AECOM
1600 Perimeter Park Drive, Suite 400
Morrisville, NC 27560

919.461.1100 tel
919.461.1415 fax

March 16, 2017

Mr. Joe Ghiold
North Carolina Department of Environmental Quality
Division of Waste Management, Hazardous Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Subject: Response to Comments
Resource Conservation and Recovery Act - Hazardous Waste Permit Renewal Application
Former Parker Hannifin Facility
Wake Forest, North Carolina
EPA ID No. NCD 002 591 014

Dear Mr. Ghiold,

On behalf of Parker Hannifin Corporation (Parker), AECOM Technical Services of North Carolina, Inc. (AECOM) is submitting the attached revised Resource Conservation and Recovery Act Post-Closure Permit Renewal Application for the subject facility. This revised application is being submitted in response to a North Carolina Department of Environmental Quality (NCDEQ) letter dated February 27, 2017. A summary of the NCDEQ requests and Parker/AECOM response is provided below.

NCDEQ Request 1: Map requirements

> *"Figure B-2 must be revised to include legal boundaries (metes and bounds) CFR 270.13 (1) as adopted in 15A NCAC 13A.0013."*

Parker/AECOM Response:

Figure B-2 has been revised to include a metes and bounds description of the property occupied by the former Parker Hannifin facility. In addition, a revised survey, with metes and bounds description is provided in Appendix E of the permit application.

NCDEQ Request 2: Groundwater Sampling and Analysis Plan

> *"The Groundwater Sampling and Analysis Plan (Appendix L) must be consistent with the permit text. (For example, the text says 57 monitor wells will be gaged while the Sampling and Analysis Plan says 24 monitor wells.) Also, wells in the renewal permit should reflect the actual wells to be monitored and sampled within the plan and will not be modified due to pending redevelopment plans at the site; unless with express approval of NCDEQ. Finally, Barium and Zinc should be part of the inorganic constituents to be sampled for groundwater under the renewal permit.*
> *CFR 270.14(c)(5), 264.97 and 264(b) (4); 264.97(d) and 264.97 (c)"*

AECOM
1600 Perimeter Park Drive, Suite 400
Morrisville, NC 27560

919.461.1100 tel
919.461.1415 fax

Parker/AECOM Response:

The Groundwater Sampling and Analysis Plan (SAP – Appendix L) has been revised for consistency with the permit application document. The SAP identifies proposed point of compliance (POC), corrective action effectiveness, and groundwater extraction wells to be sampled regularly (a total of 23 wells).

Also, during proposed redevelopment activities, Parker/AECOM will work to identify and protect existing RCRA Permit wells to the extent possible. In the event that a permit well is damaged or destroyed during site redevelopment, Parker will initiate repairs and/or replacement. If a replacement well cannot be sited adjacent to the former well location, a permit modification will be submitted to adjust the location or request removal from the monitoring program. The goal of the replacement well would be to provide equivalent or sufficient data to monitoring groundwater quality.

Barium and zinc were added to the groundwater SAP as requested.

NCDEQ Request 3: Certification of Closure

> *"1-3b Survey Plat- A statement must be included by the applicant not just a survey plat. 40 CFR 264 Subpart G (264.116)"*

Parker/AECOM Response:

A statement in compliance with 40 CFR 264 Subpart G (264.116) has been included on the survey plat (Appendix E) of the permit application.

If you have any questions or comments, please contact Jim Schenker (Parker) at (252) 896-2052.

Sincerely,

Brian A. Ray
Project Manager

Bob Wyrick, PG.
Senior Project Manager

Attachments

cc: Jim Schenker – Parker

AECOM **Environment**

Submitted to
Parker Hannifin
Cleveland, OH

Submitted by
AECOM
Morrisville, NC
Revised – March 2017
Revised
60432139

Resource, Conservation, and Recovery Act Part B

Hazardous Waste Permit Renewal Application

Former Parker Hannifin Facility
EPA ID No. NCD-002-591-014
Wake Forest, North Carolina

Table of Contents

Introduction **1**
A Part A Application (Section A) **2**
B Facility Description **3**
B-1 General Description 3
Overview of Hazardous Waste Management Units Processes 4
B-2 Topographic Map 6
B-2b Additional Topographic Requirements for Land Storage, Treatment and Disposal Facilities 7
B-3 Traffic Information 7
B-4 Location Information 8
B-4a Seismic Considerations 8
B-4b Floodplain Standard 8
B-4c Additional North Carolina Location Standards (Title 15A North Carolina Administrative Code 13A.0109(r)(2), .0113(c)(3) and .0113(c)(5)) 8
B-5 Additional North Carolina Requirements 8
BB Equipment Leaks **9**
BB-1 Equipment Leaks 9
BB-1a Applicability 9
BB-1b Exclusions 9
BB-2 Standards for Pumps in Light Liquid Service 9
BB-2a Groundwater extraction/treatment system 9
BB-2b Wastewater pretreatment system 9
BB-3 Standards for Compressors 9
BB-4 Standards for Pressure Relief Devices in Gas/Vapor Service 9
BB-5 Standards for Sampling Connecting Systems 9
BB-6 Standards for Valves 9
BB-7 Standards for Valves in Gas/Vapor Service or in Light Liquid Service 9
BB-8 Standards for Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors 10
BB-8a General Requirements 10
BB-8b Exemption 10
BB-9 Testing 10
BB-10 Record Keeping and Re porting Requirements 10
C Waste Analysis Plan **11**
C-1 Waste Management and Identification 11
C-1a Waste Management Processes and Activities 11

C-1b Waste Identification and Classification 11
C-1c Description of Hazardous Waste Management Units 11

C-2 Parameter Selection and Rationale 12

C-2a Waste Identification 12
C-2b Identification of Incompatible and Inappropriate Wastes 12
C-2c Process and Design Considerations 12
C-2d Treatment, Storage, and Disposal Facility Process Vents and Equipment 12
C-2e Exemption from Subpart CC 12
C-2f Unit Specific Parameters 12

C-3 Sampling Procedures 12
C-4 Laboratory Testing and Analytical Methods 12
C-5 Additional Requirements for Facilities Receiving Waste Generated Off-Site 13
C-6 Provisions for Complying with Land Disposal Restriction Requirements 13

E Groundwater Monitoring 14

E-1 Interim Status Monitoring Data 14

E-1a Description of Wells 14
E-1b Description of Sampling/Analysis Procedures 14
E-1c Monitoring Data 14
E-1d Statistical Procedures 15
E-1e Groundwater Assessment Plan 15

E-2 General Hydrogeologic Information 15

E-2a Regional Physiography 15
E-2b Regional Geology 15
E-2c Site Geology 16
E2-d Regional Hydrogeology 16
E2-e Site Hydrogeology 16
E2-f Surface Water 17

E-3 Topographic Map Requirements 18
E-4 Contaminant Plume Description 18
E-5 General Monitoring Program Requirements 19

E-5a Description of Wells 19
E-5b Description of Sampling/Analysis Procedures 20
E-5c Procedures for Establishing Background Quality 21
E-5d Statistical Procedures 22

E-6 Description of Detection Monitoring Program for Facility not Detecting the Presence of Hazardous Constituents. 22
E-7 Compliance Monitoring Program for Facilities Which Have Detected Presence of Hazardous Constituents 22

E-7a Description of Monitoring Program 22

E-8 Corrective Action Program 24

E-8a Characterization of Contamination 24
E-8b Concentration Limits 24

E-8b(1) Concentration Limits Established Under 264.94(a) 24
E-8b(2) Alternate Concentration Limits 24

E-8c Corrective Action Plan 24
E-8d Groundwater Monitoring Program 26

F Procedures to Prevent Hazards 27

F-1 Security 27

F-1a Security Procedures and Equipment 27
F-1b Waiver 27

F-2 Inspection Schedule 28

F-2a General Inspection Requirements 28
F-2b Facility Inspection Requirements 28
F-2c Specific Process Inspection Requirements 28
F-2d Remedial Action 29
F-2e Inspection Log 29

F-3 Waiver of Preparedness and Prevention Requirements 29
F-4 Preventive Procedures, Structures and Equipment 29
F-5 Prevention of Reaction of/ Ignitable, Reactive, and Incompatible Wastes 29

G Contingency Plan 30

G-1 General Information 30
G-2 Emergency Coordinators 30
G-3 Implementation 30
G-4 Emergency Response Procedures 30
G-5 Emergency Equipment 30
G-6 Coordination Agreements 30
G-7 Evacuation Plan 31
G-8 Required Reports 31
G-9 Amendment to the Contingency Plan 31

H Training Program 32

H-1 Training Program 32
H-2 Job Titles and Duties 32
H-3 Training Content 32
H-4 Training Frequency 32
H-5 Training Techniques 32
H-6 Training Director 33
H-7 Record Keeping 33

I Closure Plans, Post-Closure Plans, and Financial Requirements 34

I-1 Closure Plans 34

I-1a Closure Performance Standard 34
I-1b Partial Closure and Final Closure Activities 34
I-1c Maximum Waste Inventory 34
I-1d Schedule for Closure 34
I-1e Closure Procedures 34

I-2 Post-Closure Plan 35

I-2a Inspection Plan 35
I-2b Monitoring Plan 35
I-2c Maintenance Plan 35

I-2d Land Treatment 35
I-2e Post-Closure Care for Miscellaneous Units 35
I-2f Post-Closure Security 35
I-2g Post-Closure Contact 35
I-3 Notices Required for Disposal Facilities 35
I-4 Closure Cost Estimate 35
I-5 Financial Assurance Mechanism for Closure 36
I-6 Post-Closure Cost Estimate 36
I-7 Financial Assurance Mechanism for Post-Closure 36
I-8 Liability Requirements 36
I-9 State Financial Mechanism 36
J Other Federal Laws and Exposure Information Requirements 37
J-1 Other Federal Laws 37
K Certification 38
L Information Requirements for Solid Waste Management Units 39
L-1 Minimum Information Requirements for Solid Waste Management Units and Areas of Concern 39
L-2 Summary Listing of Solid Waste Management Units and Areas of Concern 39
M References 51

List of Appendices

Appendix A. Regulatory Completeness Checklists for Hazardous Waste Storage, Treatment and Disposal Facilities
Appendix B. Resource, Conservation, and Recovery Act Subtitle C Site Identification Form
Appendix C Site Photographs
Appendix D. Federal Emergency Management Administration Floodplain Map
Appendix E. Survey Plat Map/Legal Description
Appendix F. Revised Closure Plan (2008)
Appendix G. Revised Post-Closure Plan (2008)
Appendix H. Interim Status Groundwater Data
Appendix I. Well Abandonment and Replacement Workplan (March 7, 2008)
Appendix J. September 2015 Laboratory Analytical Report
Appendix K. Appendix IX Laboratory Analytical Report
Appendix L. Sampling and Analysis Plan
Appendix M. Inspection Forms
Appendix N. Contingency Plan
Appendix O. Post-Closure Cost Estimate, Closure Certification and Financial Assurance

List of Tables

Table B-1 List of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
Table E-1. Well Construction Table
Table E-2 Summary of Groundwater Elevations - September 2015
Table E-3 Summary of Intra-Aquifer Flow - September 2015
Table E-4. Historical TCE Groundwater Analytical Data
Table E-5. Historical 1,4-Dioxane Groundwater Analytical Results
Table E-6. Summary of Inorganic Analytical Results – RCRA Permit Parameters for Site Wells
Table E-7. Summary of Groundwater Monitoring Wells, Parameters, and Sampling Frequency
Table E-8. Summary of VOCs to be Removed from Permit
Table E-9. Summary of Groundwater Monitoring Wells, Parameters, and Sampling Frequency
Table E-10. Groundwater Concentration Limits

List of Figures

Figure B-1. Site Location Map
Figure B-2. Site Topographic Map
Figure B-3. Zoning and Flood Plain Map
Figure B-4. Wind Rose Diagram
Figure B-5. Site Access Control
Figure B-6. Water Supply Location Map
Figure E-1. Groundwater Potentiometric Surface Map – September 2015
Figure E-2. Site Plan with Cross-Section Transects
Figure E-3. Cross Section A-A' - September 2015
Figure E-4. Cross Section B-B' - September 2015
Figure E-5. TCE Isoconcentration Map - September 2015
Figure E-6. Historical 1,4-Dioxane Groundwater Analytical Results

List of Acronyms

AOC	Areas of Concern
Application	Post-Closure Permit Renewal Application
CFR	Code of Federal Regulations
CMS	Corrective Measures Study
EPA	United States Environmental Protection Agency
ERD	enhanced reductive dechlorination
FEMA	Federal Emergency Management Administration
HFCS	High Fructose Corn Syrup
HWS	Hazardous Waste Section
HWM	Hazardous Waste Management
mg/kg	Milligrams per kilogram
mg/L	Milligram per liter
NCDEQ	North Carolina Department of Environmental Quality
NEBA	Northeast Building Area
mL	Milliliter
O&M	operations and maintenance
Parker	Parker Hannifin Corporation
PCE	tetrachloroethene
POC	Point-of-compliance
POTW	Publicly Owned Treatment Works
RCRA	Resource, Conservation, and Recovery Act
SAP	Sampling and Analysis Plan
SVE	Soil vapor extraction
SWMU	Solid Waste Management Unit
TCE	Trichloroethene
VOCs	Volatile organic compounds
µg/L	Microgram per liter

Introduction

Parker Hannifin Corporation (Parker) has prepared this Hazardous Waste Permit Renewal Application (Application) consistent with the requirements of 40 Code of Federal Regulations (CFR) 270.28. This Application is being submitted for the former Parker Facility located at 12415 Capital Boulevard in Wake Forest, Wake County, North Carolina (the Facility).

The current facility Permit (NCD002591014), dated June 1, 2006, will terminate on July 1, 2016. This Application is organized in the order of the applicable requirements and includes both the regulatory requirement (shown in bold italics font) and a response demonstrating Parker's conformance with the requirement. Additionally, the North Carolina Department of Environmental Quality (NCDEQ), Division of Waste Management, Hazardous Waste Section (HWS), Resource, Conservation, and Recovery Act (RCRA) Permit Renewal Checklists are included in Appendix A.

A Part A Application (Section A)

An updated Part A Application (United States Environmental Protection Agency [EPA] Form 8700-23) is included as Appendix B to this Application. The document has been signed by a person meeting the definition of Corporate Officer as defined in 40 CFR 270.11.

B Facility Description

B-1 General Description

The former Parker Hannifin Facility is comprised of 30 acres of mostly-unforested land located 12415 Capital Boulevard (US Highway 1), approximately 0.4 miles north of the intersection of US Highway 1 and Highway 98 in Wake Forest, North Carolina (Figure B-1). Appendix C includes photographs of the site.

- **Facility Name** – Former Parker Hannifin Facility
- **Owner** – RREF BB NC SICP, LLC (known as Rialto Capital)
- **Location/Address** – 12415 Capital Boulevard Wake Forest, Wake County, North Carolina 27587
- New/Existing – Existing
- **Size** – The former Parker Hannifin Facility is comprised of approximately 30 acres of land.
- **Type of Facility** – The former Parker Hannifin Facility was previously a manufacturing facility that handled limited amounts of waste materials. During the time period when the manufacturing facility was active (1964 through January 2002), the facility operated a system for the treatment of wastewater generated by metal finishing and plating operations. In addition, chlorinated solvents, primarily trichloroethene (TCE), was used in the manufacturing process to clean machined parts.
- **Nature of Business** – The facility was constructed in 1964 for the manufacture and distribution of air control devices. The plant was previously operated by the Scovill Corporation and Schrader Bellows prior to its purchase by Parker in 1986. Manufacturing activities at the site ceased in January 2002. The property was sold to St. Ives 220 Commercial, LLC on June 2, 2006. In preparation for future redevelopment, St. Ives demolished most of the former manufacturing facility and its concrete slab foundation in 2008. Remaining Site structures include a small portion of the former manufacturing building; asphalt parking lots; concrete vaults and pads associated with the former industrial wastewater treatment system; sanitary sewer manholes; stormwater conveyance inlets; and components of the existing groundwater and soil vapor extraction (SVE) treatment systems. The property was acquired by RREF BB NC SICP, LLC (known as Rialto Capital) on June 29, 2012. Currently, there is no commercial or industrial activity on the property.
- **Waste types and quantities stored, treated, and/or disposed** – Prior to closure of the facility, hazardous wastes (waste codes F006 and F008) were previously handled on-site.
- **For on-site facilities, a description of the process(es) involved in the generation of hazardous waste** – Prior to closure and decommissioning of this facility, historic hazardous waste management activities at this were conducted in connection with ongoing manufacturing operations. During the time period when the manufacturing facility was active (1964 through January 2002), the plant operated a system for the treatment of wastewater generated by metal finishing and plating operations. The original wastewater treatment system included a clarifier and two sand filter beds. Wastewater from the plating operation was chemically treated in batch tanks to produce an insoluble metal hydroxide. The wastewater was then pumped into the clarifier, where the metal hydroxides became concentrated as a wet sludge. To further facilitate the removal of solids, the treated wastewater was discharged to the sand filter beds. The metal hydroxide precipitates were retained on the surface of the filter beds and filtrate was collected in the bottom of the filter beds. The treated water was discharged from the filter beds to the Wake Forest Publicly Owned Treatment Works (POTW). The sand filter beds were closed in 1986. In 1985, Scovill Corporation entered into a Consent Order with the State of North Carolina Department of Human Resources, Division of Health Services. Under the terms of this order, Scovill agreed to discontinue using the sand filter beds. The beds were closed in 1986. The Consent Order also required construction of a groundwater monitoring system. In 1985, the first wells were installed and the first groundwater samples

were collected. As a result of the initial groundwater quality assessment analytical results, the original Consent Order was amended to address the delineation of TCE in the groundwater.

Overview of Hazardous Waste Management Units Processes

Parker's current Hazardous Waste Management (HWM) Permit, issued June 1, 2006 and effective on July 1, 2006 specified the final status of the 38 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). A summary of the disposition of all 38 units is included on Table B-1. The permit designated SWMU 16 – (Sand Filter Beds), as regulated by the State's portion of the RCRA permit. The permit required completion of a RCRA facility investigation (RFI) at each of these SWMUs/AOCs. The other 26 units required no further action or were deleted (Table B-1). As shown in Table B-1, the permit required RCRA Corrective Action at the following units:

- SWMU 8 – Oil Water Separator
- SWMU 11 – Filter Press Room
- SWMU 15 – Waste Treatment Area
- SWMU 16 – Sand Filter Beds
- SWMU 24 – Storage Tank Farm
- SWMU 31 – Former Hazardous Waste Storage Area
- SWMU 32 – Former Dry Storage Area
- SWMU 33 – Former Underground Waste Oil Tank
- AOC 35 – Main Plant Floor, Floor Trenches, and Floor Drains
- AOC 36 – Caustics Storage Building
- AOC 37 – Acid Storage Building
- AOC 38 – North Corner Parking Lot

Due to their close proximity, SWMU 8, 11, 15, 16, 24, 32 and AOC 35, AOC 36 and AOC 37 were designated the Northeast Building Area (NEBA).

NEBA – SWMU 8 –Oil/Water Separator

SWMU 8 was located in the northeast end of the main plant in the plating and paint shop area. The separator contained waste synthetic and/or semi-synthetic oil. The oil/water separator was drained and dismantled in February 2002.

NEBA – SWMU 11 – Filter Press Room

SWMU 11 was located in the northeast portion of the main plant. This unit received sludge form the wastewater treatment plant where it increased the solids content from 2 percent to 30 percent. Sludge material was stored in heavy duty cardboard containers and stored adjacent to the filter press. The filter press room was also used to store caustics and coagulants for use in the wastewater treatment area. The building structure is still intact around the filter press room.

NEBA – SWMU 15 – Waste Treatment Area

This SWMU included four concrete-lined, in-ground treatment tanks located to the northeast of the plant. Each tank was approximately 14 feet by 14 feet and 6 feet deep with a 5,500 gallon capacity. Wastewater from the plant’s plating operation was chemically treated in these tanks to produce an insoluble metal hydroxide sludge. The wastewater treatment area was in use from 1964 to 1996. Three tanks were closed at this time and the interiors were scraped of residue, pressure washed, and filled with stone. The fourth tank was temporary used for secondary containment of wash-water from plant cleaning activities.

NEBA – SWMU 16 – Sand Filter Beds

This SWMU includes two closed sand filter beds associated with the former waste water treatment system. The filter beds were constructed of concrete, approximately 14 feet by 14 feet, 4 feet above grade and extended approximately 3 feet below land surface.

NEBA – SWMU 24 – Former TCE Storage Tank System

SWMU 24 consisted of two steel above ground tanks and associated piping. One 2,000 gallon tank was used for storage of virgin TCE solvent and a second 1,500-gallon tank was used to store used TCE. The tanks were set on a concrete pad and spill containment berm. The tanks have been removed, but the concrete pad is still in place.

SWMU 31 – Former Hazardous Waste Storage Area

SWMU 31 consisted of a 75 feet by 75 feet covered concrete pad. The southern portion of the pad was used to store hazardous waste. The northern portion of the pad was used to store 55-gallon drums of waste oil. Scrap metal storage hoppers were also stored on the concrete pad. The waste was removed in March 2002. The concrete pad was cleaned with a degreasing solution utilizing a hot water pressure washer. The canopy has been removed, but the concrete pad is still in place.

NEBA – SWMU 32 – Former Drum Storage Area

SWMU 32 was located along the northwest edge of the parking lot on the northeast side of the former Parker facility. Drums containing used TCE and waste oil were stored on an asphalt surface at the edge of the parking lot from 1970-1981. Currently the unit is a rectangular area of asphalt at the edge of the parking lot bordered on one side by the parking lot curb.

