8	102	75 - 130	50.0	49.4	99	3	30
1,3-Dichlorobenzene	541-73-1	0.200U	0.200	50.0	47.7	95	75 - 125	50.0	46.8	94	2	30
1,3-Dichloropropane	142-28-9	0.200U	0.200	50.0	48.4	97	75 - 125	50.0	48.5	97	0	30
1,4-Dichlorobenzene	106-46-7	0.200U	0.200	50.0	46.6	93	75 - 125	50.0	45.9	92	2	30
2,2-Dichloropropane	594-20-7	0.200U	0.200	50.0	49.0	98	70 - 135	50.0	45.6	91	7	30
2-Butanone	78-93-3	0.200U	0.200	50.0	52.7	105	30 - 150	50.0	53.1	106	1	30
2-Chlorotoluene	95-49-8	0.200U	0.200	50.0	50.3	101	75 - 125	50.0	48.8	98	3	30
2-Hexanone	591-78-6	0.500U	0.500	50.0	52.7	105	55 - 130	50.0	53.8	108	2	30
4-Chlorotoluene	106-43-4	0.200U	0.200	50.0	51.4	103	75 - 130	50.0	50.1	100	3	30
4-Isopropyltoluene	99-87-6	0.200U	0.200	50.0	51.3	103	75 - 130	50.0	49.4	99	4	30
4-Methyl-2-pentanone	108-10-1	0.200U	0.200	50.0	51.0	102	60 - 135	50.0	52.5	105	3	30
Benzene	71-43-2	0.200U	0.200	50.0	47.0	94	80 - 120	50.0	45.8	92	3	30
Bromobenzene	108-86-1	0.200U	0.200	50.0	50.6	101	75 - 125	50.0	49.4	99	2	30
Bromochloromethane	74-97-5	0.200U	0.200	50.0	45.4	91	65 - 130	50.0	45.1	90	1	30
Bromodichloromethane	75-27-4	0.200U	0.200	50.0	49.8	100	75 - 120	50.0	48.3	97	3	30
Bromoform	75-25-2	0.250U	0.250	50.0	44.9	90	70 - 130	50.0	45.0	90	0	30
Bromomethane	74-83-9	0.500U	0.500	50.0	47.8	96	30 - 145	50.0	44.2	88	8	30
Carbon tetrachloride	56-23-5	0.250U	0.250	50.0	47.8	96	65 - 140	50.0	45.9	92	4	30
Chlorobenzene	108-90-7	0.200U	0.200	50.0	44.5	89	80 - 120	50.0	43.4	87	3	30
Chloroethane	75-00-3	0.250U	0.250	50.0	47.3	95	60 - 135	50.0	44.8	90	5	30
Chloroform	67-66-3	0.200U	0.200	50.0	48.1	96	65 - 135	50.0	46.6	93	3	30
Chloromethane	74-87-3	0.200U	0.200	50.0	46.5	93	40 - 125	50.0	43.4	87	7	30
cis-1,2-Dichloroethene	156-59-2	0.200U	0.200	50.0	48.8	98	70 - 125	50.0	47.9	96	2	30
cis-1,3-Dichloropropene	10061-01-5	0.200U	0.200	50.0	50.8	102	70 - 130	50.0	49.3	99	3	30
Dibromochloromethane	124-48-1	0.200U	0.200	50.0	46.9	94	60 - 135	50.0	46.5	93	1	30
Dichlorodifluoromethane	75-71-8	0.200U	0.200	50.0	49.1	98	30 - 155	50.0	47.0	94	4	30
diisopropyl Ether (DIPE)	108-20-3	0.500U	0.500	50.0	56.5	113	60 - 140	50.0	55.4	111	2	30
Ethylbenzene	100-41-4	0.200U	0.200	50.0	46.1	92	75 - 125	50.0	44.4	89	4	30
Isopropylbenzene (Cumene)	98-82-8	0.200U	0.200	50.0	48.5	97	75 - 125	50.0	46.3	93	5	30
m,p-Xylene	136777-61-2	0.200U	0.200	100	94.8	95	75 - 130	100	90.6	91	5	30
Methylene chloride	75-09-2	0.551J	0.200	50.0	48.4	97	55 - 140	50.0	47.6	95	2	30
n-Butylbenzene	104-51-8	0.200U	0.200	50.0	54.1	108	70 - 135	50.0	52.2	104	4	30
n-Propylbenzene	103-65-1	1.00U	1.00	50.0	51.4	103	70 - 130	50.0	49.3	99	4	30
o-Xylene	95-47-6	0.200U	0.200	50.0	47.0	94	80 - 120	50.0	45.5	91	3	30
sec-Butylbenzene	135-98-8	0.200U	0.200	50.0	51.3	103	70 - 125	50.0	49.7	99	3	30
Styrene	100-42-5	0.200U	0.200	50.0	48.8	98	65 - 135	50.0	47.5	95	3	30
tert-Butyl methyl ether (MTBE)	1634-04-4	0.200U	0.200	50.0	48.9	98	65 - 125	50.0	48.8	98	0	30
tert-Butylbenzene	98-06-6	0.200U	0.200	50.0	52.1	104	70 - 130	50.0	50.1	100	4	30
Tetrachloroethene	127-18-4	0.200U	0.200	50.0	42.0	84	45 - 150	50.0	40.5	81	4	30
Toluene	108-88-3	0.200U	0.200	50.0	45.3	91	75 - 120	50.0	44.0	88	3	30
trans-1,2-Dichloroethene	156-60-5	0.200U	0.200	50.0	48.5	97	60 - 140	50.0	46.5	93	4	30
trans-1,3-Dichloropropene	10061-02-6	0.200U	0.200	50.0	51.3	103	55 - 140	50.0	50.3	101	2	30
Trichloroethene	79-01-6	0.200U	0.200	50.0	44.5	89	70 - 125	50.0	43.4	87	3	30
Trichlorofluoromethane	75-69-4	0.200U	0.200	50.0	44.9	90	60 - 145	50.0	42.0	84	7	30
Vinyl chloride	75-01-4	0.200U	0.200	50.0	48.8	98	50 - 145	50.0	46.1	92	6	30
Xylene (total)	1330-20-7	0.400U	0.400	150	142	95	75 - 130	150	136	91	4	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	52	104	50	52.1	104	70 - 120	50	51.5	103	1	NA
4-Bromofluorobenzene	460-00-4	45.4	91	50	46.5	93	75 - 120	50	46.5	93	0	NA
Dibromofluoromethane	1868-53-7	49.3	99	50	49.4	99	85 - 115	50	49.7	99	1	NA