SWMU 33 – Former Waste Oil Underground Storage Tank

SWMU 33 consisted of a 1,000-gallon underground storage tank reportedly used to contain waste cutting oil, water soluble cutting fluid, and water from machinery. Previous investigations indicate this tank was in operation from approximately 1976 to 1986. The tank was approximately 4.5 feet by 8 feet and constructed of concrete. The tank was removed in 1987.

AOC 35 – Former Plating/Paint Room Floor

For the Corrective Measures Study (CMS) process, AOC 35 is considered to encompass the former plating room and paint room concrete floor slabs. AOC 35 formerly included the former main plant floor, the raw materials warehouse on the western side of the building, the former office space on the southeast and southwest sides of the building, and the plating/paint room. Discussions with the NCDEQ resulted in treating the main floor slab and other areas separately from the plating/paint room floor. A report was submitted on June 5, 2006 (ENSR, 2006b) summarizing characterization sampling and statistical evaluation.

NEBA – AOC 36 – Caustics Storage Building Spills

AOC 36 was located on the northeast side of the facility, outside the main plant. The building is believed to have been in service from 1965 to 1990. The 20 feet by 40 feet building rested on a concrete floor. The building was demolished and removed from the site in 1990. The concrete floor that the building rested upon remains intact.

NEBA – AOC 37 – Acid Storage Building Spills

AOC 37 includes the spills associated with the former Acid Storage Building, located on the northeast side of the facility, outside the main plant. The building is believed to have been in service from 1960 to 2001. The 20 feet by 40 feet building rested on a concrete floor. The building was demolished and removed from the site in 2001. The concrete floor that the building rested upon remains intact.

AOC 38 – North Corner Parking Lot

AOC 38 is located near the northern corner of the former plant parking lot. According to former employees, this area may have been used to rinse small containers formerly containing TCE or dispose of small quantities of TCE. Reportedly, this area was not used for drum or waste storage.

B-2 Topographic Map

A topographic map of the site and surrounding area is depicted on Figure B-2. The following requirements are addressed on the topographic map, unless otherwise noted. If the information is provided on an alternate map, then that reference is provided.

Map Scale and Date

Figure B-2 depicts the site at a horizontal scale of 1 inch = 200 feet. Contours are depicted such that surface water flow can be determined.

100-Year Floodplain Area

The Federal Emergency Management Administration (FEMA) floodplain maps illustrates that Parker Hannifin is in a Zone X classification, or an area determined to be outside the 0.2 percent annual chance and future conditions 1 percent annual chance flood plain. The facility is not located within the 100-year floodplain. Figure B-3 depicts the 100-year flood zone within proximity to the Site and a copy of the FEMA floodplain map for the site is included in Appendix D.

Surface Waters including Intermittent Streams

Runoff at the Former Parker Facility drains north/northwest into three unnamed intermittent streams. These streams drain into Horse Creek which flows into the Neuse River (Figures B-1 and B-2).

Surrounding Land Uses (residential, commercial, agricultural, recreational)

The areas surrounding the site are zoned CU-HB, HB, NB and CU-GR3 which are either business or residential classifications. Surrounding land use is depicted on Figure B-3.

A Wind Rose (i.e., prevailing wind-speed and direction)

A wind rose obtained from the Raleigh Durham International Airport is depicted on B-4.

Orientation of the Map (north arrow)

The topographic maps (Figures B-1 and B-2) are provided with a north arrow.

Legal Boundaries of the HWM Facility Site

The Post Closure Care (Hazardous Waste Management) facility consists of the closed hazardous waste management filter beds. The legal boundary survey for the entire facility in accordance with 40 CFR 264 Subpart G (264.116) is included in Appendix E.

Access Control (fences, gates)

Access and Internal Roads – Figure B-5 illustrates the roadways within and in the immediate vicinity of the facility. The closed hazardous waste management area site is surrounded by a chain-link fence with one gate. The gate is locked at all times except during routine operations and maintenance (O&M) site visits.

Injection and Withdrawal Wells both On-site and Off-site

Two injection wells (SIW-1 and DIW-1) were installed to implement a field remediation pilot test. The locations of these wells are depicted on Figure B-2. No potable wells are located on the facility property.

The location of the nearest offsite water supply well is approximately 600 feet northeast of the facility. A figure depicting the location of properties with known water supply wells and is included as Figure B-6.

Buildings and Structures

Figure B-5 shows the remaining buildings and structures on the entire facility property as well as the post closure care management area.

Recreation Areas

There are no recreational areas within the post closed care management area.

Storm Water Management

There is no ongoing storm water management as the facility is no longer active.

Sanitary and Process Sewerage Systems

Groundwater extracted from the Corrective Action System is treated by the on-site air stripper system and then discharged into the City of Raleigh POTW. The approximate location of the discharge line is depicted on Figure B-2.

Fire Control Facilities

A fire extinguisher is kept in the treatment shed of the groundwater extraction system.

Flood Control or Drainage Barriers

Not applicable.

Location of Hazardous Waste Management Units

Location of operational units within the HWM facility site, where hazardous waste is (or will be) treated, stored, or disposed (include equipment cleanup areas).

Not applicable.

Location of Solid Waste Management Units

The location for the SWMUs are shown on Figure B-2.

Access and Internal Road

Adjacent road ways along with access roads on the site property are shown on the aerial figure (B-5).

B-2b Additional Topographic Requirements for Land Storage, Treatment and Disposal Facilities

See Section E for applicable information

B-3 Traffic Information

The Parker facility previously generated a hazardous waste as a result of its wastewater pretreatment process. Due to facility closure, hazardous wastes are no longer generated or stored on site. Hazardous materials and waste have been removed

from the facility and taken to appropriate offsite disposal facilities. Vehicle traffic at the facility is currently limited occasional vehicles performing investigation and remediation activities at the facility.

B-4 Location Information

B-4a Seismic Considerations

Not applicable.

B-4b Floodplain Standard

A FEMA floodplain map is included as Appendix D. The map indicates the former Parker facility is located outside the 100-year flood plain.

B-4c Additional North Carolina Location Standards (Title 15A North Carolina Administrative Code 13A.0109(r)(2), .0113(c)(3) and .0113(c)(5)

Not applicable as per NCDEQ.

B-5 Additional North Carolina Requirements

This section does not apply as the former Parker facility is an existing facility with post-closure status.

BB Equipment Leaks

BB-1 Equipment Leaks

BB-1a Applicability

This section is submitted in accordance with the requirements of 40 CFR §264.1050. Equipment leaks are associated with any operation that involves a hazardous waste with organic concentrations of at least 10 parts per million (ppm). The applicable unit at the Parker facility is the groundwater extraction/treatment system. There is no longer a wastewater pretreatment system at the Site.

BB-1b Exclusions

Parker is not seeking exclusions from the requirements of §264.1050.

BB-2 Standards for Pumps in Light Liquid Service

BB-2a Groundwater extraction/treatment system

The groundwater treatment system utilizes one light liquid service pump. The pump is used to distribute extracted groundwater to the top of an air stripping column. This pump is inspected weekly for structural damage, leaks and pressure. Additional information regarding the groundwater treatment system is included in Section E.

BB-2b Wastewater pretreatment system

No longer exists.

BB-3 Standards for Compressors

The groundwater treatment system does not use compressors.

BB-4 Standards for Pressure Relief Devices in Gas/Vapor Service

The groundwater treatment system does not use pressure relief devices.

BB-5 Standards for Sampling Connecting Systems

The groundwater treatment system is not equipped with sampling connecting systems.

BB-6 Standards for Valves

The groundwater treatment system is not equipped with valves.

BB-7 Standards for Valves in Gas/Vapor Service or in Light Liquid Service

The groundwater treatment system is not equipped with valves.

BB-8 Standards for Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors

BB-8a General Requirements

The groundwater treatment system is comprised of a variety of connections. All connections are monitored weekly for the presence of leaks. In the event of a leak discovery, the system will be repaired within 15 calendar days of detection. The first repair attempt will be made within 5 days of detection. The system will be checked again 5 days after repair is completed.

BB-8b Exemption

Parker is not seeking exemptions to these standards.

BB-9 Testing

Equipment described in this section is tested at least monthly according to the requirements specified in §264.1063.

BB-10 Record Keeping and Re porting Requirements

Records documenting the inspection and repair of the equipment described in this section will be maintained according to the requirements of §264.1064. An annual report will also be submitted to the HWS that complies with the standards of §264.1064.

C Waste Analysis Plan

A waste analysis plan generally describes the chemical and physical properties of hazardous wastes managed at a facility. As noted herein, the facility is not active and does not manage hazardous wastes as part of ongoing processes. The only wells currently generated at the site are related to groundwater remediation activities. As such, this section will only include discussion of waste management applicable to the remediation activities. This section is in compliance with the requirements of 40 CFR §270.14(b)(2)&(3), §264.13, and §268.7.

C-1 Waste Management and Identification

C-1a Waste Management Processes and Activities

The Parker facility currently extracts contaminated groundwater, which is treated by an on-site air-stripper and discharged to the City of Raleigh POTW. This process is described in Section E-8c and is not regulated under this section.

C-1b Waste Identification and Classification

The wastes disposed in the sand filter beds was analyzed during closure activities in 1986 and reported in the facility's March 2002 RFI Report.

C-1c Description of Hazardous Waste Management Units

C-1c(1) Containers

Not applicable. Parker does not operate any containers.

C-1c(2) Tanks

Not applicable. Parker does not operate any tanks.

C-1c(3) Waste Piles

Not applicable. Parker does not operate any waste piles.

C-1c(4) Surface Impoundments

Parker previously operated sand filter beds (SWMU#16) which were closed as surface impoundments in 1986. Copies of the approved Closure Plan and Post-Closure Plan are included as Appendix F and G respectively.

C-1c(5) Landfills

Not applicable.

C-1c(6) Land Treatment

Not applicable.

C-1c(7) Drip Pads

Not applicable.

C-1c(8) Containment Buildings

Not applicable.

C-1c(9) Incinerator

Not applicable.

C-1c(10) Boilers and Industrial Furnaces.

Not applicable.

C-1d Waste Re-Evaluation Frequencies

The contents of the sand filter beds will be examined in accordance with the procedures described in the revised closure plan (2008) included in Appendix F.

C-2 Parameter Selection and Rationale

C-2a Waste Identification

See Appendix F.

C-2b Identification of Incompatible and Inappropriate Wastes

Not applicable.

C-2c Process and Design Considerations

Not applicable.

C-2d Treatment, Storage, and Disposal Facility Process Vents and Equipment

Not applicable.

C-2e Exemption from Subpart CC

Not applicable.

C-2f Unit Specific Parameters

See Appendix E.

C-3 Sampling Procedures

See Appendix F.

C-4 Laboratory Testing and Analytical Methods

An EPA certified laboratory will conduct laboratory testing. Due to the low groundwater protection standards applicable for some of the contaminants present at the site, and the inherent limitations of detecting these contaminants using standard laboratory methods at the required detection limits, Parker will work with the laboratory to determine that the most precise analytical methods that are currently available, are used to evaluate contaminant concentrations.

C-5 Additional Requirements for Facilities Receiving Waste Generated Off-Site

Not applicable. Parker does not receive any off-site wastes.

C-6 Provisions for Complying with Land Disposal Restriction Requirements

Parker does not currently land dispose any hazardous waste. However, during proposed soil remediation at the facility, some soils exhibiting the characteristics of hazardous waste or containing listed hazardous waste may be excavated. If this occurs, Parker will comply with the requirements included in the NCDEQ HWS Contained-In Policy.

E Groundwater Monitoring

E-1 Interim Status Monitoring Data

A description of the groundwater monitoring data gathered during interim status is detailed in this section. Appendix H includes tables which summarize groundwater chemistry data collected since 1985 from monitoring and recovery wells and water elevation data.

E-1a Description of Wells

Well descriptions at the Parker facility are discussed in Section E-5a and summarized in Table E-1. See Appendix I for updated information regarding well locations after completion of proposed site development activities and implementation of the Well Abandonment and Replacement Workplan (ENSR, 2008d). The current property owner has recently proposed site redevelopment. These plans have not been finalized. When a redevelopment plan is finalized, a revised well abandonment and replacement plan may be necessary. The revised closure plan will be submitted to the NCDEQ.

E-1b Description of Sampling/Analysis Procedures

Groundwater sampling events at the Parker facility began in 1985. Therefore, interim status groundwater data includes samples taken from 1985 until approval of the RCRA Part B Permit (1991). During this time, wells were samples according to the sampling summary in Appendix H. Sample frequencies varied, with most wells sampled quarterly, and included additional sample dates when new wells were installed. Quarterly groundwater samples were analyzed for purgeable organics (EPA Method 601), total organic halogens, total organic carbon, metals, pH, temperature, conductivity and water table elevation. When new wells were installed they may have originally been sampled only for purgeable organics. All analytical methods were performed using EPA-approved procedures. Standard purging and sampling technique was to use a Teflon® bailer with nylon rope. A stainless steel pump with Teflon® bladder, polypropylene discharge line, and Teflon® check valve between the pump and discharge line may have occasionally been used. The wells sampled during this period included: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-6D, MW-6DR, MW-7, MW-8, MW-8D, MW-8DR, MW-9, MW-10, MW-11, MW-11D, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-20, MW-21 AND MW-21D.

The various samples were preserved in the following manner:

- Purgeable organics — 40 milliliter (mL) vials, no headspace, preserved with HC1, shipped at 4ºC
- Total organic halogens — 500mL vials, no headspace, amber bottles, shipped at 4ºC
- Total organic carbon — 40mL vials, shipped at 4ºC
- Metals — 1 L plastic bottles, preserved with nitric acid, shipped at 4ºC

E-1c Monitoring Data

The groundwater monitoring data collected during interim status is included in Appendix H. Due to document size considerations, analytical data for total organic halogens, total organic carbon, pH, temperature, and conductivity are not included in these tables. This data has been previously submitted to the HWS with individual laboratory reports and in the annual reports. Total organic carbon and total organic halogens are not currently required to be monitored.

Only limited groundwater surface elevations are available for the interim status period. During the interim status period, the majority of the groundwater data was collected by a laboratory which did not provide water level measurements as part of its report to the facility. Interim status water level data is available for August 1988, April 1989, June 1990, and November 1991.

These dates correspond to reports prepared by the facility's environmental consultant (Westinghouse Environmental and Geotechnical Services, Inc. [WEGS], 1988; WEGS, 1989b; WEGS, 1991b). Copies of these data tables are included as part of Appendix H. A groundwater elevation contour map before remediation pumping, using the November 1991 data is also included in Appendix H.

The mean and variance for each indicator parameter during the first year measurements from the upgradient well MW-1 are shown in Appendix H.

E-1d Statistical Procedures

Parker utilized the Cochran's Approximation to the Behrens-Fisher Student's t-test at the 0.05 level (95 percent confidence) to evaluate the groundwater quality data (S&ME, 1987). Statistical analyses are not included in the annual groundwater assessment reports for the Parker facility (e.g. Earth Tech, 2002a; 2002b). The Parker facility is not currently seeking to demonstrate compliance with groundwater standards.

E-1e Groundwater Assessment Plan

The rate, extent and concentration of hazardous waste migration are discussed in Section E-4.

E-2 General Hydrogeologic Information

E-2a Regional Physiography

The Former Parker Facility is situated within the eastern-most portion of the Piedmont Physiographic Province of North Carolina. Regional and local topography consists of rolling hills dissected by narrow v-shaped drainage ways and perennial streams that eventually drain into the Neuse River. The relief on the subject property averages 100 feet from valley floor to the top of interstream ridges. The Facility is situated on a north-south ridge at an elevation of approximately 398 feet. The trellis drainage system in the vicinity of the Facility is geologically controlled, with the larger streams generally paralleling the bedrock strike and the smaller streams oriented perpendicular to bedrock strike along fracture planes.

E-2b Regional Geology

Regionally, the Former Parker Facility is situated in the Raleigh Geologic Belt with underlying bedrock consisting of injected gneisses and schists of the approximately north-trending Cambrian-aged Raleigh Terrane (informally known as the Raleigh gneiss; Farrar, 1985). The Raleigh Terrane is characterized by a heterogeneous, locally migmatitic, gneiss composed mainly of hornblende-biotite gneiss and biotite gneiss (Horton et al., 1994). Numerous sets of joints exist in this area, particularly in gneisses with generally northeast strikes and vertical to subvertical dips. The majority of the meta-igneous rocks (from cores) show some foliation due to the presence of cleavage, the uniform orientation of platy minerals, or a layering of different mineral compositions (Parker, 1979).

The Raleigh Terrane is bounded by the Paleozoic-aged Nutbush Creek fault to the west and the Rolesville batholith to the east. The Nutbush Creek fault zone is part of a regional system of right-lateral Alleghanian faults that extend from Virginia to Alabama (Druhan et al., 1994). In the Wake County area, the fault zone trends north-northeast and is typically about 1 km wide. The felsic gneisses and schists beneath the Former Parker Facility have been deformed into a regional series of folds which plunge gently to the north-northeast. These folds in turn have been refolded around steeply west-plunging axes. Felsic rocks form the ridge on which the plant is located and are in contact with belts of more micaceous rocks in the valleys to either side.

The lithology associated with the Nutbush Creek fault in the Wake Forest area is the subhorizontally lineated, granitic orthogneiss informally named the Falls Leucogneiss (Farrar, 1985). The contact between the Raleigh terrane and the Nutbush Creek fault is generally sharp; however, some textural overprinting can occur up to a few kilometers away from the fault zone (Druhan et al., 1994).

Diabase dikes traverse the area regionally along a general northwest to southeast alignment; at least one of these is mapped just to the south of the Facility on the North Carolina Geologic Map (Brown, 1985). According to published geologic documents, these dike features may be up to 100 to 200 feet wide. Smaller dike splays may be 10 to 20 feet wide (Parker, 1979). Mapped dike locations for the region are based on previously conducted aeromagnetic surveys and are subject to interpretation. Diabase was reported in a core sample from monitoring well MW-24 at a depth of between 82 and 90 feet below land surface (ft bls).

E-2c Site Geology

In general, subsurface soil and rock can be subdivided into units to facilitate localized lithologic characterization as follows:

- Based on the available data, four major lithologic units have been identified. These units include the uppermost soil horizon, saprolite, PWR, and bedrock. The upper soil layer is comprised of micaceous red to brown clayey silts and silty clays and ranged from < 5.0 to 10 feet in thickness. The surficial soil layer transitions gradually to saprolite that is composed of clayey silts with some sand and clayey sands with some silt. The material generally coarsens with depth. The thickness of the saprolite ranges from 14 to 30 feet thick in the borings installed during this phase of site assessment. Beneath the saprolite is a partially weathered rock zone of variable thickness (~7 to 18 feet). The PWR zone, often referred to as the transition zone, exhibits the same properties as deeper soils but with higher occurrence of rock and rock fragments.
- Bedrock in the vicinity of the Former Parker Facility typically consists of a gneissic rock with a high degree of fractures near the interface of PWR and bedrock. Based on a review of the literature and previous investigations, the average strike of the structural features in the bedrock in the vicinity of the Former Parker Facility is north 7 degrees (º) -26º east(E) with a dip of 70º to 80º E. Joints and fractures are common and dissipate with depth while voids and vugs are common in shallow rock zones when weak exfoliation soil zones are encountered near PWR. The dominant regional joint orientation is north 75º ± 10º west (W) with a dip of 80º north (N). A secondary, longitudinal joint orientation that is approximately parallel to strike is present at N 4º -25º E.

E2-d Regional Hydrogeology

Hydrogeologically, the Former Parker Facility is situated in a meta-igneous hydrostratigraphic province of the eastern Piedmont of North Carolina (Daniel and Payne, 1990). The water table surface is approximately 10 to 40 feet below the ground surface within the unconsolidated saprolite in the eastern Piedmont. Three general hydrostratigraphic units characterize the hydrogeology of the area. The top unit (often referred to as saprolite) serves as an unconfined storage aquifer that transmits water downward (generally) to the lower semi-confined PWR unit and fractured confined metacrystalline bedrock aquifer unit (Daniel and Payne, 1990). Groundwater movement in the saprolite is controlled by groundwater divides associated with ridges and streams. The typical flow of groundwater occurs from upland areas (ridgelines) to perennial streams.

The PWR, or transitional zone, lies between the saprolite and bedrock units and groundwater movement flows both within the material matrix and through fractures. Groundwater movement in bedrock is restricted to intersecting sets of water-bearing fractures and joints (Harned and Daniel, 1987). As a result, the flow within the bedrock aquifer is assumed to be heterogeneous and anisotropic (Daniel and Payne, 1990). Hydraulic conductivity in the Piedmont decreases significantly in the PWR and bedrock units beneath the high porosity (30-55 percent) saprolite unit (Daniel and Dahlen, 2002).

E2-e Site Hydrogeology

Overall, groundwater flow beneath the site is toward the northwest, toward two small tributaries of Horse Creek. Groundwater flow is not perpendicular to the potentiometric lines or the topographic (ground surface) and is more complex due to local and regional geology and hydrogeology. The groundwater flow has been effectively “deflected” northward by the structural fabric of the aquifer, leading to the orientation and current location of the plume. Furthermore, active pumping has significantly depressed the potentiometric surface in the area northeast of the main building and groundwater flow in this portion of the site has been redirected by the system to flow into the extraction wells.

Depth-to-water measurements were collected from 57 shallow and deep monitoring and extraction wells during the September 2015 groundwater monitoring event. These groundwater elevations are summarized on Table E-2 were plotted as Figure E-1 and are restricted to shallow to intermediate depth wells screened in the deep saprolite or PWR. These contoured plots were used to estimate the groundwater flow across the site and are also used to establish the approximate zone of capture for the active pumping system. A figure depicting groundwater flow prior to startup of the groundwater treatment system is included in Appendix H.

Hydraulic gradients for the shallow aquifer prior to pumping were fairly uniform across the site, ranging from 0.026 to 0.038 ft./ft. (RUST E&I, 1997). Gradients observed around the extractions wells since pumping began are steeper with values ranging from 0.108 to 0.131 ft./ft. (RUST E&I, 1997). Since May of 1992, the directions and rates of flow have been influenced by the presence of three extraction wells (RW-4, RW-6, and RW-19). Removal of groundwater by the pumping wells has affected the groundwater contours as can be seen by the groundwater elevation contours wrapping into a cone of depression which has formed around the two pumping wells (RW-4 and RW-6). The cone of depression at RW-19 appears to be much steeper and locally restricted and does not appear to have affected shallow groundwater flow patterns in that area.

Table E-3 summarizes the vertical gradients observed during the September 2015 monitoring period. Downward vertical gradients were present during the September 2015 monitoring event at the MW-6/MW-6D and MW6-DR/MW-6DR3 portions of the MW-6 well cluster, the MW-8D/MW-8DR portion of the MW-8 well cluster, and the MW-21/MW-21D well pair. Upward vertical gradients were detected at the MW-6D/MW-6DR portion of the MW-6 well cluster. Upward vertical gradients were also detected at the MW-8/MW-8D portion of the MW-8 well cluster, the MW-39/MW-39D well pair, and the MW-40/MW-40D well pair; indicating typical upward groundwater movement in discharge areas (i.e., near streams).

Two cross-sections were prepared based on well construction data and soil boring logs. The line of each section is shown on the site plan in Figure E-2**.** Figure E-3 is a cross-section (A-A') running generally south to north across the site from monitoring well MW-30 to monitoring well MW-38. Figure E-4 is a cross-section (B-B') running generally east to west across the site from monitoring well MW-1 to MW-21.

Hydraulic test data is available from wells screened in both saprolite and bedrock. Recovery tests within the saprolite indicated hydraulic conductivity ranging from $7.5x10^{-5}$ cm/sec to $2.73x10^{-4}$ cm/sec (S&ME, 1987). Pumping tests, believed to be more accurate, indicated hydraulic conductivity values of $2.60x10^{-5}$ cm/sec (WEGS, 1989c). Conservative estimates of saprolite porosity based upon literature data is around 30 percent, and effective porosity is estimated to be approximately 25 percent (RUST E&I, 1993). The porosity of the bedrock has not been estimated.

E2-f Surface Water

The primary surface water feature on the Parker property is the intermittent stream which originates downslope of SWMU 24 and SWMU 32. Surface water originating in the area of SWMUs 24 and 32 would travel in a northerly direction across the parking lot, drain off the asphalt and into the shallow swale. The swale grades into a ditch which can be traced across the grass through the fence line at the rear of the plant. A second drainage ditch, probably of manmade origin, also originates on the northeast side of the former plant. The course of this ditch parallels the intermittent stream and drains into the same grassy area around well cluster six. Water flow in this upper section of the stream is in response to precipitation events.

At the edge of the woods, near well cluster six, surface flow dissipates into a broad grassy area of undefined drainage. Discrete drainage channels become evident again within the woods to the north of well cluster six. Here the stream is characterized by narrow erosive gullies that are as much as 10 to 15 feet deep. These gullies cut down through a thick section of the fill material covering this part of the property. Water flow in this section of the stream is from surface runoff and there are no major areas of deposition observed.

Toward the northern property boundary the stream flows through small steep sided gullies eroded into in-place sediments and through slightly broader terrace areas with more gently sloping stream sides. Discharge of groundwater occurring in this lower reach of the stream appears to begin approximately 50 feet upstream of MW-7. There are small areas of deposition of sediments due to local flattening of the stream bottom in this lower section.

As described in the previous RFI report (RUST E&I, 1997), the volume of groundwater discharging to the stream was estimated to be approximately 3 million gallons each year. The surface runoff was previously calculated at 6.3 million gallons per year giving a total stream flow of 9.3 million gallons per year.

Periodic stream sampling conducted since 1997 indicates that low concentrations of volatile organic compounds (VOCs) from the groundwater plume discharge into the stream in the area of the property line. A total of five surface water samples (SW-8 through SW-12) were collected from seven stations located on tributaries designated A and B of Horse Creek during the March 2015 sampling event. Surface water locations SW-16 and SW-17 were dry and therefore not collected during the March 2015 sampling event. Vinyl chloride, TCE, and tetrachloroethene (PCE) were detected at concentrations above the North Carolina Administrative Code 2B Standard at SW-12. Surface water sampling location SW-12 is dry during normal operation of the groundwater treatment system; however recovery wells RW-4 and RW-6 were shut down during the sampling event in preparation for upcoming enhanced reductive dechlorination pilot test injections in the source area. Well RW-6 acts to capture VOCs entering the stream upgradient of SW-12. Recovery well RW-6 is currently in operation and well RW-4 remains inactive due to the ongoing pilot injection program.

E-3 Topographic Map Requirements

The following required items are included on the Site Plan, Figure B-2, or other figures as noted below.

- Groundwater Flow Direction and Rate – This is shown on Figure E-1.
- **Point of Compliance** – The Point of Compliance (POC) wells POC-1A, POC-1B, POC-2A and POC-2B are shown on Figures B-2 and E-1.
- **Groundwater Monitoring Wells** – The groundwater monitoring wells are shown on Figure B-2 and E-1.
- **The Extent of Any Plume** – Figure E-5 depicts TCE isoconcentration contours in plan view and Figure E-6 depicts 1,4-dioxane concentrations at each well.
- **Hazardous Waste Management Areas** – The location of the historical RCRA SWMUs/AOCs are shown on the B-2 and E-1
- **Property Boundaries** – The property boundaries are shown on the site plan (Figure B-2), the aerial photograph in Figure B-6 and Figure E-1.
- **Groundwater Flow Rate** – The direction and gradient of groundwater flow are shown on Figures E-1. The flow rate varies across the site and is primarily controlled by the active groundwater extraction system
- **Hydraulic Downgradient** – Prior to the activation of the groundwater extraction system, the direction of groundwater flow was generally to the northwest. The current direction and groundwater flow gradient are shown on Figure E-1. The gradients are primarily controlled by the active groundwater extraction system.
- **Waste Management Areas** – Waste management areas (current and historic) are shown on Figure B-2.

E-4 Contaminant Plume Description

Currently, a site wide semi-annual groundwater monitoring program is conducted at the site in compliance with the current permit. The most recent sampling event was conducted in September 2015. Groundwater analytical results for VOCs collected in September 2015 are presented in Table E-4 and Table E-5. Various metals have also been detected in groundwater at the site and are summarized on Table E-6. Appendix J provides a complete laboratory analytical report from all monitoring wells included in this event.

The following table summarizes the maximum concentrations of the detected organic contaminants during the September 2015 event identified at the former Parker facility.

Chemical	September 2015 – Highest Detected Concentration (micrograms per liter [µg/L])	Location
Acetone	64.2	RW-4
Chloroform	4.21 J	POC-2B
1,1-Dichloroethene	14.2	RW-4 (dup02)
cis-1,2-Dichloroethene	10,600 J	POC-2B
1,2-Dichloroethane	1.7 J	RW-4 (dup02)
1,2-Dichloropropane	1.38 J	POC-2B
Methyl Ethyl Ketone	207 J	POC-2B
Tetrachloroethene	13.6	MW-13
Trichloroethene	4,470 J	POC-1B
Trans-1,2-Dichloroethene	4.97 J	POC-2B
Trichlorofluoromethane	2	MW-8DR
Toluene	4.5	MW-21D
Vinyl Chloride	2.2 J	POC-2B

Notes:
J – estimated value

Samples were collected from POC wells POC-1A, POC-1B, POC-2A and POC-2B in February 2010 and submitted for laboratory analysis for all Appendix IX compounds. The complete laboratory analytical report is included as Appendix K.

The vertical extent of TCE contamination is depicted on cross-section Figures E-3 and E-4. Concentration values are plotted on these sections at the center of the screened interval for each of the wells. Figure E-5 depicts TCE isoconcentration contours in plan view and Figure E-6 depicts 1,4-dioxane concentrations at each well in plan view.

E-5 General Monitoring Program Requirements

This section describes the current groundwater monitoring requirements for the Parker facility.

Based on the historical groundwater analytical data which indicates that the horizontal and vertical extent of the contaminant plume is defined and that contaminant concentrations in site monitoring wells are stable or decreasing, Parker proposes to reduce the groundwater sampling frequency from semi-annual to annual.

E-5a Description of Wells

The installation of the groundwater monitoring network began in August 1985 with the installation of wells MW-1 through MW-4. To date, a total of 57 wells have been installed both on and off the facility property. The locations of these wells are shown on Figure E-2 and construction information is included on Table E-1.

The current well network includes 16 corrective action system effectiveness wells, 4 point-of-compliance (POC) wells, and 3 groundwater extraction wells (refer to Table E-7). Monitoring of these wells fulfills the RCRA Part B Permit requirement to demonstrate the state of corrective action efforts. Other non-permit monitoring wells are sampled intermittently to evaluate groundwater quality.

Redevelopment activities, including new building construction, have been proposed by the current property owner. Parker will work with the property owner/developer to identify and protect site wells to the extent possible. In the event that a Point of Compliance, Corrective Action Effectiveness, or Extraction well is damaged or destroyed during site redevelopment, Parker will initiate repairs or installation of a replacement well. If a replacement well cannot be sited adjacent to the former well location, a permit modification will be submitted to adjust the location or request removal from the monitoring program. The goal of the replacement well would be to provide equivalent or sufficient data to monitoring groundwater quality.

See Appendix I for updated information regarding well locations after completion of site development activities and implementation of the Well Abandonment and Replacement Workplan (ENSR, 2008).

Point of Compliance Wells

The point of compliance (POC) wells POC-1A, POC-1B, POC-2A, and POC-2B will be sampled during each annual monitoring event. In addition, these wells will be sampled for Appendix IX constituents every five years at least six-months prior to the permit anniversary date.

Effectiveness Wells for Annual Monitoring

These effectiveness wells will be sampled on an annual basis. These wells are listed by area in Table E-7.

- MW-3
- MW-4
- MW-6
- MW-6DR3
- MW-8
- MW-8D
- MW-8DR
- MW-15
- MW-21
- MW-21D
- MW-33
- MW-34
- MW-36
- MW-38
- MW-39D
- MW-40D

Extraction Wells

The three extraction wells (RW-4, RW-6, and RW-19) will be sampled annual basis. The combined influent and effluent will be sampled on a semi-annual basis to monitor the efficiency of the system air strippers.

Approximately fifty-seven wells (which include the above listed POC, effectiveness, and extraction wells) will also be inspected and gauged during each sampling event to determine groundwater elevation. These additional wells would be gauged only to assist with evaluating groundwater flow and hydraulic capture of the groundwater extraction system and are not required effectiveness or permit wells.

E-5b Description of Sampling/Analysis Procedures

The current Post-Closure Permit specifies 31 constituents to be monitored at this site. Based on analytical data obtained over the last ten years of groundwater sampling and analysis, Parker proposes to eliminate the following constituents: acetone, benzene, bromodichloromethane, carbon disulfide, chloroform, 1-1-dichlorothane, dibromochloromethane, dichlorodifluoromethane (CFC-12), toluene, 111-TCA, trichlorofluoromethane, arsenic, barium, cadmium, copper, mercury, selenium, silver and zinc, and continue to monitor the compounds listed in Table E-7. These constituents have either not been detected consistently or not above the laboratory reporting limit and/or above North Carolina 2L Groundwater Quality Standards. Table E-8 provides a summary of the analytical data for organic constituents to be eliminated. Table E-9 lists analytical data for organic constituents. The table below summarizes the organic and inorganic constituents listed in the current permit, the constituents proposed for the new permit, and constituents proposed to be eliminated.

Constituents of Concern

Organic Constituents - Current Permit	Organic Constituents to be Eliminated	Organic Constituents - Proposed Permit
Acetone Benzene Bromodichloromethane Carbon Disulfide Chloroform Dibromochloromethane Dichlorodifluoromethane 1,1 Dichloroethane 1,2 Dichloroethane 1,1 Dichloroethene cis-1,2 Dichloroethene trans-1,2 Dichloroethene 1,2-Dichloropropane 1,4-Dioxane Methyl Ethyl Ketone Tetrachloroethene Toluene 1,1,1 Trichloroethane Trichloroethene Trichlorofluoromethane Vinyl Chloride	Acetone Benzene Bromodichloromethane Carbon disulfide Chloroform 1-1-Dichlorothane Dibromochloromethane Dichlorodifluoromethane (CFC-12) Toluene 111-TCA Trichlorofluoromethane	1,2 Dichloroethane 1,1 Dichloroethene cis-1,2 Dichloroethene trans-1,2 Dichloroethene 1,2-Dichloropropane 1,4-Dioxane Methyl Ethyl Ketone Tetrachloroethene Trichloroethene Vinyl Chloride
Inorganic Constituents - Current Permit	**Inorganic Constituents to be Eliminated**	**Inorganic Constituents - Proposed Permit**
Arsenic Barium Cadmium Chromium (total) Copper Mercury Nickel Selenium Silver Zinc	Arsenic Cadmium Copper Mercury Selenium Silver	Barium Chromium (total) Nickel Zinc

As outlined on Table E-7, the annual groundwater samples will be analyzed for VOCs, 1,4-dioxane, and select metals (barium, chromium, nickel, and zinc). Appendix IX sampling on the point-of-compliance wells is conducted every five years with the next sampling event scheduled for February 2016.

Groundwater sampling procedures are provided in the Sampling and Analysis Plan (SAP) dated January 2016. A copy of the SAP is included in Appendix L. Groundwater sample collection procedures will follow the most current version of the *US Environmental Protection Agency Region IV Science and Ecosystem Support Division (SESD) Field Branches Quality System and Technical Procedures.*

E-5c Procedures for Establishing Background Quality

Monitoring well MW-1 was previously established as the background monitoring well at the Site. This well is located upgradient of the former sand filter bed area (SWMU 16); storage tank farm (SWMU 24) and the former drum storage area (SWMU 32). Based on historical and current monitoring data, Parker proposes to switch the background well to MW-36.

E-5d Statistical Procedures

When groundwater monitoring data indicate that concentrations of targeted constituents are close to established compliance limits, statistical analysis will be conducted to establish significant trends. Parker proposes to use the method described in Section E-5d(5).

E-5d(1) Parametric Analysis of Variance (ANOVA)

This method will not be used.

E-5d(2) Non-parametric ANOVA (Based on Ranks)

This method will not be used.

E-5d(3) Tolerance or Prediction interval Procedure

This method will not be used.

E-5d(4) Control Chart Approach

This method will not be used.

E-5d(5) Alternative Approach

Following each sampling event, data from the compliance monitoring wells will be evaluated using the Mann-Kendall (nonparametric) statistical method. This method will used to determine if the measured concentrations of site constituents are increasing, decreasing, or stable over time. Calculations of confidence limits can also be performed to determine if well concentrations are statistically significant from the groundwater protection standards.

At this time, use of statistical methods are not proposed as groundwater concentrations exceed compliance limits.

E-6 Description of Detection Monitoring Program for Facility not Detecting the Presence of Hazardous Constituents.

Not Applicable – Groundwater at the former Parker facility has been impacted with hazardous constituents.

E-7 Compliance Monitoring Program for Facilities Which Have Detected Presence of Hazardous Constituents

E-7a Description of Monitoring Program

The monitoring program at the Parker facility is detailed in Section E-5b.

E-7a(1) Description of Wastes Previously Handled at Facility

This section identifies the various hazardous wastes that have historically been handled at the Parker facility.

Wastewater Pretreatment System Sludge

The Parker facility previously utilized a metal cleaning process that generated a wastewater containing various heavy metals (i.e., nickel and chromium). The wastewater was processed via an on-site wastewater pretreatment process. This process precipitated the heavy metals, and then removed the bulk precipitate in a clarifier. The clarifier sludge was then processed in a filter press and placed in an 8 cubic yard heavy-duty, plastic lined cardboard container. This process generated approximately 2 cubic yards of sludge per month. The cardboard containers were removed for disposal every three months by Enviro-Chem (Apex, NC). This sludge was listed as an F0 19 hazardous waste. The pretreated wastewater was then discharged to the Wake Forest Richland Creek Wastewater Treatment Plant**.** Wastewater treatment ceased in 2001**.**

Previously, the facility operated an electroplating operation in conjunction with its cleaning processes. The sludge generated during this process was classified as F006 and F008. Electroplating operations ceased in 1990.

Contaminated Groundwater

The Parker facility has a pump-and-treat groundwater remediation system. The system extracts groundwater from three recovery wells (RW-4, RW-6 and RW-19) and transfers it to an equalization tank. The influent groundwater TCE concentration on July 2, 2015 was 0.20 milligram per liter (mg/L). The groundwater is pumped to an air-stripping column, which removes greater than99 percent of the volatile organic compounds (VOCs) in the water. The treated water from this process is also discharged to the City of Raleigh POTW.

Waste Varsol

The facility previously generated a waste Varsol product as a result of its manufacturing operations. This waste was a listed hazardous waste due to ignitability (D001). The waste Varsol was mixed with nonhazardous, used cutting oil, which was subsequently burned to produce heat in the facility building. The facility generated approximately 200 gallons of waste Varsol per year. No waste varsol is currently generated.

Cross-Bar Trichloroethylene Still Bottoms

The facility no longer generates these TCE still bottoms. While in operation, however, metal parts were degreased in a cross-bar unit using TCE as a solvent. The TCE was recycled within the unit using distillation processes. The still bottoms from the distillation process produced 15- 20 gallons of wastewater per week that contained 15-20 percent TCE. The still bottoms were collected in 55-gallon drums and shipped to a recovery facility. This process was removed in December 1991.

Open Pit Degreasing

The Parker facility no longer uses this open pit degreasing operation. This process was used to degrease parts using TCE vapor. The used TCE was recycled by distillation, which created a residue containing 15-20 percent TCE. The residue was created at a rate of 5-10 gallons per week, and was disposed of in 55-gallon drums. When full, the drums were disposed in a licensed and permitted hazardous waste disposal facility. This process was removed in December 1991.

E-7a(2) Characterization of Contaminated Groundwater

A summary of the current groundwater conditions at the Parker facility is included in Sections E-1(c) and E-4.

E-7a(3) List of Hazardous Constituents to be Monitored in Compliance Program

The compounds to be monitored are summarized in Section E-5b and Table E-7.

E-7a(4) Proposed Concentration Limits for Each Constituent

The proposed concentration limits for each groundwater chemical are listed in Table E-10. These concentration limits are as listed in Subchapter 2L of 15A NCAC .0202(g).

E-7a(5) Detailed Plans of an Engineering Report Describing Groundwater Monitoring System

A summary of the current groundwater monitoring program is included in Section E-5.

E-7a(6) Description of Proposed Sampling and Statistical Analysis Procedures for Groundwater Data

The proposed sampling and statistical analysis procedures for the site as summarized in Sections E-5b and E-5d, respectively.

E-7a(7) Procedures to be Implemented if Groundwater Protection Standard is Exceeded at Compliance Point Monitoring Well

The four point-of-compliance monitoring wells currently contain TCE above the concentration limits proposed in Section E-7a(4). A corrective action plan for the groundwater in this area is currently in place and is described in Section E-8.

E-7b An Engineering Feasibility Plan for Corrective Action Program

Not applicable. Parker has already enacted a corrective action program as described in Section E-8.

E-8 Corrective Action Program

This section details the corrective action program that has been in place at the site since May 1992.

E-8a Characterization of Contamination

VOCs have been detected in both soil and groundwater at this facility. Sections E-1 and E-4 describe the contaminant extents.

E-8b Concentration Limits

E-8b(1) Concentration Limits Established Under 264.94(a)

Table E-8 presents the hazardous constituents detected in the groundwater and proposed concentration limits. The proposed concentration limits are based on North Carolina 2L Groundwater Quality Standards.

E-8b(2) Alternate Concentration Limits

Alternate concentration limits are not proposed for Groundwater at this time.

The goal of the corrective action program will be to restore groundwater quality to the North Carolina 2L Groundwater Quality Standards. If after having implemented corrective action and demonstrating that continuance would not result in significant reduction of hazardous waste constituents, Parker may petition for a revision of the concentration limits. This revision or variance will be filed with the Environmental Management Commission in accordance with Section .0113 Variance.

E-8c Corrective Action Plan

Interim remediation measures have been implemented at the site under the supervision of the NCDEQ HWS. These include the implementation of a groundwater hydraulic control system with treatment and POTW discharge and an SVE system for soil and groundwater vapor removal. In addition, interim soil excavation and capping procedures have been approved and are awaiting implementation. Information regarding performance of all interim actions currently in-place are regularly provided to the HWS through permit required monitoring reports.