GC/MS Volatiles QC Summary

Analytical Batch 571628	Client ID	MB571628		LCS571628				LCSD571628				
	GCAL ID	1505555		1505556				1505557				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/03/2015 13:33		11/03/2015 12:09				11/03/2015 12:35				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Toluene d8	2037-26-5	50.6	101	50	48.6	97	85 - 120	50	48.9	98	1	NA

GCAL ANALYTICAL LABORATORIES, LLC

CHAIN OF CUSTODY RECORD

7979 Innovation Park Dr., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

Client ID: 4476 - Parsons
SDG: 215102307
PM: RCH2

Report to:
Client: PARSONS
Address: 3577 PARKWAY LANE S-100
NORCROSS, GA 30092
Contact: ANGIE WELCH
Phone: 404-803-3791
E-mail: Angie.Welch@parsons.com

Bill to:
Client: PARSONS
Address:
Contact: STEPHANIE BLISS
Phone: 801-572-5999
E-mail: Stephanie.Bliss@parsons.com

P.O. Number

Project Name/Number: FT. BRAGG - SITE 14C (SWMU14C)

Sampled By: HUEY / MANGLONA / TEPLY

Analytical Requests & Method: VOCS SW8260B

GCAL use only:
Custody Seal used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C 2.2 EZY

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	HCL	Preservative
W	10/21/15	15:00		X	TB-102115-03	3	X	1
W	10/21/15	16:10		X	14C-14MW4	3	X	2
W	10/21/15	16:00		X	14C-14MW5	3	X	3
W	10/21/15	16:00		X	14C-14MW12	3	X	4
W	10/21/15	16:05		X	14C-14MW13	3	X	5
W	10/21/15	16:22		X	14C-14MW14	3	X	6
W	10/21/15	16:30		X	14C-14MW15	3	X	7
W	10/21/15	16:45		X	14C-14MW150	3	X	8
W	10/21/15	16:50		X	14C-74MW6	3	X	9
W	10/21/15	15:30		X	14C-74MW7	3	X	10
W	10/21/15	16:40		X	14C-SW1	3	X	11
W	10/21/15	16:30		X	14C-SW2	3	X	12
W	10/21/15	16:15		X	14C-SW3	3	X	13

Air Bill No: 8092 2222 8795

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	10/22/15	16:45	FEDEX	10/22/15	16:45
Fedex	10-23-15	~~948~~ 949	[signature]	10-23-15	~~948~~ 949
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
		949			

Note:

By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

We cannot accept verbal changes. Please email written changes to your PM.

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

CHAIN OF CUSTODY RECORD

GCAL ANALYTICAL LABORATORIES, LLC
7979 Innovation Park Dr., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

Client ID: 4476 - Parsons
SDG: 215102307
PM: RCH2

Report to:
Client: PARSONS
Address: 3577 PARKWAY LANE S-100
NORCROSS, GA 30092
Contact: ANGIE WELCH
Phone: 404-803-3791
E-mail: Angie.Welch@parsons.com

Bill to:
Client: PARSONS
Address:
Contact: STEPHANIE BLISS
Phone: 801-572-5999
E-mail: Stephanie.Bliss@parsons.com

P.O. Number
Project Name/Number: FT. BRAGG – SITE 14C (SWMU14C)
Sampled By: HUEY / MANGLONA / TEPLY

Analytical Requests & Method: VOCS SW8260B

GCAL use only:
Custody Seal used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C 2.2 E24

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	HCL	Preservative
W	10/22/15	08:10		X	14C-74MW2I	3	X	14
W	10/22/15	08:20		X	14C-74MW4	3	X	15
CH ~~W~~	~~10/22/15~~	~~15:00~~		~~X~~	~~TB-102115-03~~	~~3~~	~~X~~	

Air Bill No: 8092 2222 8795

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	10/22/15	16:45	FEDEX	10/22/15	16:45
Relinquished by: (Signature) FEDEX	10-23-15	948	Received by: (Signature) [signature]	10-23-15	948
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Note:

By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

215102307

SAMPLE DELIVERY GROUP 215102307

Client PM RCH2 4476 - Parsons	**Transport Method** FEDEX
Profile Number 243150	**Received By** Saucier, Charlotte M.
Line Item(s) 1 - Water Cr/Pb	**Receive Date(s)** 10/23/15

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☑	☐	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☑	☐	☐
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOA vials received with no head space?	☑	☐	☐
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑	☐	☐

COOLERS

Airbill	Thermometer ID: E24	Temp(°C)
8092 2222 8795		2.2

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.4

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