E-8c(1) Groundwater Remediation

Parker currently operates a hydraulic control system that includes three groundwater extraction wells (RW-4, RW-6, and RW-19). The remediation system was installed as an interim measure to limit off-site migration of contaminated groundwater. The extracted groundwater is first distributed to a 300-gallon equalization tank. From the equalization tank, the groundwater is transferred to the top of the air-stripping tower. The air stripping tower is a EZ Stacker 4.4P (QED Environmental Systems). It is a shallow tray stripper and does not contain packing material. This system receives a groundwater flowrate of approximately 8-10 gallons per minute (gpm). The air stripper blower is 3 hp and is rated for 280 cfm at a discharge pressure of 20 inches of water column.

The treated groundwater is then discharged to the local POTW. Analytical and performance data for the system are provided to the NCDEQ HWS on a semi-annual basis, as a component of the permit required -annual Groundwater Monitoring and Remediation System Effectiveness Report.

E-8c(2) Soil Remediation

Parker also operates a SVE system that was placed into service in 1996 consisting of four extraction wells to treat impacted soil located in the SWMU 24, SWMU31/33 and AOC 38 areas. The SVE system was installed as an interim measure to address VOCs detected in soils. The four SVE well points have since been removed from service due to construction activities and replaced with three new SVE wells (SVE-4, SVE-5, and SVE-6). The first two new SVE wells (SVE-4 and SVE-5) were installed in November and December 2006 in the SWMU 31/33 area and immediately brought online. The third SVE well (SVE-6) was also installed in the SWMU 31/33 area and brought online March 7, 2007. A summary of the remediation data is provided in the *Groundwater Monitoring and Remediation System Effectiveness Reports prepared* for the site. The SVE system was installed as a voluntary action and was not intended as the final remedy for soils. Air samples from the system are collected routinely to evaluate VOC removal and system performance. In addition, soil samples were collected in March 2010 to assess system performance. These data will be summarized and evaluated as part of the final remediation strategy development in the CMS Report (AECOM, 2012).

E-8c(3) Additional Proposed Remediation

Interim Measures Excavations

In addition, two work plans proposing interim measures excavations (IME) were approved by the HWS on September 16 and October 3, 2008. These measures were proposed in response to possible future site redevelopment by the property owners. The IME are planned in three areas, the NEBA, AOC 38, and SWMU 31/33. IME in the NEBA were designed to remove and isolate only the portion of impacted material that could potentially present a human health risk to the developer's contractor if the IME were not conducted. In contrast, IME in the areas of AOC 38 and SWMU 31/33 were designed to remove the full extent of soil contamination because impacts to soils in these areas are relatively small in area and shallow in depth. Excavated material will be replaced with un-impacted fill material (either derived on-site or imported) in AOC 38 and SWMU 31/33 and graded to match the existing surface elevations. In the NEBA, potentially impacted soils that remain in the excavation area will be overlain with approximately one foot of crusher run material. SVE was proposed to treat the remaining vadose zone chlorinated VOCs in NEBA soils.

The timing of implementation of the interim measures is dependent on a final development plan from the current property owners and developers. Construction plans and schedules have not been finalized by the property owner and it is currently unclear exactly when or how the site will be developed. The most important factors affecting the proposed interim measures were the final site elevation grade and building design (construction and orientation of future buildings).

Groundwater Pilot Testing

In August 2014, Parker initiated an enhanced reductive dechlorination (ERD) field pilot test in order to evaluate whether ERD is a suitable groundwater remediation technology at the site. The pilot test consisted of injecting approximately 3,000 gallons of a solution of High Fructose Corn Syrup (HFCS) and sodium bicarbonate into one shallow (overburden) injection well (SIW-1) and one deep (bedrock) injection well (DIW-1). Approximately 1,500 gallons of a 10 percent solution by volume of HFCS and bicarbonate were injected into each injection well at low pressure with a double diaphragm pump.

Post injection groundwater sampling has been conducted since the injection with sampling events in September, October, November, December 2014, March 2015 and June 2015. In general, injection results currently appear favorable with groundwater analytical data indicating significant reductions in TCE and increases in cis-1,2-dichloroethene (DCE) and several detections of vinyl chloride. Results of the pilot test were summarized and submitted to NCDEQ in a technical memorandum dated July 10, 2015. Additional data will be collected and a final memorandum will be prepared and submitted to NCDEQ summarizing the injection program data.

E-8d Groundwater Monitoring Program

The groundwater monitoring program is discussed in Section E-5.

E-8d (1) Description of Monitoring System

See Section E-5a.

E-8d (2) Description of Sampling and Analysis Procedures

See Section E-5b.

E-8d (3) Monitoring Data and Statistical Analysis Procedures

See Section E-5c.

E-8d (4) Reporting Requirements

Effectiveness Evaluation Reports for the Corrective Action Program will be submitted on an annual basis. During the March and September events, groundwater elevation data will be collected from approximately fifty-seven monitoring wells. This data will be used to prepare potentiometric maps for the site. During the annual sampling events, groundwater samples will be collected from the components of the monitoring network as outlined in Section E-5. This data will be used to prepare iso-concentration maps for the site. The annual report will summarize analytical data collected and evaluate historical and areal trends observed. The report will also discuss any problems encountered, describe planned monitoring system modifications, and provide general comments regarding the overall system effectiveness. In addition, samples will also be collected from the combined influent and the effluent of the groundwater treatment system.

Operational and performance data will be collected during each six-month period prior and will also be presented in the report. The report will discuss activities during each 6-month period, summarize analytical data collected to track system performance, discuss any problems encountered, describe planned system modifications, and provide general comments regarding the overall system effectiveness. The report will include potentiometric maps indicating groundwater flow direction and also provide an estimate of VOC mass removal during the monitoring period.

F Procedures to Prevent Hazards

This Section was prepared in accordance with the requirements of 40 CFR §264.14(a), and §270.14(b) 4. This section describes the procedures implemented by Parker Hannifin for the prevention of site hazards.

F-1 Security

Security measures are in place for the Former Parker Facility including SWMU 31/33, former filter beds, AOC38 and the groundwater extraction and treatment system compound which will continue to be maintained by Parker. Details regarding site security are provided in the following sections.

F-1a Security Procedures and Equipment

F-1a(1) 24-Hour Surveillance System

The former Parker facility does not have a 24-hour surveillance system.

F-1a(2) Barrier and Means to Control Entry

Entry into the property is controlled with access to authorized personnel only, as described below.

F-1a(2)(a) Barrier

Access to portions of the site property is controlled by fencing which surrounds the area as shown on Figure B-6. The fencing is 8-foot high chain link and has two locking access gates. Each of the existing SWMUs/AOCs are located within the fenced areas.

The groundwater treatment and SVE systems are also located within the fencing and associated equipment is located within locked equipment sheds.

F-1a(2)(b) Means to Control Entry

The access gates on the fences are kept locked 24 hours a day, 7 days a week unless access is needed for site maintenance, landscaping activities, environmental remediation activities or maintenance of the remediation system. In these cases, the gates are open only while trained personnel are present on the active portion of the site and are able to control access. Only authorized Parker personnel and their consultants have keys to the gates.

F-1a(2)(c) Warning Signs

Signs are posted at each of the locked gates controlling access to the facility. Parker will also place several signs around the closed sand filter beds and the nearby SWMU's.

F-1b Waiver

A Waiver to these requirements is not requested.

F-2 Inspection Schedule

The perimeter fence and gates are inspected for structural integrity as part of this checklist. The groundwater remediation and soil vapor extraction systems are checked on a weekly and monthly basis. The inspection forms for the groundwater remediation system are included in Appendix M.

F-2a General Inspection Requirements

The processes/equipment inspected on a regular basis include: the groundwater remediation systems, security fencing, and the closed surface impoundments.

F-2a(1) Types of Problems

The types of problems to investigate are listed on the respective inspection log sheets located in Appendix M.

F-2a(2) Frequency of Inspection

The groundwater remediation system is checked on a weekly and monthly basis. Other inspections are conducted monthly. Copies of the inspection logs are kept on-site within storage building.

F-2b Facility Inspection Requirements

F-2b(1) Monitoring Equipment

The only monitoring equipment related to hazardous waste management are liquid level controllers and pH meters that are part of the groundwater treatment system. The groundwater remediation system is checked weekly.

F-2b(2) Emergency Equipment

Fire extinguishers are located in the groundwater treatment system building.

F-2b(3) Safety Equipment

See above.

F-2b(4) Security Equipment

The chain link fence is inspected on a monthly basis.

F-2b(5) Operating and Structural Equipment

Due to plant closure there is no operating or structural equipment that requires inspecting.

F-2c Specific Process Inspection Requirements

F-2c(1) Container Inspection

Not applicable. The Parker facility no longer has container storage.

F-2c(2) – F-2c(7)

The Parker facility no longer operates any waste piles, incinerators, landfills, or land treatment units. The only tank in use at the facility is the equalization tank used as part of the groundwater treatment system. Inspection of this tank is covered in the weekly and monthly inspections of the treatment system discussed above.

F-2c(8) Miscellaneous Unit Inspections

The groundwater remediation system is checked on a weekly basis. A copy of the remediation system maintenance plan is kept on-site.

F-2c(9) F-2c(11)

Not applicable. The Parker facility does not operate any boilers and industrial furnaces, drip pads or containment buildings.

F-2c(12) F-2c(l4)

The requirements applicable to Subparts BB are discussed in their respective sections. Subparts AA and CC is not applicable to the facility.

F-2d Remedial Action

This is discussed in Section E.

F-2e Inspection Log

Copies of the inspection logs are included in Appendix M. Completed inspection logs are kept inside the groundwater remediation system building. These records will be maintained for a minimum of three years.

F-3 Waiver of Preparedness and Prevention Requirements

None of the existing SWMU/AOC areas pose a hazard to Parker consultant personnel who may visit the facility. Emergency and safety equipment are maintained in the groundwater treatment system building. Parker consultants working on site will carry a cell phone for use in contacting emergency personnel if needed.

F-4 Preventive Procedures, Structures and Equipment

Not applicable.

F-5 Prevention of Reaction of/ Ignitable, Reactive, and Incompatible Wastes

This is an inactive post-closure facility. There are currently no Ignitable, Reactive, or Incompatible Waste stored on-site, nor is there any plan to store these types of wastes on this site in the future.

G Contingency Plan

Parker subcontracts the Operation and Maintenance services required for the groundwater treatment system, the soil remediation systems, and the remaining SMWUs/AOCs. Contract arrangements require that the Operator maintains an adequate Contingency Plan. An updated copy of the Contingency Plan is located in Appendix N.

G-1 General Information

The Contingency Plan is a stand-alone document and includes the facility name, location, owner and operator names, site plan, and description of the facility operations addressed by the plan. It should be noted that the document serves as the Contingency Plan for Parker remediation system related operations only and is not applicable to other onsite activities. The Parker operations include the groundwater treatment system, the SVE systems, and remaining RCRA SWMU areas. See Figure B-2 for locations of Parker system operations.

G-2 Emergency Coordinators

Due to the closure of the facility and the lack of on-site emergency personnel, the emergency coordinators have been established as employees of AECOM, subcontracted to Parker Hannifin. Job titles and duties of key personnel for the former Parker facility are included in the Contingency Plan. The emergency coordinators are authorized to commit the necessary resources to implement the Plan when needed. The Coordinators are located close enough to the facility to respond within a short period of time.

G-3 Implementation

This Contingency Plan will be implemented in the event of a failure or threat of failure of the groundwater remediation system that might result in release of hazardous waste constituents which would endanger human health and the environment. This plan is designed to prevent and control any releases as necessary to minimize threats to human health and the environment.

G-4 Emergency Response Procedures

Emergency response procedures are outlined in the Contingency Plan. There are no waste piles or surface impoundments located on at the facility, therefore those items are not addressed.

G-5 Emergency Equipment

The Contingency Plan provides an up-to-date list of equipment available at the facility.

G-6 Coordination Agreements

The contingency plan has been submitted to the appropriate local agencies including police, fire department, hospitals, and local emergency response teams. Copies of letters verifying receipt of the Contingency Plan are maintained in the most recent version of the Contingency Plan.

G-7 Evacuation Plan

The Parker operations at the site are not occupied full-time and are principally exterior operations.

G-8 Required Reports

The Contingency Plan addresses the reporting requirements for incidents which trigger the implementation of the Plan.

G-9 Amendment to the Contingency Plan

The Contingency Plan will be reviewed and modified as required based on changes in personnel, regulations, site conditions, or other factors that impact the Plan.

H Training Program

Parker subcontracts the Operation and Maintenance services required for the groundwater treatment system and the soil remediation systems. Contract arrangements require that the Operators maintain adequate personnel training. A copy of the latest revision of the Remediation Systems Operation, Maintenance Manual) is maintained on-site.

H-1 Training Program

O&M staff receive an initial 40-hours of training for hazardous waste operation and emergency response followed by 8-hours of refresher training annually. Emphasis is placed on compliance with the Department of Transportation (DOT) and regulations mandated by the EPA. This training contains, but is not limited to, the following topics:

- Hazardous Waste and Materials Management
- Proper use of Shipping Papers (including labels and manifests)
- Sampling and Testing Procedures
- Contingency Plan Procedures

Internal AECOM health and safety specialists provide the 40-hour and 8-hour training for ENSR personnel. Certified independent contractors will be used for outside training such as manifesting and waste management.

H-2 Job Titles and Duties

Job titles and duties of personnel for the former Parker facility are outlined in the Contingency Plan included in Appendix M.

H-3 Training Content

The content for the initial 40-hour course and subsequent 8-hour refresher training for hazardous waste operations and emergency response will be comprised of topics outlined in 29 CFR 1910.120.

H-4 Training Frequency

Personnel will receive an initial 40 hours of hazardous waste operations and emergency response training under guidelines established by 29 CFR 1910.120. Additionally, personnel will receive an additional 8-hours of hazardous waste and emergency response training that will include additional site-specific training based on their respective duties on-site.

H-5 Training Techniques

Internal AECOM health and safety specialists provide the 40-hour and 8-hour training for AECOM personnel. Certified independent contractors will be used for additional training as needed. Additional training may include, but is not limited to, on the job training, seminars, or additional formal courses taught by certified personnel.

H-6 Training Director

The Operator in Responsible Charge for the groundwater treatment plant will be responsible for coordinating and directing site related training.

H-7 Record Keeping

Documentation of 40-hour training and 8-hour refresher training for on-site personnel will be maintained at the site. Personnel records of AECOM employees will be maintained at AECOM corporate offices and will be kept current for all active employees during the administration of the O&M contract with Parker. In the case of personnel who terminate employment with the facility, records will be maintained for a period no less than three years from the date of last employment.

I Closure Plans, Post-Closure Plans, and Financial Requirements

I-1 Closure Plans

There is currently one SWMU at this facility (SWMU 16 – filter beds) which is currently in post-closure status. The filter beds were taken out of service in November 1985 and subsequently closed in accordance with an approved Closure Plan in October 1996. Closure included the removal of contaminated materials within and immediately below the filter bed structures, backfilling the structures with clean fill, and capping the filter bed structures with an impermeable concrete cap. A revised closure plan was submitted by Parker to NCDEQ in 2008 (Appendix F), which included revisions to the configuration of the RCRA CAP required due to redevelopment and construction related activities proposed for the former Parker facility. The revised closure plan was approved by NCDEQ in 2008. The proposed changes were to be conducted concurrently with interim action soil excavation activities proposed for the NEBA. However, due to delays in the planned redevelopment of the property, implementation of the revised closure plan has not occurred. The current property owner and developer has recently proposed site redevelopment. These plans have not been finalized. When a redevelopment plan is finalized, a revised closure plan for SWMU-16 may be necessary. The revised closure plan will be submitted to the NCDEQ.

I-1a Closure Performance Standard

The closure plan for the sand filter beds was designed to minimize the need for further maintenance by eliminating post-closure escape of all hazardous constituents utilized at the facility.

I-1b Partial Closure and Final Closure Activities

The sand filter beds were closed as surface impoundments in 1986. The sand and underlying soil were excavated to a depth of one foot below the filtration media. Existing concrete walls were hand scraped and hydroblasted to remove any attached solid contamination. Excavated material was disposed in a licensed hazardous waste landfill. Following excavation and cleaning activities, the sand beds were backfilled with clean material and capped with a concrete cover. The closure plan for the sand beds is discussed in S&ME (1987).

I-1c Maximum Waste Inventory

The Parker facility is closed and does not store any hazardous waste on site. Hazardous waste was identified, inventoried, and properly disposed off-site as part of the plant closure.

I-1d Schedule for Closure

Not applicable. Closure activities for the Parker facility were completed in 1986.

I-1e Closure Procedures

The facility has no active disposal units, containers, tanks, waste piles, surface impoundments, incinerators, landfills or land treatment systems that would require closure activities.

Closure procedures for the facility's SWMU's and AOC's are described in Section L of this document.

I-2 Post-Closure Plan

The facility currently performs post-closure monitoring of its sand filter beds. This monitoring primarily consists of groundwater monitoring as discussed in Section E-5. A copy of the Closure Plan is included as Appendix F and the Post-Closure Plan as Appendix G.

I-2a Inspection Plan

The closed filter bed covers will be inspected monthly as long as they are in place, to evaluate structural integrity and general sound construction. An inspection log will be maintained on-site that documents the findings of these inspections. A copy of the inspection log is included as Appendix M.

I-2b Monitoring Plan

The groundwater monitoring plan for this facility is detailed in Section E-5.

I-2c Maintenance Plan

The closed filter beds have not required maintenance since their construction in 1986 and the concrete covers are inspected monthly to confirm that they are still providing a cap for the beds.

I-2d Land Treatment

Not applicable.

I-2e Post-Closure Care for Miscellaneous Units

Not applicable.

I-2f Post-Closure Security

The closed sand filter beds are enclosed by an 8-foot chain link fence. Security for these areas is discussed in more detail in Section F.

I-2g Post-Closure Contact

The post closure contact is Jim Schenker, Assistant Manager, Environmental Engineering with Parker Hannifin Corporation. Contact information for Mr. Schenker is provided below:

Parker Hannifin Corporation
6035 Parkland Boulevard
Cleveland, OH 44124-4141
216-896-2052

I-3 Notices Required for Disposal Facilities

The signed closure statement submitted to the NCDEQ HWS is included in Appendix O. A notice certifying completion of the post-closure period will be submitted at the appropriate time (30 years from the date of closure) to the HWS.

I-4 Closure Cost Estimate

Not applicable. Parker is a post-closure facility.

I-5 Financial Assurance Mechanism for Closure

Not applicable. Parker is a post-closure facility.

I-6 Post-Closure Cost Estimate

The most recent post closure cost estimate (2015) is included in Appendix O.

I-7 Financial Assurance Mechanism for Post-Closure

The most recent financial assurance mechanism (2015) is included in Appendix O.

I-8 Liability Requirements

Not applicable. Parker Hannifin is not subject to liability requirements.

I-9 State Financial Mechanism

Not applicable.

J Other Federal Laws and Exposure Information Requirements

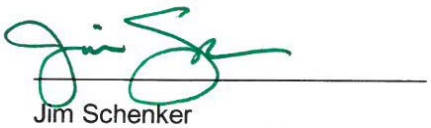
J-1 Other Federal Laws

The facility is in general compliance with other federal laws such as the Wild and Scenic Rivers Act, the National Historic Preservation Act of 1966, or the Endangered Species Act are applicable to the Former Parker Facility as referenced in the 2003 RCRA Permit Renewal Application.

K Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Date:



1/28/16

Jim Schenker
Assistant Manager, Environmental Engineering
Parker Hannifin Corporation

L Information Requirements for Solid Waste Management Units

An RFA was completed and previously submitted for this facility, however significant additional investigations and closures of many of the units have been completed since that time. Therefore, the following information for SWMUs and AOCs on-site is provided below in addition to the RFA.

L-1 Minimum Information Requirements for Solid Waste Management Units and Areas of Concern

- Location
- Type of Unit
- General Description and Structural Description
- Dates of Operation
- Specification of Wastes Handles
- Information pertaining to releases
- Review of Sampling and Analysis activities
- Summary of Remediation Activities
- Closure Activities

L-2 Summary Listing of Solid Waste Management Units and Areas of Concern

Parker's current Hazardous Waste Management Permit (2006) specified the final status of the 38 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). Figure B-2 depicts the location of current and historical SWMUs/AOCs at the Site and Table B-1 summarizes each of the SWMUs/AOCs and the current status. The permit required completion of a RFI and RCRA Corrective Action at each of the following units:

- SWMU 8 – Oil Water Separator
- SWMU 11 – Filter Press Room
- SWMU 15 – Waste Treatment Area
- SWMU 16 – Sand Filter Beds
- SWMU 24 – Storage Tank Farm
- SWMU 31 – Former Hazardous Waste Storage Area
- SWMU 32 – Former Dry Storage Area
- SWMU 33 – Former Underground Waste Oil Tank
- AOC 35 – Main Plant Floor, Floor Trenches, and Floor Drains
- AOC 36 – Caustics Storage Building
- AOC 37 – Acid Storage Building
- AOC 38 – North Corner Parking Lot

The following summarizes historical information and investigation/remediation conducted at each of the 12 remaining SWMUs and AOCs at the former Parker facility. Any SWMU/AOC that has been deleted since the RFA was performed is not addressed, but is listed in Table B-1. Due to their close proximity, SWMU 8, 11, 15, 16, 24, 32 and AOC 35, AOC 36 and AOC 37 were designated the NEBA.

NEBA – SWMU 8; Oil/Water Separator

Description of Unit

SWMU 8 was located in the northeast end of the main plant in the plating and paint shop area. According to facility personnel, this unit was placed into service in 1989. The separator had a 500-gallon capacity contained waste synthetic and/or semi-synthetic oil that was heated to remove water. A skimmer removed petroleum oil to an adjacent 55-gallon drum via a feeder line. The unit was adjacent to a wall, and there was a hood over the separator. Once the evaporation rate was reduced, the concentrated oil was placed in 55-gallon containers and was stored in the RCRA hazardous waste/raw product drum storage area (SWMU 31) until the oil was used in the burners. The oil/water separator was drained and dismantled in February 2002.

Information Pertaining to Releases

At the time of the 1990 Visual Site Inspection (VSI), there was waste oil, covered with absorbent, on the floor around the unit. After the VSI, Parker instituted additional drip pans beneath the SWMU. The oil/water separator sat on the brick floor portion of the plating room and any leaks or spills originating from this unit would have been to the floor. The brick and mortar in the plating room appears to be stained. As part of plant closure Parker removed the brick floor and cleaned the underlying concrete floor. The concrete under the brick appears to be intact and in good condition. It is not stained and has minor surface etching in a few small areas.

Sampling and Analysis

Samples of the soils underneath the concrete slab in the areas of the floor drains and piping in the plating room have been taken and are discussed in the section on SWMU 35 - Main Plant Floor.

NEBA – SWMU 11; Filter Press Room

Description of Unit

SWMU 11 was located in the northeast portion of the main plant. According to facility personnel, this unit was placed into service in 1985. This unit received sludge form the wastewater treatment plant where it increased the solids content from 2 percent to 30 percent. Sludge material was stored in heavy duty cardboard containers and stored adjacent to the filter press until it was shipped to an offsite hazardous waste disposal facility. The filter press room was also used to store caustics and coagulants for use in the wastewater treatment area. All equipment in the filter press room was cleaned, dismantled and sent to Parker's Michigan facility in 2001. The building structure is still intact around the filter press room.

Information Pertaining to Releases

At the time of the VSI, there was a small amount of sludge and oil on the floor under the filter press. The concrete floor of the filter press room appeared to be intact and in fairly good condition. There are two, approximate 3" floor drains that lead to the wastewater treatment area (SWMU 15) in the filter press room. The purpose of these floor drains was to provide secondary containment to any spills that occurred in this area. According to plant personnel, this room was always used to store caustics and coagulants for use in the wastewater treatment area. Based on the history of use of this room, only minor spillage is anticipated to have occurred. These spills would have been routed to the wastewater treatment tanks where additional sampling is planned.

Sampling and Analysis

The filter press room equipment designated as SWMU 11 has been cleaned and removed from the facility. Rinsate samples indicated that the walls, ceiling and floor of the room had been adequately cleaned. This SWMU has been decommissioned and requires No Further Action. As part of the continuing investigation of SWMU 35, the main plant floor, the concrete floor

and brick walls were removed and soil samples were collected around the floor drain. Results are discussed in the section on SMWU 35.

NEBA – SWMU 15; Waste Treatment Area

Description of Area

This SWMU included four concrete-lined, in-ground treatment tanks located to the northeast of the plant. Each tank was approximately 14 feet by 14 feet and six feet deep with a 5,500 gallon capacity. Wastewater from the plant's plating operation was chemically treated in these tanks to produce an insoluble metal hydroxide sludge. The treated water was pumped to a clarifier where the solids were allowed to settle. The treated water was then discharge through sand filter beds (SWMU 16) and the sludge that collected at the bottom of the clarifier was transferred to the sludge holding tank in the filter press room (SWMU 11). The wastewater treatment area was in use from 1964 to 1996. Three tanks were scraped of residue, pressure washed, and filled with stone.

Information Pertaining to Releases

Facility personnel indicated that the basins had overflowed prior to the time of the VSI. There have been no subsequent releases documented from the wastewater treatment area.

Sampling and Analysis

Parker plans to physically remove the waste water treatment tanks which are located in the northeast portion of the facility and is included in the Interim Measure - Soil Excavation Workplan Northeast Building Area (AECOM, 2008a). Additional soil sampling is planned in this area and will include soil samples from around and beneath this SWMU.

NEBA – SWMU 16; Sand Filter Beds

Description of Area

This SWMU includes two closed sand filter beds associated with the former waste water treatment system. The filter beds were constructed of concrete, approximately 14 feet by 14 feet, 4 feet above grade and extended approximately 3 feet below land surface. They were used from 1964 until 1986, when they were closed. During use, wastewater from the clarifier was discharged by gravity into the sand filter beds. The wastewater passed through the bed and was discharged to the Town of Wake Forest sewer system. Solids from the filter beds were removed and sent offsite for disposal. The filter beds were unlined and the bottom of the beds are estimated to have been three and one-half feet below the present ground surface. The unit was closed in 1986 by removing all of the sludge, filtrate, sand, piping, and 1.5 feet of soil. The empty beds were then filled with washed gravel and covered with a 7-inch cap of reinforced concrete.

Information Pertaining to Releases

No specific incidents of spills or overflows are known to be associated with this unit. Releases from the unit are assumed to have occurred as constituents in the wastewater migrated through the unlined bottom of the filter beds.

Sampling and Analysis

Sampling of the soils underlying the filter beds in April 1986 indicated contamination was present at a depth of eighteen inches below the bottom of the filter beds. These samples were taken after all the filter material and eighteen inches of soil had been removed from the filter beds and would have been approximately 4.5 feet below the present ground surface. Original laboratory data reports were submitted in the RFI report in March 2002 (EarthTech 2002b). Sample results indicated that both metals and some volatile compounds were present in the soils directly under the filter beds. Subsequent sampling in August 1986 at greater depths beneath the beds also indicated that metals and some volatile compounds were present in soils down to five feet below the bottom of the filter beds.

A revised closure plan was submitted by Parker to NCDEQ in 2008 (Appendix F), which included revisions to the configuration of the RCRA CAP required due to redevelopment and construction related activities proposed for the former Parker facility.

The revised closure plan was approved by NCDEQ in 2008. The proposed changes were to be conducted concurrently with interim action soil excavation activities proposed for the NEBA.

NEBA – SWMU 24 – Former TCE Storage Tank System

Description of Area

SWMU 24 is located on the northeast side of the former facility building and consisted of two steel above ground tanks and associated piping. One 2,000 gallon tank was used for storage of virgin TCE solvent and a second 1,500-gallon tank was used to store used TCE. The tanks were set on a concrete pad and spill containment berm. The TCE was pumped into the tank by way of a valve set into the top of the tank that coupled to a delivery vehicle hose. TCE from the tank was gravity fed into the plant through piping attached to the bottom of the tank. The TCE was used in an open pit degreaser and a cross bar degreaser to remove cutting oil and metal chips from finished parts prior to plating or painting. Used TCE was pumped monthly from the degreasers to the used product holding tank. The used TCE was stored in this tank while the plant's degreasers were being cleaned. The two tanks were positioned on a 10 foot by 27 foot by 6 inch reinforced concrete pad for spill containment. The pad is surrounded on four sides by a 1.75 foot high concrete berm that was added in 1984. A drain with a control valve was located in the base of the berm in one comer. High level alarms were installed in 1983 on the 1,500 gallon tank. The 1,500 gallon tank subsequently was replaced with a new tank on January 26, 1990 and used until the system was taken out of service in March 1992.

Information Pertaining to Releases

There have been two types of releases reported from the TCE storage tanks; 1) multiple small volume spills occurring at intervals over an extended time period and 2) a single, larger volume spill in 1983. The only information available on the amount of TCE that may have been spilled is based on the recollections of plant personnel concerning normal housekeeping practices during TCE deliveries and the single spill event. This information has been interpreted to provide an estimate of the possible total volume of TCE released to the environment from SWMU 24. The accuracy of this estimate is not known.

Small spills of TCE were observed during delivery to the tanks from 1968 to 1983. According to descriptions of normal practices observed by plant employees, the delivery hose was allowed to drain on the ground after filling the tank from 1968 to1971. In 1971, buckets were supplied by plant personnel and the hose was drained into the buckets. Approximately five to ten gallons of TCE would be collected in the buckets, with some small amount of spillage still occurring. Plant personnel also have estimated that perhaps twenty percent of the time from 1968 to 1983, approximately one to five gallons of TCE were spilled when the tanks overflowed during filling.

Plant personnel have reported that since 1983 very little spillage has occurred. Delivery information from requisition forms maintained at the plant show that 22 deliveries were made during the time period from 1968 to 1971. Assuming that five gallons of TCE was spilled during each delivery, then the total possible spillage during this period would be 110 gallons. From 1968 through 1983 there were 80 deliveries of TCE made to the plant. Assuming one gallon was spilled during twenty percent of those deliveries, a potential quantity of 16 gallons would have been spilled. Summing these two estimates gives a potential volume of TCE spilled during deliveries from 1968 to 1983 of 126 gallons.

On November 23, 1983, the 1,500 gallon TCE storage tank overflowed while pumping TCE from the cross bar degreaser into the storage tank. Plant personnel on site estimated that 50 to 75 gallons of TCE overflowed from the tank and ran out onto the adjacent parking lot. This estimate is based on visual inspection of the spill; no measurements of the spill were attempted. Upon discovery of the release, the TCE was soaked up with speedy-dry absorbent and shoveled into 55 gallon drums. Calculations performed after the spill indicated that a maximum amount of 73 gallons of TCE could have overflowed the tank. This estimate was reached based on the volume of material in the cross bar degreaser and TCE storage tank prior to pumping. The capacity of this material exceeded the capacity of the 1,500 gallon tank by 73 gallons. The portion of the asphalt contacted by TCE was subsequently removed and replaced.

Sampling and Analysis

During the RFI, the Storage Tank Farm (SWMU 24) and the Former Drum Storage Area (SWMU 32) were investigated as one area, due to their proximity and to the storage of TCE at both SWMUs. See Section for the Former Drum Storage Area (SWMU 32) for a discussion of the results of this sampling. Because piping from the plating room ran beneath this SWMU, some soil samples were taken from this area as part of that investigation and are discussed in the section on SWMU 35.

SWMU 31 – Former Hazardous Waste Storage Area

Description of Area

SWMU 31 consisted of a 75 feet by 75 feet covered concrete pad. The southern portion of the pad was used to store hazardous waste. The northern portion of the pad was used to store 55-gallon drums of waste oil. Scrap metal storage hoppers were also stored on the concrete pad. According to facility personnel, this unit was placed into service in 1982 and removed in March 2002. The concrete pad was cleaned with a degreasing solution utilizing a hot water pressure washer. The canopy has been removed, but the concrete pad is still in place.

Information Pertaining to Releases

At the time of the VSI, perforations in the concrete pad in many locations were noted. The dike had a break in one area in front of the waste oil drums. Drip pans beneath the large hoppers were noted to be inadequate and had overflowed, and there were many oil stains and spills on the concrete pad, especially around the large hoppers. The oil patches ranged in size from one square foot to four square feet. Also, around one of the drains which pass through the dike oil spills and stains were observed, both inside and outside the dike. Beneath the spigots on the horizontal drums were small oil spots where the dripping oil had missed the catch pan and there were oil spills beneath the raw product and waste oil drums.

Sampling and Analysis

Hazardous waste in this area was stored in DOT approved bulk packages and the last of the hazardous waste was disposed off-site in March 2002. The concrete floor in the oil storage area, the bin storage area, and the hazardous storage area was cleaned by ARR with a pressure washer. Each concrete area was then rinsed separately with water and a sample was submitted for analysis for oil and grease, RCRA and site metals, plus cyanide, and volatile organics. None of the metals in the three rinse water samples were above the site's preliminary soil screening levels and the only volatile compounds detected were acetone, bromodichloromethane, and chloroform, all below 30 µg/L. Chloroform and acetone at these levels are typical laboratory contaminants. Oil and grease was present at 16.4 to 195 mg/L, which is below the North Carolina regulatory limit of 250 miligrams per kilogram (mg/kg) in soils. Wash water and rinse water was contained, characterized and disposed off-site.

Parker collected shallow soil samples from beneath the concrete at this SWMU in October 2002. Based on these sample results, it appears that the shallow soils beneath the concrete have been impacted by oil and grease and by some volatile organic compounds.

Additional RFI soil sampling was conducted in this area in 2005. For the investigation, SWMU31 and SWMU 33 were combined into one study area and designated SWMU #31/33. The results of the investigation, the horizontal and vertical extents of VOC impacts in this area were delineated. The results are summarized in the report titled *RCRA Facility Investigation – Soil Assessment and Statistical Evaluation of Background Metal in Soil: SWMU #31/#33, AOC #38, Northeast Plant Area, and Background Locations*, AECOM, 2006.

NEBA – SWMU 32 – Former Drum Storage Area

Description of Area

SWMU 32 was located along the northwest edge of the parking lot on the northeast side of the former Parker facility. Drums containing used TCE and waste oil were stored on an asphalt surface at the edge of the parking lot from 1970-1981. Currently the unit is a rectangular area of asphalt at the edge of the parking lot bordered on one side by the parking lot curb.

Information Pertaining to Releases

Some of the drums stored in this area were reportedly in poor condition and potentially leaked an unknown quantity of materials onto the ground. After the drums were removed from the area in 1981, the underlying asphalt was observed to be in poor condition, possibly due to contact with oils and solvents released from the drums. Due to this degraded condition, the asphalt and underlying six or so inches of soil were removed and disposed. Gravel was used to replace the soils and the surface was recovered with asphalt.

Sampling and Analysis

During the RFI, this unit and the Storage Tank Farm (SWMU 24) were investigated as one area due to their proximity and to the storage of TCE at both SWMUs. The results of sampling of the two units are discussed here.

Soil samples were first collected at SWMU 32 during the confirmatory sampling program. Three shallow hand auger borings were placed along the drainage swale leading from the parking lot at SWMU 32. Two hollow stem auger borings (32-1 and 32-2) were also completed to the water table within the boundary of SWMU 32. Two deeper samples from these borings were selected for analyses based on OVA readings that generally increased with depth. These five samples were analyzed for volatile and semi-volatile organic compounds. The shallow, hand auger samples were also analyzed for the site-specific list of metals. The results indicated that the shallow samples contained high concentrations of volatile organic compounds (primarily TCE), a few semi-volatile compounds in much lower concentrations, and some metals that appeared elevated. The deeper samples also contained TCE, but in lower concentrations.

The RFI soil sampling expanded the area of investigation to include SWMU 24, the parking lot adjacent to SWMU 24 and 32, and the drainage area downgradient of the SWMUs. Fourteen hollow stem auger borings and 14 hand auger borings were advanced in the areas around SWMUs 24 and 32. Each of the soil samples collected were analyzed for volatile organic compounds and select samples were analyzed for semi-volatile compounds and metals.

The primary volatile organic compounds detected in soil samples from the borings were TCE, *cis* 1,2-dichloroethene, acetone and xylenes. TCE was generally accompanied by its daughter product, *cis* 1,2- dichloroethene. Some samples contained more *cis* 1,2-dichloroethene than TCE. The only semi-volatile organic compound detected was bis-2-ethyl-hexyl-phthalate at low concentrations in the shallowest samples at T7-DB2 and T7-DB3. Bis-2-ethyl-hexyl-phthalate has been associated with the types of gloves used during the soil sampling and was not known to be used at Parker.

Metals concentrations from these RFI samples are below site background concentrations with the exception of mercury, which is slightly elevated. The data indicate that any metals contamination present at SWMU 32 is very likely restricted to the surficial soils. Because the metals do not show up in slightly deeper samples, they may be in the form of small metal particles instead of in a dissolved form that would be transported downward within the soil profile. These small particles would have been created through the plant's machining and cleaning processes.

With the exception of one deep boring, soil contamination decreases markedly with depth, with the highest concentrations in the upper 4 feet of soil. For this reason, the shallow hand auger samples are considered to be a good indicator of areas of soil contamination. As shown on Figure 16 (Attachment 7), the 0-4' interval reveals a pattern of soil contamination centered on the two SWMUs and extending approximately 180 feet downslope along the drainage swale that originates at SWMU 32. The highest concentrations, i.e., above 10 mg/kg, are found in the soils within 50 feet downslope of SWMU 32. Concentrations diminish quickly as you move down the drainage swale to below 0.1 mg/kg 150 feet from SWMU 32. Significant contamination also appears to be restricted laterally to within 40 to 60 feet of the drainage swale. The remaining depth intervals illustrate the generally decreasing concentrations with depth with areas of significant contamination following the pattern of the shallow samples.

The lateral distribution of volatile organics, primarily trichloroethene and its breakdown product *cis* 1,2-dichloroethene, in the soils around SWMUs 24 and 32 has been defined and correlates well with information on the nature of releases and storage of materials in these SWMUs. Releases from SWMU 24 would have very likely taken place immediately around the former tanks or in the adjacent parking lot where the delivery truck parked. Releases from SWMU 32 would have likely taken place

along the edge of the parking lot, both on and off the pavement where the drums were stored. Released material from both SWMUs would have migrated with runoff across the parking lot, into the drainage swale and downslope into the ditch. The vertical profile of decreasing concentrations with depth appears to be influenced by the generally coarsening downward soils. Many of the shallow soil samples contain some amount of clay and given that organic solvents can absorb onto clay particles, the upper soils have resulting higher concentrations. The vertical extent of soil contamination in this area is defined by the presence of these compounds in the groundwater.

In 1997, Parker began a soil vapor extraction program in the area of soil contamination delineated around SWMUs 24 and 32. The SVE system was installed as an interim measure to address VOCs detected in soils. The four SVE well points have since been removed from service due to construction activities and replaced with three new SVE wells (SVE-4, SVE-5, and SVE-6). The first two new SVE wells (SVE-4 and SVE-5) were installed in November and December 2006 in the SWMU 31/33 area and immediately brought online. The third SVE well (SVE-6) was also installed in the SWMU 31/33 area and brought online March 7, 2007.

SWMU 33 – Former Waste Oil Underground Storage Tank

Description of Area

SWMU 33 consisted of a 1,000-gallon underground storage tank reportedly used to contain waste cutting oil, water soluble cutting fluid, and water from machinery. Previous investigations indicate this tank was in operation from approximately 1976 to 1986. The tank was approximately 4.5 feet by 8 feet and constructed of concrete. Waste cutting oil, water- soluble cutting fluid, and water from production machines were placed directly into the tank. The tank was removed from the ground in 1987 and backfilled with gravel.

Information Pertaining to Releases

When full, the tank was pumped empty by an outside contractor. However, based on the presence of some metals and volatiles in soils and seepage around the unit, it was determined that rainwater had caused the tank to periodically overflow to the ground.

Sampling and Analysis

Soil samples were first collected at SWMU 33 in the fall of 1992 as part of the confirmatory sampling program. A solvent odor and sheen were noted during drilling on the sample from a depth of five feet. The confirmatory sampling results showed that the sample directly underlying the former tank pit contained elevated concentrations of organic compounds and oil and grease, with estimated concentrations of two semi-volatile compounds. A deeper sample at that location and the sample downgradient of the former tank pit contained much lower concentrations of organic compounds.

Metals analyses from SWMU 33 appeared to be within expected naturally occurring soil concentrations. Subsequent comparisons with background samples confirmed that metals concentrations at SWMU 33 did not appear to be significantly elevated above the background concentrations. Copper and lead are slightly above background values and chromium is somewhat higher than the background. Chromium in particular, has been documented as a natural component of Piedmont soils and this variation is not considered significant. No additional metal analyses were conducted during the RFI at this SWMU.

To continue evaluation of SWMU 33, four borings were advanced in this area during Phase 1 of the RFI. No semi-volatile compound was detected in any of the samples. However, nine volatile organics were detected. The compounds detected in highest concentrations were TCE, acetone, PCE, and *cis* 1,2-dichloroethene.

Based on the chemical analyses performed during the confirmatory sampling program and the RFI, the contaminants of concern at SWMU 33 are volatile organic compounds. In addition to the TCE and its breakdown products found elsewhere onsite, samples from this SWMU contain comparatively more acetone and PCE.

The highest concentrations of volatiles were found in the boring placed directly in the former tank pit and in the boring placed approximately 10 feet downslope from the former tank pit. In both of these locations, concentrations decrease greatly with depth, indicating that the primary soil contamination remains in the upper soil column. Concentrations in the borings placed crossgradient to SWMU 33 and placed approximately 20 feet downslope have decreased markedly. It appears that soil contamination from SWMU 33 is localized very close to the former tank pit with the highest concentrations in the upper soil column. The distribution of soil contamination correlates with the known releases from this tank, which is thought to have overflowed onto the surface when it filled with rainwater. Soil contamination under the tank may have come from overflows moving down the sides of the tank. The concrete tank was thought to have been in good condition when it was removed. The vertical extent of soil contamination in this area is defined by the presence of the organic compounds in the groundwater.

Parker initiated a soil vapor extraction program at SWMU 33 to address the small area of delineated soils contamination. The system consists of a soil vapor extraction point screened from 5 to 25 feet below ground surface. Concentrations of volatile organics in the effluent air as measured in the laboratory were 140 ppm TCE, 34 ppm PCE, and 24 ppm *cis* 1,2-dichloroethene. In addition to the extraction point, two monitoring points were installed approximately 60 feet away to measure the effective radius of influence of the vapor extraction point. These monitoring points are screened from 10.5 to 15.5 feet below ground surface and from 20.5 to 25.5 feet below ground surface. Measurement of negative pressure at both these points indicates that the vapor extraction point is affecting bothshallow and deeper soils at a distance of 60 feet. Parker will continue to operate and monitor the effectiveness of the vapor extraction at SWMU 33.

Additional RFI soil sampling was conducted in this area in 2005. For the investigation, SWMU31 and SWMU 33 were combined into one study area and designated SWMU #31/33. The results of the investigation, the horizontal and vertical extents of VOC impacts in this area were delineated. The results are summarized in the report titled *RCRA Facility Investigation – Soil Assessment and Statistical Evaluation of Background Metal in Soil: SWMU #31/#33, AOC #38, Northeast Plant Area, and Background Locations*, AECOM, 2006.

AOC 35 – Former Plating/Paint Room Floor

Description of Area

AOC 35 formerly included the former main plant floor, the raw materials warehouse on the western side of the building, the former office space on the southeast and southwest sides of the building, and the plating/paint room. Discussions with the NCDEQ resulted in treating the main floor slab and other areas separately from the plating/paint room floor. A report was submitted on June 5, 2006 (ENSR, 2006b) summarizing characterization sampling and statistical evaluation. AOC 35 is considered to encompass the former plating room and paint room concrete floor slabs.

The plating room was constructed with both a concrete floor and an acid resistant brick floor. Floor drains that penetrated the concrete in the plating room, filter press room and paint shop were piped to the plant's wastewater treatment area. The piping consisted of 4-inch, acid resistant, fiberglass pipes. There were also three parallel floor trenches in the plating room. The trenches were approximately one foot wide, one foot deep and 40 to 45 feet long. The trenches were installed to catch any spills of acid or caustic materials from the metal finishing system formerly used in this area. They were designed to catch acid and caustics in separate trenches.

Information Pertaining to Releases

The floor was initially designated as an AOC because of small spills of grease and oil from operating machinery. In the main portion of the plant, drip pans were used to catch small leaks from machinery and sorbent material was used to clean up the floor. Acids and caustics, which could erode the concrete, were restricted to use in the plating room.

Sampling and Analysis

The brick floor and grouting in the plating room was stained and had a dark residue partially covering the surface. Parker removed the brick from the floor and the three trenches. The underlying concrete floor, including the concrete in the trenches, appeared to be in good condition with no cracking or significant pitting. Parker used a video camera and radio locator to map the locations of the piping under this floor, removed the piping and collected soil samples from directly under the piping.

Additional investigations were performed for the former main plant floor in 2006. A summary of these investigations is summarized in the *Workplan - Main Plant Floor Waste Characterization* (ENSR, 2006a) and the *Implementation Report – Revised 6-5-06 - Main Plant Floor Waste Characterization* (ENSR, 2006b). During this investigation 25 concrete cores were collected from statistically generated random selected locations and analyzed for 12 metals (arsenic, barium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver and zinc). Based on the analytical results, the main plant floor did not meet the criteria for unrestricted use based on only one metal (arsenic) but did meet the criteria for disposal at an approved municipal landfill.

In March, 2008, ENSR personnel collected concrete floor slab samples from the northwest edge of the former main floor of the manufacturing building (Investigation Area) and from the previously identified solid wastes management units (SWMUs) (the plating/paint room, SWMU #11, SWMU #13/#36, SWMU #14, SWMU #24). The results indicated that the concrete in the paint room/plating room are not characteristically hazardous. The brick that forms the plating room walls would be stockpiled on-site (in the plating room) to await disposal during the implementation of the NEBA Interim Measures Workplan.

Also in 2008, soil samples were collected from two areas where concrete staining was observed (Stained Concrete Area) along the northwest edge of the former building structure and an area where TCE had been detected in sub-slab vapor samples previously collected at SV-9 and SV-12 (SV-9/SV-12 Area). PCE was detected in shallow (less than five feet below ground surface) soil samples SS-1, SS-2, SS-3, SS-4, and SS-6 (Phase 1, March 2008) at concentrations above the NCDEQ HWS Soil Screening levels (SSLs) and “Contained-In” Policy Unrestricted Use Levels (Unrestricted Use Levels). However, deeper samples collected at each of these locations (Phase 2, November 2008) did not contain PCE or other VOCs in excess of HWS SSLs or Unrestricted Use Levels, demonstrating the PCE-impacted soils are limited to the shallow interval. Additionally, delineation samples (Phase 2, November 2008) SS-7 through SS-20 did not contain VOCs above HWS SSLs or Unrestricted Use Levels indicating the areal extent of PCE in soils was also defined. Naphthalene and bis(2-ethylhexyl)phthalate were also detected in shallow soil samples, however their concentrations did not exceed applicable regulatory limits. Bis(2-ethylhexyl)phthalate is a relatively common laboratory contaminant and is not assumed to be associated with site soils.

No other VOCs or semi-VOCs were detected above laboratory limits, documenting that both the areal and vertical extent of impacted soils is restricted to shallow soils beneath sample locations SS-1 through SS-6. Based on the soil analytical data, no additional delineation sampling was recommended. The results are presented in the Soil Sampling Results – Stained Concrete Area and SV-9/SV-12 Area, AECOM, 2009.

NEBA – AOC 36 – Caustics Storage Building Spills

Description of Area

The former caustics storage building was located on the northeast side of the facility, outside the main plant, but enclosed in the fenced area containing the wastewater treatment area. The building is believed to have been in service from 1965 to 1990. The 20 feet by 40 feet building rested on a concrete floor. The building was demolished and removed from the site in 1990. The flooring still appears structurally intact and is 6 inches thick. There are no floor drains or breaches in the slab. According to former plant personnel, the caustics materials stored in this building were in dry form. No liquid materials were ever stored in this building and plant personnel were in the building on a daily basis.

Information Pertaining to Releases

Reportedly, there were no known instances of significant spills. Any spills that did occur would have been small amounts during transfer of materials from one container to another. These would have been cleaned up at the time of the spill. It seems unlikely that small spills of dry materials inside the building on the concrete floor could have impacted the environment.

Sampling and Analysis

During RFI soil sampling conducted in 2003 soil, VOCs and metals were detected in soil at concentrations above published screening criteria. Additional RFI soil sampling was conducted in this area in 2005. For the 2005 investigation, this area was grouped with several other SWMUs and AOCs and identified in the Northeast Plant Area. The soil borings advanced in the

Northeast Plant Area were placed to fill data gaps from previous investigations and were principally designed to determine the horizontal and vertical extent of VOC contamination in soils. No source area borings were advanced during this investigation. In order to complete horizontal and vertical delineation of soil contamination, eight soil borings were advanced in the Northeast Plant Area. Although several VOCs were detected, most of the concentrations were at or slightly above laboratory reporting limits. Based on the results of the investigation it was determined the horizontal and vertical extent of VOCs in soils had been sufficiently delineated. The results are summarized in the report titled *RCRA Facility Investigation – Soil Assessment and Statistical Evaluation of Background Metal in Soil: SWMU #31/#33, AOC #38, Northeast Plant Area, and Background Locations*, AECOM, 2006.

NEBA – AOC 37 – Acid Storage Building Spills

Description of Area

AOC 37 includes the spills associated with the former Acid Storage Building, located on the northeast side of the facility, outside the main plant. The building is believed to have been in service from about 1960 to 2001. The former acid storage building was approximately 20 by 40 foot building and used to store various acids utilized in the wastewater treatment process. The building rested on a concrete floor approximately 6-inches thick. The building was demolished and removed from the site in 2001. The concrete floor that the building rested upon remains intact.

Information Pertaining to Releases

No reported leaks or spills other than small drips during transfer of materials have been documented.

Sampling and Analysis

Additional RFI soil sampling was conducted in this area in 2005. For the 2005 investigation, this area was grouped with several other SWMUs and AOCs and identified in the Northeast Plant Area. The soil borings advanced in the Northeast Plant Area were placed to fill data gaps from previous investigations and were principally designed to determine the horizontal and vertical extent of VOC contamination in soils. No source area borings were advanced during this investigation. In order to complete horizontal and vertical delineation of soil contamination, eight soil borings were advanced in the Northeast Plant Area. Although several VOCs were detected, most of the concentrations were at or slightly above laboratory reporting limits. Based on the results of the investigation it was determined the horizontal and vertical extent of VOCs in soils had been sufficiently delineated. The results are summarized in the report titled *RCRA Facility Investigation – Soil Assessment and Statistical Evaluation of Background Metal in Soil: SWMU #31/#33, AOC #38, Northeast Plant Area, and Background Locations*, AECOM, 2006.

AOC 38 – North Corner Parking Lot

Description of Area

AOC 38 is located near the northern corner of the former plant parking lot. The area then extends northward off the parking lot into a soil and grass area where runoff from some of the parking lot flows. The area of interest appears to be 10 to 20 feet wide and 30 to 40 feet long.

Information Pertaining to Releases

According to former employees, this area may have been used to rinse small containers formerly containing TCE or dispose of small quantities of TCE. Reportedly, this area was not used for drum or waste storage.

Sampling and Analysis

Soil samples were collected during the RFI indicated revealed impacts of volatile organic compounds. It initially appeared soil contamination was limited to the drainage swale at the edge of the parking lot with concentrations decreasing with distance from the parking lot. The data also indicated that soil contamination was greatest within approximately 50 feet of the parking lot and appeared to be limited to the drainage feature.

TCE was the primary compound detected, and also significant percentages of 1,1,1-trichloroethane and tetrachloroethene. The location of the highest concentrations of these compounds just off the parking lot and down the drainage swale corresponds to the recollection that some employees had used this area for disposal of TCE. The vertical extent of soil contamination in this area is defined by the presence of the organic compounds in the groundwater.

Soils contamination in this area has been investigated and a soil vapor extraction program is underway to remove volatile organics from the soils. The system consists of a soil vapor extraction point screened from 10 to 25 feet below ground surface.

Additional RFI soil sampling was conducted in this area in 2005 to further evaluate the horizontal and vertical extent of impacted soil. Several VOCs including 1,1,1-TCA, acetone, cis-1,2-dichloroethene, dichloromethane, PCE, and TCE were detected in the samples. Based on available data, sufficient soil samples have been collected to delineate the horizontal and vertical extent of VOCs in soils in the AOC #38 area. The results are summarized in the report titled *RCRA Facility Investigation – Soil Assessment and Statistical Evaluation of Background Metal in Soil: SWMU #31/#33, AOC #38, Northeast Plant Area, and Background Locations*, AECOM, 2006.

Summary of Resource, Conservation, and Recovery Act Facility Investigation Groundwater Activities

A summary of the approved RFI work was provided in the *RCRA Facility Investigation Groundwater Investigation Report (Phase VII – Offsite Investigation)* (ENSR, 2007b). Following is a summary of historical and relevant information about each SWMU and AOC to be addressed in this document.

- The Phase IV RFI Report was submitted in June 2005 (ENSR, 2005b) documenting investigations conducted in the fall of 2004. The main goal of this phase of the RFI was to complete the offsite (northwest) delineation of the impacted groundwater plume. The investigation was designed to supplement the existing monitoring well network with the installation of four additional wells (MW-32, MW-33, MW-34, and MW-35) north and west of the Former Parker Facility. The report included a description of well installation activities for two saprolite/partially weathered rock monitoring wells and two bedrock monitoring wells. Geophysical, optical, and acoustic logging were also conducted to evaluate bedrock lithology and fracture dimensions and orientations. The geographic extent of TCE-impacted groundwater was not fully delineated during this investigation. However, the presence of TCE in the newly installed wells (MW-33, MW-34, and MW-35) indicated that TCE-impacted groundwater was present offsite to the northwest of the Former Parker Facility.
- The Phase V RFI Report (ENSR, 2005) documented the installation of two additional groundwater monitoring wells (MW-36 and MW-37) hydraulically upgradient (southeast) of the former manufacturing building. The primary goal of this investigation was to demonstrate that the impacted groundwater plume was adequately delineated in the upgradient direction (relative to confirmed source areas).
- The Phase VI RFI Report (ENSR, 2006) summarized soil sampling conducted in November 2005 in the NEBA, the SWMU31/33 area, and the AOC 38 area. The Phase VI investigation completed the delineation of impacted soils in these three areas and also provided background sampling data for use in the evaluation of background metals in these three areas.
- Phase VII completed the horizontal and vertical extent of the dissolved phase plume of targeted compounds north of the facility. The scope of work included the installation of monitoring wells and the collection of surface water samples. This RFI report also included a conceptual site model which explains the orientation and location of the dissolved phase plume.

Based on RFI data, all of the SWMUs and AOCs identified at the Parker facility have been adequately investigated. Furthermore, approval of the RFI was received in a NCDEQ letter submitted to Parker dated March 27, 2009. The NCDEQ letter also indicated a CMS would be required for each of the referenced SWMUs/AOCs.

A revised CMS Workplan was submitted to NCDEQ on March 29, 2012. The CMS Workplan proposed completion of bench scale treatability studies to evaluate ERD, sub-micron scale zero valent iron and in-situ chemical oxidation these treatment technologies for remediation of VOCs in groundwater at the Site. The CMS Workplan was subsequently approved by NCDEQ on September 5, 2012. Based on the results of the benchscale studies, Parker initiated completion of an ERD field pilot test in August 2014. Two injection wells (SIW-1 and DIW-1) and four monitoring wells (PMW-1s, PMW-1d, PMW-2s, and PMW-2d)

were installed to implement the field pilot test. Initial results of the ERD pilot are favorable and further groundwater monitoring is proposed. Following completion of the ERD pilot test, a CMS Report will be prepared summarizing the CMS activities and will include a proposed groundwater remedy for the site.

M References

Daniel, C.C., III, and Payne, R.A., 1990. Hydrogeologic unit map of the Piedmont and Blue Ridge Provinces of North Carolina: U.S. Geological Survey Water-Resource Investigations Report 90-4035, 1 sheet, scale 1:500,000.

Druhan, R.M., Butler, J.R., Horton, J.W. Jr., and Stoddard, E.F., 1994. The Nutbush Creek fault zone, eastern Piedmont of North Carolina. Carolina Geological Society Fieldtrip Guidebook for 1994 annual meeting; p. 47-56.

Earth Tech, 2002a. RCRA Facility Investigation Report, Parker Hannifin Corporation. Volumes I and II. March 2002.

Earth Tech, 2002b. *Annual Groundwater Monitoring Report.* March 2002 – August 2002. Earth Tech. 2002b. *CRA Facility Investigation Report, March 2002.*

Earth Tech, 2003. RCRA Part B Renewal Permit Application, Parker Hannifin Corporation. Volumes I and II. May 2003.

ENSR, 2005b. *Phase IV RFI Report*. ENSR Consulting and Engineering (NC) Inc. June 2005.

ENSR, 2006, RCRA Facility Investigation-Soil Assessment and Statistical Evaluation of Background Metals in Soil, Parker Hannifin Corporation

ENSR, 2007a. RCRA Facility Investigation-Soil Assessment and Statistical Evaluation of Background Metals in Soils: SWMU 31, 33, AOC 38, Northeast Plant Area, and Background Locations. ENSR Consulting and Engineering (NC) Inc. January 31, 2007.

ENSR, 2007b. *RCRA Facility Investigation Groundwater Investigation Report (Phase VII – Offsite Investigation).* ENSR Consulting and Engineering (NC) Inc. September 2007.

ENSR, 2008a. *Interim Measure - Soil Excavation Workplan Northeast Building Area*. ENSR Consulting and Engineering (NC) Inc. June 2008.

ENSR, 2008b. *Revised Post-Closure Plan. Sand Filter Beds (SWMU 16).* ENSR Consulting and Engineering (NC) Inc. February 2008.

ENSR, 2008c. *Revised Closure Plan, Sand Filter Beds (SWMU 16).* ENSR Consulting and Engineering (NC) Inc. February 2008.

ENSR, 2008d. Well Abandonment & Replacment Workplan, Former Parker Hannifin Facility. ENSR Consulting and Engineering (NC) Inc. February 2008.

Farrar, S.S., 1985. Stratigraphy of the northeastern North Carolina Piedmont: Southeastern Geology, v. 25; p. 159-183.

Harned, D.A., and Daniel, C.C., 1987. Ground-water component of Piedmont streams – Implications for ground-water supply systems and land use planning [abs.] Geological Society of America Abstracts with Programs, v. 19, no. 2; p. 89.

Horton, J.W., Jr., Blake, D.E., Wylie, A.S., Jr., and Stoddard, E.F., 1992. Geologic map of the Falls Lake-Wake Forest area, north-central North Carolina: United States Geological Survey Open File Report 92-269, scale 1:24,000.

Parker, J. M., 1979. Geology and Mineral Resources of Wake County. North Carolina Department of Natural Resources and Community Development, Division of Land Resources, Geological Survey Section.

RUST E&I, 1993. *RCRA Facility Investigation Workplan Rev.*01. May 1993. Schrader Bellows: Wake Forest, North Carolina.

RUST E&I, 1997. *Comprehensive RCRA Facility Investigation Report For Schrader Bellows Company.* Division of Parker Hannifin Corporation. Wake Forest, North Carolina.

S&ME, 1987. *RCRA Post-Closure Permit Application For Schrader Bellows Company.* Division of Parker Hannifin Corporation. Wake Forest, North Carolina.

WEGS, 1988. *Phase II Ground Water Quality Assessment.* Schrader Bellows: Wake Forest, North Carolina.

WEGS, 1989a. *Response to First NOD.* Schrader Bellows: Wake Forest, North Carolina.

WEGS, 1989b. *Phase III Ground Water Assessment.* Schrader Bellows. Wake Forest, North Carolina.

WEGS, 1991b. Shrader Bellows RCRA Facility Investigation Workplan. Schrader Bellows: Wake Forest, North Carolina.

Tables

Table B-1
SWMU/AOC Summary
Former Parker Hannifin Facility
Wake Forest, North Carolina

SWMU/AOC Number	SWMU/AOC Description	Status of SWMU/AOC Given in Permit, August 1991	Actions at SWMU/AOC From August 1991 - May 2003	Current Status of SWMU/AOC
1	Operations Equipment	Deleted	No longer exists.	No Further Action
2	Waste Oil Burners	No Further Action Required At This Time	Unit cleaned and removed from facility as part of plant closure. Concrete pad cleaned beneath unit. Rinsate sample indicates this area has been adequately cleaned. Soil sampling conducted exterior to building indicates no impact to site soils.	Decommissioned with No Further Action Required
3	Lubricating and Cutting Oil Drum Storage Units	Deleted	No longer exists.	No Further Action
4	Sump Sucker	No Further Action Required At This Time	Unit cleaned and removed from facility as part of plant closure. Rinsate sample indicates this area has been adequately cleaned.	Decommissioned with No Further Action Required
5	Freon Storage Area	Deleted	No longer exists.	No Further Action
6	Instapak Storage Area	Deleted	No longer exists.	No Further Action
7	Corrosion Inhibitor Drum Storage Area	Deleted	No longer exists.	No Further Action
8	Oil/Water Separator	No Further Action Required At This Time	Unit was cleaned and removed from the facility as part of plant closure. Brick floor was removed and the underlying concrete floor cleaned. In a general area designated for further soils investigation.	RFI Complete. Corrective Action Required
9	Oil Chips Centrifuges	Deleted	No longer exists.	No Further Action
10	Product Parts Cleaner	Deleted	No longer exists.	No Further Action

Table B-1
SWMU/AOC Summary
Former Parker Hannifin Facility
Wake Forest, North Carolina

SWMU/AOC Number	SWMU/AOC Description	Status of SWMU/AOC Given in Permit, August 1991	Actions at SWMU/AOC From August 1991 - May 2003	Current Status of SWMU/AOC
11	Filter Press Room	No Further Action Required At This Time	Filter press equipment cleaned and removed from facility as part of plant closure. Concrete floor, walls and ceiling of room cleaned and later removed. Rinsate samples indicate this area has been adequately cleaned. In a general area designated for further soils investigation.	RFI Complete. Corrective Action Required
12	Sludge Satellite Drum Storage Area	Deleted	No longer exists.	No Further Action
13	Caustic Storage Building	Deleted	Building demolished and all material removed from site.	No Further Action
14	Acid Storage Building	Deleted	Building demolished and all material removed from site.	No Further Action
15	Waste Water Treatment Area	No Further Action Required At This Time	Parker Hannifin plans to conduct confirmatory sampling and remove this unit.	RFI Complete. Corrective Action Required
16	Sand Filter Beds (Regulated Unit)	Regulated by the State's Portion of the Permit	Shallow soil samples taken from downgradient of unit indicate presence of metals in soils. Parker Hannifin plans to sample soils beneath this unit and evaluate clean closure.	RFI Complete. Corrective Action Required
17	Brite Dip Line	Deleted	No longer exists.	No Further Action
18	Passivate Line	Deleted	No longer exists.	No Further Action
19	Chromic Acid Line	Deleted	No longer exists.	No Further Action
20	Open Pit Degreaser	No Further Action Required At This Time	Dismantled and removed from facility in 1991. Concrete portion of floor cleaned. Rinsate sample indicates concrete has been adequately cleaned. Brick floor removed, underlying concrete intact. Floor drains investigated as part of SWMU 35 (plating room).	Decommissioned with No Further Action Required

Table B-1
SWMU/AOC Summary
Former Parker Hannifin Facility
Wake Forest, North Carolina

SWMU/AOC Number	SWMU/AOC Description	Status of SWMU/AOC Given in Permit, August 1991	Actions at SWMU/AOC From August 1991 - May 2003	Current Status of SWMU/AOC
21	Crossbar Degreaser	No Further Action Required	Dismantled and removed from facility in 1991. Concrete portion of floor cleaned. Rinsate sample indicates concrete has been adequately cleaned. Brick floor removed, underlying concrete intact. Floor drains investigated as part of SWMU 35 (plating room).	Decommissioned with No Further Action At This Time
22	Lab Pack	Deleted	No longer exists.	No Further Action
23	Paint Shop	Deleted	Paint room was cleaned as part of plant closure. Rinsate sample indicates this area has been adequately cleaned.	No Further Action
24	Storage Tank Farm	Requires An RPI	Actual unit (the TCE tanks) no longer exist. Soil samples taken and reported in the Comprehensive RPI Report, Rust August 1997. Groundwater investigation continues.	RFI Complete. Corrective Action Required
25	Flammable Material Storage Building	Deleted	No longer exists.	No Further Action
26	Roll On/Roll Off Dumpster	Deleted	No longer exists.	No Further Action
27	Former Bulk Oil Storage Tank	Requires an RFI	The AOC (above ground tank) has been removed. All contaminated soils have been removed and treated to State standards.	Closed with No Further Action Required
28	Former Scrap Yard	Requires an RFI	The AOC (scrap yard) has been removed. All contaminated soils have been removed and treated to below State standards.	Closed with No Further Action Required
29	Scrap Yard	No Further Action Required At This Time	No Action Required. All material removed from this area in 1992. As part of plant closure concrete pad was cleaned. Rinsate sample indicates this area has been adequate!y cleaned.	Decommissioned with No Further Action Required
30	Storage Tank Farm	Deleted	No longer exists.	No Further Action

Table B-1
SWMU/AOC Summary
Former Parker Hannifin Facility
Wake Forest, North Carolina

SWMU/AOC Number	SWMU/AOC Description	Status of SWMU/AOC Given in Permit, August 1991	Actions at SWMU/AOC From August 1991 - May 2003	Current Status of SWMU/AOC
31	Hazardous Waste/Raw Product Storage	No Further Action Required At This Time	As part of plant closure concrete pad was cleaned. Some soil samples collected under concrete impacted by past spills, additional sampling planned.	RFI Complete. Corrective Action Required
32	Former Drum Storage Area	Requires Confirmatory Sampling	The drum storage no longer exists. Soil samples taken and reported in the Comprehensive RFI Report, Rust August 1997. Groundwater investigation continues. Additional soil samples will be taken.	RFI Complete. Corrective Action Required
33	Former Underground Waste Oil Tank	Requires Confirmatory Sampling	The underground tank no longer exists. Soil and groundwater samples taken and reported in the Comprehensive RFI Report, Rust August 1997. Groundwater and soil investigation continues.	RFI Complete. Corrective Action Required
34	Former Drum Storage Area Near Water Tank	Requires Confirmatory Sampling	HWS requested additional sampling at this unit. Parker Hannifin conducted soils and groundwater sampling and requested No Further Action for Soils, continue monitoring groundwater.	No Further Action
35	Main Plant Floor , Floor Trenches, and Floor Drains	Requires an RFI - RFI can be satisfied by clean-up of minor oil staining.	Concrete floor intact with no apparent holes or cracks and was cleaned as part of plant closure. Rinsate sample indicates this area has been adequately cleaned. Soils under investigation in plating room.	Further Investigation Required for plating room and filter press room soils.
36	Caustic Storage Building Spills	Requires an RFI - RFI can be satisfied by clean-up of minor oil staining.	Building no longer exists. Building had concrete floor with no drains, no cracks observed and stored only dry materials.	RFI Complete. Corrective Action Required
37	Acid Storage Building Spills	Requires an RFI - RFI can be satisfied by clean-up of minor oil staining.	Building no longer exists. Building had a concrete floor with a drain to the WWTP, no known spills.	RFI Complete. Corrective Action Required

Table B-1
SWMU/AOC Summary
Former Parker Hannifin Facility
Wake Forest, North Carolina

SWMU/AOC Number	SWMU/AOC Description	Status of SWMU/AOC Given in Permit, August 1991	Actions at SWMU/AOC From August 1991 - May 2003	Current Status of SWMU/AOC
38	North Corner Parking Lot	Not Listed in Permit	Soil sampling confirmed release and delineated area of TCE contamination. Confirmatory sampling of soils is planned to evaluate SVE system.	RFI Complete. Corrective Action Required

Notes:
AOC - Area of Concern
SWMU - Solid Waste Management Unit

Table E-1
Well Construction Table
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Measuring Point Elevation at TOC (feet MSL)	Materials and Diameter of Well	Total Well Depth (feet bls)	Elevation of Screen Interval or Open Hole (feet TOC)	Material Well is Screened in
MW-I	398.85	2" SCH 40 PVC	43.60	353.52 - 363.52	SILTY SAND
MW-2	394.01	2" SCH 40 PVC	44.12	349.14 - 359.14	SILTY SAND
MW-3	393.58	2" SCH 40 PVC	55.70	336.71 - 346.71	SILTY SAND
MW-4	395.65	2" SCH 40 PVC	39.30	355.83 - 365.83	SANDY SILT
MW-5	394.61	2" SCH 40 PVC	39.30	355.10 - 365.10	SILTY SAND
MW-6	385.47	2" SCH 40 PVC	45.64	336.25 - 346.25	SILTY SAND
MW-6D	385.58	2" SCH 40 PVC	69.20	316.48 - 311.48	ROCK
MW-6DR	387.07	2" SCH 40 PVC	103.90	283.96 - 293.96	ROCK
MW-6DR3	387.95	6" Open Hole	154.10	233.06 - 243.06	ROCK
MW-7	354.45	2" SCH 40 PVC	10.00		SILT to SAND
MW-8	357.87	2" SCH 40 PVC	17.20	340.77 - 350.77	SILT to SAND
MW-8D	358.14	2" SCH 40 PVC	67.20	291.3 - 296.3	ROCK
MW-8DR	358.41	2" SCH 40 PVC	92.20	266.68 - 276.68	ROCK
MW-9	362.38	2" SCH 40 PVC	16.05	346.69 - 356.69	SILT to SAND
MW-10	389.10	2" SCH 40 PVC	31.40	355.22 - 365.22	SILTY SAND
MW-11	384.69	2" SCH 40 PVC	35.00	348.83 - 358.83	SILTY SAND
MW-11D	384.79	2" SCH 40 PVC	67.20	317.96 - 322.96	ROCK
MW-12	386.75	2" SCH 40 PVC	38.02	350.83 - 360.83	SANDY SILT
MW-13	377.93	2" SCH 40 PVC	34.65	340.46 - 350.46	SILT
MW-14	377.93	2" SCH 40 PVC	26.65	346.73 - 346.73	SILT to SAND
MW-15	369.88	2" SCH 40 PVC	29.87	339.96 - 349.96	Siltv SAND
MW-16	372.94	2" SCH 40 PVC	24.05	349.41 - 359.41	SILT
MW-17	357.10	2" SCH 40 PVC	17.00	340.57 - 350.57	SAND
MW-18	394.33	2" SCH 40 PVC	40.50	354.55 - 364.55	SAND
MW-18D	397.04	2" SCH 40 PVC	105.50	292.95 - 302.95	ROCK
MW-20	396.11	2" SCH 40 PVC	46.40	349.67 - 359.67	SAND
MW-21	339.38	2" SCH 40 PVC	20.00	318.93 - 328.93	SAND
MW-21D	340.07	2" SCH 40 PVC	142.32	199.0 - 219.0	ROCK
MW-22	382.10	2" SCH 40 PVC	38.35	336.84 - 346.84	SILTY SAND
MW-23	361.41	2" SCH 40 PVC	28.50	332.82 - 342.82	SAND to SILT
MW-24	395.12	4" Stainless Steel	48.11	273.88 - 283.88	ROCK
MW-25	395.42	4" Stainless Steel	45.45	348.04 - 358.04	SILTY SAND
MW-26	394.01	4" SCH 40 PVC	83.70	310.48 -320.48	ROCK
MW-27	390.56	2" SCH 40 PVC	43.72	345.58 - 355.58	SANDY SILT
MW-28	383.14	2" SCH 40 PVC	46.90	335.22 - 345.22	SILTY SAND
MW-29	376.32	2" SCH 40 PVC	37.20	283.69 - 328.69	ROCK
MW-30	389.92	2" SCH 40 PVC	49.31	341.30 - 331.30	ROCK
MW-31	391.26	2" SCH 40 PVC	49.19	370.92 - 355.92	ROCK
MW-32	375.67	6" Carbon Steel	62.55	325.17 - 310.17 (open)	ROCK
MW-33	382.54	2" PVC	40.15	352.54 - 342.54	ROCK
MW-34	383.07	2" PVC	84.00	333.07 - 298.07	ROCK
MW-35R	376.99	2" PVC	32.85	346.50 - 336.50	SILTY SAND
MW-36	391.26	2" PVC	40.10	361.66 - 351.66	SILT
MW-37	395.01	2" PVC	39.51	364.81 - 354.81	ROCK
MW-38	335.10	2" PVC	32.81	312.28 - 302.28	SILTY SAND
MW-39	352.05	2" PVC	26.25	334.66 - 324.66	SILTY SAND
MW-39D	352.02	2" PVC	69.90	284.26 - 279.26	ROCK
MW-40	350.10	2" PVC	32.60	326.98 - 316.98	SILTY SAND
MW-40D	350.54	2" PVC	61.70	293.19 - 288.19	ROCK

Table E-1
Well Construction Table
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Measuring Point Elevation at TOC (feet MSL)	Materials and Diameter of Well	Total Well Depth (feet bls)	Elevation of Screen Interval or Open Hole (feet TOC)	Material Well is Screened in
MW-41	371.79	2" PVC	28.60	353.69 - 343.69	SILTY SAND
PMW-1s	395.15	2" SCH 40 PVC	30.00	40 - 30	SILT and ROCK
PMW-1d	395.54	2" SCH 40 PVC (0-63) 6" SCH 40 PVC (0-47)	73.00	73 - 63	ROCK
PMW-2s	394.97	2" SCH 40 PVC	41.00	41 - 31	ROCK
PMW-2d	395.37	2" SCH 40 PVC (0-60) 6" SCH 40 PVC (0-48)	70.00	70 - 60	ROCK
RW-4	393.87	6" Stainless Steel	78.00	323.31 - 363.94	SILTY SAND and ROCK
RW-6	388.02	6" Open Hole	65.08	306.64 - 334.64	ROCK
RW-19	356.99	6" Open Hole	163.50	205.3 - 316.7	ROCK
POC- l A	393.72	2" Stainless Steel	41.92	351.62 - 341.62	SANDY SILT
POC- l B	393.44	2" Stainless Steel	44.53	328.04 - 338.04	ROCK
POC-2A	395.30	2" Stainless Steel	47.00	349.38 - 359.98	SILTY SAND
POC-2B	395.67	2" Stainless Steel	65.30	330.30 - 341.30	ROCK
SIW-1	395.44	2" SCH 40 PVC	35.00	35 - 25	SILT and ROCK
DIW-1	396.50	6" SCH 40 PVC	46.12	NA	NA

Notes:
MSL - Mean Sea Level
SCH 40 PVC - Schedule 40 Polyvinyl Carbon
TOC - Top of Casing

Table E-2
Summary of Groundwater Elevation - September 2015
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Date Gauged	Measuring Point Elevation at TOC (feet MSL)	Water Level Below TOC (feet)	Groundwater Elevation (feet MSL)
MW-1	9/1/2015	398.85	37.50	361.35
MW-2	9/1/2015	394.01	30.59	363.42
MW-3	9/1/2015	393.58	30.57	363.01
MW-4	9/1/2015	395.65	33.60	362.05
MW-5	9/1/2015	394.61	34.77	359.84
MW-6	9/1/2015	385.47	26.40	359.07
MW-6D	9/1/2015	385.58	29.22	356.36
MW-6DR	9/1/2015	387.07	28.98	358.09
MW-6DR3	9/1/2015	387.95	34.72	353.23
MW-7	9/1/2015	354.45	DRY	DRY
MW-8	9/1/2015	357.87	14.75	343.12
MW-8D	9/1/2015	358.14	14.00	344.14
MW-8DR	9/1/2015	358.41	14.77	343.64
MW-9	9/1/2015	362.38	DRY	DRY
MW-10	9/1/2015	389.10	28.87	360.23
MW-11	9/1/2015	384.69	30.01	354.68
MW-11D	9/1/2015	384.79	30.22	354.57
MW-12	9/1/2015	386.75	23.57	363.18
MW-13	9/1/2015	377.93	28.30	349.63
MW-14	9/1/2015	377.93	22.63	355.30
MW-15	9/1/2015	369.88	23.51	346.37
MW-16	9/1/2015	372.94	23.40	349.54
MW-17	9/1/2015	357.10	12.67	344.43
MW-18	9/1/2015	394.33	33.66	360.67
MW-18D	9/1/2015	397.04	47.48	349.56
MW-20	9/1/2015	396.11	36.49	359.62
MW-21	9/1/2015	339.38	4.87	334.51
MW-21D	9/1/2015	340.07	15.70	324.37
MW-22	9/1/2015	382.10	25.77	356.33
MW-23	9/1/2015	361.41	19.60	341.81
MW-24	9/1/2015	395.12	36.37	358.75
MW-25	9/1/2015	395.42	34.66	360.76
MW-26	9/1/2015	394.01	32.42	361.59
MW-27	9/1/2015	390.56	31.62	358.94
MW-28	9/1/2015	383.14	31.34	351.80
MW-29	9/1/2015	376.32	27.40	348.92
MW-30	9/1/2015	389.92	38.02	351.90
MW-31	9/1/2015	391.26	33.34	357.92
MW-32	9/1/2015	375.67	22.90	352.77
MW-33	9/1/2015	382.54	32.60	349.94
MW-34	9/1/2015	383.07	38.34	344.73
MW-35R	9/1/2015	376.99	22.60	354.39

Table E-2
Summary of Groundwater Elevation - September 2015
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Date Gauged	Measuring Point Elevation at TOC (feet MSL)	Water Level Below TOC (feet)	Groundwater Elevation (feet MSL)
MW-36	9/1/2015	391.26	30.40	360.86
MW-37	9/1/2015	395.01	37.75	357.26
MW-38	9/1/2015	335.10	17.15	317.95
MW-39	9/1/2015	352.05	16.55	335.50
MW-39D	9/1/2015	352.02	14.49	337.53
MW-40	9/1/2015	350.10	16.10	334.00
MW-40D	9/1/2015	350.54	16.35	334.19
MW-41	9/1/2015	371.79	19.01	352.78
RW-4	9/1/2015	393.87	31.62	362.25
RW-6	9/1/2015	388.02	29.80	358.22
RW-19	9/1/2015	356.99	97.78	259.21
POC-1A	9/1/2015	393.72	30.34	363.38
POC-1B	9/1/2015	393.44	30.39	363.05
POC-2A	9/1/2015	395.30	32.84	362.46
POC-2B	9/1/2015	395.67	33.60	362.07

Notes:
MSL - Mean Sea Level
TOC - Top of Casing

Table E-3
Summary of Intra-Aquifer Flow
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well ID	Date	WL Elev. (ft, msl)	Screen Midpoint Elev. (ft, msl)	Gradient (ft/ft)	Direction	Aquifer
MW-6	Sep-15	359.07	341.25	0.099	Downward	Saprolite
MW-6D		356.36	313.98			Rock
MW-6D		356.36	313.98	-0.069	Upward	Rock
MW-6DR		358.09	288.96			Rock
MW-6DR		358.09	288.96	0.095	Downward	Rock
MW-6DR3		353.23	238.06			Rock
MW-8	Sep-15	343.12	345.77	-0.020	Upward	Saprolite
MW-8D		344.14	293.8			Rock
MW-8D		344.14	293.8	0.023	Downward	Rock
MW-8DR		343.64	271.68			Rock
MW-21	Sep-15	334.51	323.93	0.088	Downward	Saprolite
MW-21D		324.37	209			Rock
MW-39	Sep-15	335.50	329.66	-0.042	Upward	Saprolite
MW-39D		337.53	281.76			Rock
MW-40	Sep-15	334.00	321.98	-0.006	Upward	Saprolite
MW-40D		334.19	290.69			Rock

Notes:
ft, msl - Feet relative to mean sea level
ft/ft - feet per foot
Positive gradient is downward (shallow well head > deep well head).
WL Elev. - Water Level Elevation

Table E-4
Historical TCE Groundwater Analytical Data
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well ID	Historic TCE NCAC 2L Permit Level: 3.0 µg/L																				
	July 2005	Feb 2006	Aug 2006	Feb 2007	Aug 2007	Feb 2008	Aug 2008	Feb 2009	Aug 2009	Feb 2010	Sept 2010	Feb 2011	Aug 2011	Feb 2012	Aug 2012	Feb 2013	Aug 2013	Feb 2014	Aug 2014	Mar 2015	Sept 2015
MW-1	<1	<1.0	< 1 U	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	NS	**350.0**	NS	NS	NS	NS	NS	**1810**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	NS	**330.0**	**500.0**	**980.0**	**2190**	**745**	**1000**	NS	**2420**	**1520**	NS	**1600**	**830.0**	**790.0**	**930**	**920**	**1200**	**1100 J**	**1700**	**1200**	**386**
MW-6	**1600**	**1200**	**850.0**	**970.0**	**1380**	**989**	**1230**	**372.0**	**1040**	**2390**	**2700**	**2000**	**2300**	**1900**	**1300**	**2500**	**2800**	**2800 J**	**490**	**4300**	**1720**
MW-6D	NS	**930.0**	**1300**	**1700**	**1800**	**1350**	**397**	**989.0**	**1310**	**2090**	**980.0**	**1500**	**1500**	**970**	**2000**	**2600**	**2200**	**1500 J**	**5100**	**3500**	NS
MW-6DR	**1300**	**270 J**	**1200**	**1200**	**953.0**	**754**	**977**	**809.0**	**897.0**	**3900**	**1100**	**770.0**	**790.0**	**610.0**	**690**	**2800**	**3600**	**910**	**770**	**850**	NS
MW-6DR3	**160.0**	**110.0**	**99.0**	**120.0**	**136.0**	**112**	**121**	**92.6**	**186.0**	**29.7**	**730.0**	**110.0**	**100.0**	**110.0**	**140**	**100**	**66**	**240**	**180**	**170**	**124**
MW-7	NS	**230.0**	NS	**84.0**	NS	NS	NS	NS	NS	**11.8**	**30.0**	**100.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	NS	**11.0**	1.7	**6.7**	**5.3**	**9.6**	NS	**7.3**	**9.5**	**7.6**	**900.0**	**11.0**	NS	**12.0**	NS	7.8	**9.8**	**12**	**14**	**5.9**	**10.1**
MW-8D	NS	**8.7**	**13.0**	**16.0**	**16.0**	**14.9**	**13.3**	**14.0**	**13.0**	**15.9**	**12.0**	**14.0**	**12.0**	**15.0**	**14**	**14**	**11**	**13**	**11**	**6.4**	**3.85**
MW-8DR	**25.0**	**63.0**	**92.0**	**65.0**	**50.7**	**39.9**	**36.2**	**33.3**	**27.1**	**36.2**	**34.0**	**38.0**	**31.0**	**34.0**	**19**	**37**	**37**	**42**	**42**	**35**	**22.3**
MW-9	NS	NS	NS	**610.0**	NS	NS	NS	NS	**383.0**	NS	NS	**410.0**	NS	**570.0**	NS	NS	NS	NS	NS	NS	NS
MW-11	NS	**20.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11D	NS	**610.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-13	**10.0**	**7.9**	**8.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.64
MW-15	NS	**320.0**	**1100**	NS	NS	NS	**1150**	**558.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17	NS	4.9	**7.8**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18	NS	**7.8**	1.2	NS	NS	<1.0	**30.9**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18D	NS	3.6	**4.8**	NS	NS	1.4	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20	**9.3**	**6.9**	**44.0**	NS	2.8	NS	NS	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21	1.0	<1.0	**5.0**	<1.0	< 1 U	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.42 J	<0.153
MW-21D	<1.0	<1.0	**9.8**	<1.0	< 1 U	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.65 J	<0.153
MW-22	NS	**130.0**	**82.0**	NS	NS	NS	**59.8**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23	**27.0**	**16.0**	**20.0**	NS	NS	NS	NS	**16.2**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24	NS	**120.0**	**180.0**	NS	NS	NS	NS	**194.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	**310.0**	**190.0**	**220.0**	NS	NS	NS	**253**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26	**6.4**	**23.0**	**150.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27	**150.0**	**110.0**	< 1 U	NS	NS	**44.4**	NS	**28.2**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-28	**510.0**	**480.0**	**330.0**	**470.0**	**328 A**	**521.0**	NS	**273.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29	**17.0**	**14.0**	**13.0**	NS	NS	NS	**15.3**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**6.19**
MW-30	**22.0**	**22.0**	NS	NS	NS	NS	NS	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31	**12.0**	**20.0**	**8.5**	NS	NS	**7.3**	NS	<1.0	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32	<1	<1.0	< 1 U	<1.0	< 1 U	<1.0	<1.0	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.153
MW-33	**520.0**	**700 J**	**570.0**	**510.0**	**550.0**	**539**	**426 J**	**227.0**	NS	**272.0**	NS	**220.0**	**32.0**	**220.0**	NS	200	NS	**120**	**110**	**89**	**41.6**
MW-34	**310.0**	**340 J**	**280.0**	**390.0**	**63.8**	**58.7**	**126**	NS	**91.0**	NS	**51.0**	NS	NS	NS	**29**	**60**	**120**	NS	**66**	**26**	**20.5**
MW-35	**38.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35R	NS	NS	NS	NS	< 1 U	NS	<1.0	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	<0.50	NS	NS	NS
MW-36	NS	1.1	< 1 U	NS	NS	1.4	NS	<1.0	1.3	<1.0	NS	NS	NS	1.4	1	0.88	0.92	0.53	<0.50	NS	<0.312 U
MW-37	NS	**43.0**	**44.0**	NS	**50.2**	NS	NS	NS	NS	NS	**6.3**	**4.5**	NS	NS	NS	NS	NS	NS	**20**	**20**	NS
MW-38	NS	NS	NS	**20.0**	**17.5**	**20.1**	**24.3**	**24.5**	**27.1**	**24.0**	**22.0**	**21.0**	**32.0**	**26.0**	**33**	**29**	**29**	**27**	**22**	**14**	**10.9 J**
MW-39	NS	NS	NS	<1.0	< 1 U	<1.0	<1.0	<1.0	<1.0	<1.0	1.4 J	<2.0	<0.50	0.47 J	<0.50	<0.50	<0.50	<0.50	<0.50	0.48 J	NS
MW-39D	NS	NS	NS	<1.0	< 1 U	<1.0	<1.0	<1.0	<1.0	<1.0	1.7 J	0.74 J	0.6	0.85	0.63	0.53	<0.50	NS	<0.50	0.50 J	<0.153 UJ
MW-40	NS	NS	NS	<1.0	< 1 U	<1.0	**3.4**	2.1	**8.5**	**9.2**	**11.0**	**6.0**	**5.3**	**3.3**	2.9	4.4	**5.5**	**5.3**	**4.2**	1.5	NS
MW-40D	NS	NS	NS	**12.0**	**5.4**	1.3	**7.8**	**3.1**	**7.7**	**14.0**	**5.5**	**13.0**	**3.1**	**7.4**	**6.3**	**23**	**11**	**7.3**	**7.6**	1.6	0.768 J
MW-41	NS	NS	NS	<1.0	< 1 U	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.40	NS
RW-4	**8500**	**2800**	**5600**	**7100**	**8870 A**	**6330**	**11700 J**	**9840**	**9400**	**11800**	**14000 J**	**14000**	**19000**	**11000**	**11000**	**25000**	**41000**	**39000**	**29000 J**	**190**	**17.7 J**
RW-6	**2000**	**1500**	**1100**	**1500**	**1570**	**1380**	**1650**	**1260**	**1850**	**4300**	**2000**	**1900**	**2200**	**1800**	**1900**	**760**	**3800**	**7500**	**2900**	**1500**	**983 J**
RW-19	NS	**550**	**680**	**690**	**852**	**1070**	**745**	**649**	**789**	**924**	**750**	**840**	**910**	**740**	**760**	**700**	**720**	**570**	**480**	**400**	**283 J**
POC-1A	**3200**	**430**	**1500**	**4800**	NS	NS	**3000**	**1600**	NS	**3440**	**740**	NS	NS	NS	NS	920	**1300 J**	**1200**	**780**	**6.9**	**214**
POC-1B	**6500**	**6500**	**6500**	**5600**	NS	NS	**14400**	**11900**	**12100**	**11100**	**7200**	**1300**	**7700**	**1700**	**4400**	**10000**	**9400**	**8400 J**	**9900**	**6700**	**4470 J**
POC-2A	NS	NS	NS	**1300**	NS	NS	NS	NS	NS	**18600**	**3200**	NS	NS	NS	NS	39000	**20000**	**18000 J**	**22000**	**3200**	**1980 J**
POC-2B	**16000**	**7100**	**13000**	**12000**	NS	**8090**	**9920**	**27800**	**31200**	**16300**	**33000**	**30000**	**45000**	**38000**	**42000**	**30000**	**20000**	**22000 J**	**40000**	**6400**	**2510 J**

Notes:
µg/L - micrograms per liter
J - Estimated
NCAC 2L - Title 15A North Carolina Administrative Code 2L Groundwater Standard
NS - not sampled
U - not detected above the level of the reported sample quantitation limit

Table E-5
Historical 1,4-Dioxane Groundwater Analytical Results
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well ID	Historic 1,4-Dioxane NCAC 2L Permit Level: 3µg/L																				
	July 2005	Feb 2006	Aug 2006	Feb 2007	Aug 2007	Feb 2008	Aug 2008	Feb 2009	Aug 2009	Feb 2010	Sept 2010	Feb 2011	Aug 2011	Feb 2012	Aug 2012	Feb 2013	Aug 2013	Feb 2014	Aug 2014	Mar 2015	Sept 2015
MW-1	<3.2	<3.4	< 3.3 U	NS	NS	NS	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	NS	<3.1	NS	NS	NS	NS	NS	<3.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	NS	<3.0	< 3.6 U	< 3.6 U	< 3.8 U	<4.0	<3.3	<3.2	<3.1	<3.8	**540***	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.60	NS
MW-6	<3.3	<3.8	< 3.6 U	< 3.4 U	< 3.8 U	<3.5	<3.3	<4.0	<3.3	<4.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	**13 J**	2.72 J
MW-6D	NS	<3.3	< 4.4 U	< 3.5 U	< 4.5 U	<3.5	<3.5	<3.6	<3.6	<3.8	<3.0	<3.0	<3.0	1.0 J	<3.0	<3.0	<3.0	<3.0	<3.0	**4.7 J**	NS
MW-6DR	<3.8	<3.1	< 3.3 U	< 3.3 U	< 3.2 U	<4.0 UJ	<3.0	<3.2	**3.9**	<3.9	<3.0	1.6 J	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	**4.7**	1.8 J	NS
MW-6DR3	<3.4	<3.0	< 3.5 U	< 3.1 U	< 3.1 U	<3.9	<3.1	<3.2	<3.2	<3.0 UJ	**6.4**	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.60	<0.597
MW-7	NS	<4.1	NS	< 3.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	NS	<3.7	< 3.0 U	< 4.2 U	< 3.9 U	<3.3	NS	<3.3	NS	<3.6	NS	<3.0	NS	<3.0	NS	<3.0	<3.0	<3.0	<3.0	<0.60	NS
MW-8D	NS	<3.3	< 3.5 U	< 3.6 U	< 3.3 U	<3.7	<3.2	<3.8	<3.0	<3.8	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.60	NS
MW-8DR	<3.1	<3.4	< 3.4 U	< 3.8 U	< 3.2 U	<3.4	<3.2	<3.6	<3.1	<3.3	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.60	NS
MW-9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<3.0	NS	NS	NS	NS	NS	NS	NS
MW-11	NS	<3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11D	NS	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-13	<3.2	<3.2	< 3.2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.597
MW-15	NS	<3.9	< 4.2 U	NS	NS	NS	<3.2	<3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17	NS	<3.5	< 3.3 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18	NS	<3.4	< 4.7 U	NS	NS	<3.5	<3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18D	NS	<3.7	< 3.5 U	NS	NS	<3.5	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20	<3.1	<3.0	< 3.2 U	NS	< 3.6 U	NS	NS	<3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21	<3.0	<3.1	< 3.2 U	< 3.4 U	< 3.8 U	<3.5	<3.2	<3.8	<3.3	<3.0	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.60	NS
MW-21D	<3.4	<3.1	< 3.2 U	< 3.4 U	< 3.3 U	<3.6	<3.2	<3.8	<3.3	<4.0	<1.0	<3.0	<3.0	1.9 J	<3.0	<3.0	<3.0	<3.0	<3.0	<0.60	NS
MW-22	NS	<3.0	< 3.0 U	NS	NS	NS	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23	<3.3	<4.0	< 3.3 U	NS	NS	NS	NS	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24	NS	<3.1	< 3.9 U	NS	NS	NS	NS	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	<3.3	<3.4	< 3.5 U	NS	NS	NS	<3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26	**3**	<3.6	< 4.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27	**19**	**17**	**17**	NS	NS	**14.9**	NS	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-28	<3.3	<3.1	< 3.2 U	< 3.2 U	< 3.7 U	<4.5	NS	<3.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29	<3.3	<3.2	< 3 U	NS	NS	NS	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.597
MW-30	<3.3	<3.4	NS	NS	NS	NS	NS	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31	<3.0	<3.1	< 3.2 U	NS	NS	<3.9	NS	<3.4	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32	<3.2	<3.1	< 3.4 U	< 3.5 U	< 3.8 U	<4.2	<3.2	NS	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.597
MW-33	**39**	**34**	**33**	**29**	**32.4**	**26.1**	**27.4**	**22.3**	NS	**24.2**	NS	**22**	**11**	**9.8**	NS	**12**	NS	**14**	**21**	NS	**9.02**
MW-34	**20**	**18**	**19**	**13**	**12.8**	**11.2**	**14.0**	NS	**11.6**	NS	**7.5**	NS	NS	NS	**5.8**	**7.8**	**3.7**	NS	**9.1**	NS	**6.62**
MW-35R	<3.1	NS	NS	NS	< 4.2 U	NS	<3.4	NS	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	<3.0	NS	NS	NS
MW-36	NS	<3.5	< 3.4 U	NS	NS	<4.4	NS	<3.5	<3.2	<3.8	NS	NS	NS	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NS	NS
MW-37	NS	<3.6	< 3.3 U	NS	< 3.3 U	NS	NS	NS	NS	NS	**10**	<3.0	NS	NS	NS	NS	NS	NS	<3.0	NS	NS
MW-38	NS	NS	NS	< 4.3 U	< 3.2 U	<3.3	<3.1	<3.8	<3.0	<3.8	<1.0	<3.0	<3.0	<3.0	<3.0	1.4 J	<3.0	<3.0	<3.0	NS	NS
MW-39	NS	NS	NS	< 3.4 U	< 3.5 U	<3.2	<3.2	<3.4	<3.7	<3.8	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NS	NS
MW-39D	NS	NS	NS	< 3.4 U	< 3.6 U	<3.5	<3.1	NS	<3.6	<3.0	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NS	NS
MW-40	NS	NS	NS	< 3.4 U	< 3.2 U	<4.7	<3.2	<3.8	<3.1	<3.0	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NS	NS
MW-40D	NS	NS	NS	< 3.3 U	< 3.2 U	<4.6	NS	<3.4	<3.8	<3.5	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NS	NS
MW-41	NS	NS	NS	< 3.3 U	< 3.5 U	<3.4	<3.2	<3.1	<3.3	<3.0	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NS	NS
RW-4	**5.2**	<3.3	< 3.3 U	< 3.3 U	**18.4 A**	<3.3	<3.1	<3.4	**3.6**	<3.2	**12**	2.8 J	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	**3.2**	<0.60	**6.12**
RW-6	<3.1	<3.4	< 3.6 U	< 3.7 U	< 3.3 U	<3.3	<3.2	<3.3	<3.2	<3.3	<10	1.4 J	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	**5.9 J**	**3.64 J**
RW-19	NS	<3.1	< 3.2 U	< 3.6 U	< 3.3 U	<3.3	<3.1	<3.3	<3.1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	0.84 J	0.706 J
POC-1A	<3.1	<3.3	< 3.3 U	< 3.6 U	NS	NS	NS	NS	NS	<3.8	<4.0	NS	NS	NS	NS	<3.0	<3.0	<3.0	<3.0	1.0 J	0.879 J
POC-1B	<3.0	<3.1	< 3.4 U	< 17 U	NS	NS	NS	NS	<10	**8.1**	<10	**8.5**	**9.2**	<3.0	<3.0	**5.5**	<3.0	**11**	**4.1**	**8.7 J**	**10.5 J**
POC-2A	NS	NS	NS	< 4.1 U	NS	NS	NS	NS	NS	**3.6**	**530***	NS	NS	NS	NS	<3.0	<3.0	<3.0	**7.9**	<0.60	**22.3 J**
POC-2B	**14**	<3.1	**15**	< 17 U	NS	**4.1**	NS	NS	<3.3	<3.0	<10	**4.3**	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.60	<0.597

Notes:
*September 2010 data for wells MW-3 and POC-2A are likely anomalous and not representative of actual groundwater concentrations.
µg/L - micrograms per liter
Bold values indicate an exceedance of permit limit.
J - Estimated
NCAC 2L - Title 15A North Carolina Administrative Code 2L Groundwater Standard
NS - Not Sampled
U = Non-detect

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		NE	0.01	0.7	NE	0.002	0.01	1	0.3	0.3	0.015	0.05	0.001	0.1	0.02	0.02	NE	1
Well ID	Sample Date																	
MW-1	7/28/2004	NA	<0.01 U	**0.13**	NA	<0.01 U	<0.01 U	NA	NA	**2.94**	<0.01 U	**1.04**	<0.00025 U	NA	NA	NA	NA	NA
MW-1	7/26/2005	NA	<0.005 U	**0.07**	NA	<0.001 U	<0.002 U	NA	NA	<0.05 U	<0.005 U	**0.015**	<0.0002 U	NA	NA	NA	NA	NA
MW-1	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**0.789**	<0.01 U	**0.145**	**0.0011**	NA	NA	NA	NA	NA
MW-1	2/13/2006	NA	<0.0050 U	**0.069**	NA	<0.0010 U	<0.0020 U	NA	NA	**0.58**	<0.0050 U	**0.16**	<0.00020 U	NA	NA	NA	NA	NA
MW-1B	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	**0.0114**	<0.00025 U	NA	NA	NA	NA	NA
MW-2	2/16/2006	NA	<0.005 U	**0.091**	NA	<0.001 U	**0.01**	NA	NA	**17**	<0.005 U	**0.3**	<0.0002 U	NA	NA	NA	NA	NA
MW-2	2/25/2009	NA	<0.0050	0.0109 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-2B	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	**0.0967**	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-3	7/27/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**1.06**	<0.01 U	**0.0452**	<0.00025 U	NA	NA	NA	NA	NA
MW-3	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-3	2/16/2006	NA	<0.005 U	**0.14**	NA	<0.001 U	**0.0055**	NA	NA	**4.2**	<0.005 U	**0.18**	<0.0002 U	NA	NA	NA	NA	NA
MW-3	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.057**	<0.002 U	NA	**0.87**	<0.005 U	NA	<0.0002 U	**0.03**	<0.01 U	<0.005 U	<0.01 U	**0.02**
MW-3	8/22/2007	NA	<0.0050	**0.0266**	NA	<0.0010	**0.0132**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0059**	<0.0100	<0.0050	NA	<0.0100
MW-3	2/27/2008	NA	<0.0050	**0.0367**	NA	<0.0010	**0.0167**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0082**	<0.0100	<0.0050	NA	<0.0100
MW-3	2/25/2009	NA	<0.0050	0.0195 U	NA	<0.0010	**0.024**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0116**	<0.0100	<0.0050	NA	<0.0100
MW-3	8/26/2009	NA	<0.0050	0.0268 U	NA	<0.0010	**0.0262**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0135**	<0.0100	<0.0050	NA	<0.0100
MW-3	8/25/2011	NA	<0.010	**0.033**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-3	2/23/2012	NA	<0.010	**0.027**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-3	8/29/2012	NA	<0.010	**0.024**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-3	2/20/2013	NA	<0.010	**0.027**	NA	<0.0010	<0.0051	<0.010	NA	**0.12**	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	<0.031
MW-3	8/14/2013	NA	<0.010	**0.031**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-3	2/11/2014	NA	<0.010	<0.031 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-3	8/6/2014	NA	<0.010	<0.043 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-3	3/4/2015	NA	**0.0076 J**	**0.059**	NA	<0.00070	<0.0014	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	<0.0059
MW-3	9/2/2015	NA	N	NA	NA	NA	**0.00421 J**	NA	NA	NA	NA	NA	NA	**0.00629 J**	NA	NA	NA	NA
MW-4	8/13/2013	NA	<0.010	<0.017 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	**0.0023**	<0.010	<0.020	<0.0050	NA	<0.030
MW-4	2/11/2014	NA	<0.010	<0.030 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	**0.0036**	<0.010	<0.020	<0.0050	NA	<0.030
MW-6	7/27/2004	NA	<0.01 U	**0.105**	NA	<0.01 U	<0.01 U	NA	NA	**3.48**	<0.01 U	**0.18**	<0.00025 U	NA	NA	NA	NA	NA
MW-6	7/26/2005	NA	<0.005 U	**0.072 A**	NA	<0.001 U	**0.0068 A**	NA	NA	**2.4 A**	**0.0055**	**0.065**	<0.0002 U	NA	NA	NA	NA	NA
MW-6	7/26/2005	NA	<0.005 U	**0.072**	NA	<0.001 U	**0.0069**	NA	NA	**2.3**	<0.005 U	**0.064**	<0.0002 U	NA	NA	NA	NA	NA
MW-6	8/31/2005	NA	**0.0143**	**1.04**	NA	<0.01 U	**0.107**	NA	NA	**73.1**	**0.0719**	**1.61**	<0.00025 U	NA	NA	NA	NA	NA
MW-6	2/15/2006	NA	<0.005 U	**0.21**	NA	<0.001 U	**0.028**	NA	NA	**15**	**0.0099**	**0.33**	<0.0002 U	NA	NA	NA	NA	NA
MW-6	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.0069**	**0.0062**	NA	**1.2**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.025**
MW-6	8/21/2007	NA	<0.0050	**0.0434**	NA	<0.0010	**0.0123**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.012**
MW-6	2/27/2008	NA	<0.0050	**0.0503**	NA	<0.0010	**0.0126**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0106**
MW-6	2/26/2009	NA	<0.0050	**0.0487**	NA	<0.0010	**0.0056**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-6	8/24/2011	NA	<0.010	**0.046**	NA	<0.0010	**0.019**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6	2/21/2012	NA	<0.010	**0.042**	NA	<0.0010	**0.016**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6	8/29/2012	NA	<0.010	**0.049**	NA	<0.0010	**0.014**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.055 U
MW-6	2/19/2013	NA	**0.0011 J**	**0.04**	NA	**0.00012 J**	**0.018**	**0.0026 J**	NA	NA	NA	NA	<0.00020	**0.00071 J**	<0.020	<0.0050	NA	**0.018 J**
MW-6	8/12/2013	NA	<0.010	**0.042**	NA	<0.0010	**0.019**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6	2/11/2014	NA	<0.010	<0.039 U	NA	<0.0010	**0.015**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6	8/6/2014	NA	<0.010	**0.059 J+**	NA	<0.0010	**0.0063**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6	3/2/2015	NA	<0.0065	**0.045**	NA	<0.00070	**0.013**	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.0084 J**

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		NE	0.01	0.7	NE	0.002	0.01	1	0.3	0.3	0.015	0.05	0.001	0.1	0.02	0.02	NE	1
Well ID	Sample Date																	
MW-6D	2/15/2006	NA	<0.005 U	**0.27**	NA	<0.001 U	<0.002 U	NA	NA	**0.45**	<0.005 U	**0.029**	<0.0002 U	NA	NA	NA	NA	NA
MW-6D	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.0091**	<0.002 U	NA	**0.081**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.033**
MW-6D	8/21/2007	NA	<0.0050	**0.317**	NA	<0.0010	**0.0243**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0086**	<0.0100	<0.0050	NA	**0.0688**
MW-6D	2/27/2008	NA	<0.0050	**0.292**	NA	<0.0010	**0.0078**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0329**
MW-6D	2/25/2009	NA	<0.0050	**0.273**	NA	<0.0010	**0.008**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0456**
MW-6D	8/25/2009	NA	<0.0050	**0.276**	NA	<0.0010	**0.0083**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0152**
MW-6D	8/24/2011	NA	<0.010	**0.31**	NA	<0.0010	**0.006**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.037**
MW-6D	2/22/2012	NA	<0.010	**0.34**	NA	<0.0010	**2.6**	**0.052 J+**	NA	NA	NA	NA	<0.00020	**2**	<0.020	<0.0050	NA	**0.48**
MW-6D	8/29/2012	NA	<0.010	**0.24**	NA	<0.0010	**0.0076**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.039 U
MW-6D	2/19/2013	NA	**0.0028 J**	**0.25**	NA	<0.0010	**0.0048 J**	**0.00094 J**	NA	NA	NA	NA	<0.00020	<0.010	**0.0040 J**	<0.0051	NA	**0.032**
MW-6D	8/12/2013	NA	<0.010	**0.32**	NA	<0.0010	**0.0061**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6D	2/11/2014	NA	<0.010	**0.20 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6D	8/6/2014	NA	<0.010	**0.26 J+**	NA	<0.0010	**0.0054**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6D	3/2/2015	NA	<0.0065	**0.27**	NA	<0.00070	**0.0066 J**	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.0076 J**
MW-6DR	7/27/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	**0.0102**	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-6DR	7/28/2005	NA	<0.005 U	**0.083**	NA	<0.001 U	**0.0039**	NA	NA	**0.058**	<0.005 U	**0.026**	<0.0002 U	NA	NA	NA	NA	NA
MW-6DR	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-6DR	2/16/2006	NA	<0.005 U	**0.086**	NA	<0.001 U	**0.0042**	NA	NA	**0.17**	<0.005 U	**0.051**	<0.0002 U	NA	NA	NA	NA	NA
MW-6DR	2/16/2006	NA	<0.005 U	**0.085 A**	NA	<0.001 U	**0.0045 A**	NA	NA	**0.2 A**	<0.005 U	**0.050 A**	<0.0002 U	NA	NA	NA	NA	NA
MW-6DR	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	**0.0039**	NA	<0.05 U	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.01**
MW-6DR	8/22/2007	NA	<0.0050	**0.0633**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-6DR	2/27/2008	NA	<0.0050	**0.0749**	NA	<0.0010	**0.0056**	**0.0085**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0107**
MW-6DR	2/25/2009	NA	<0.0050	0.0641 U	NA	<0.0010	**0.0101**	**0.0082**	NA	NA	NA	NA	<0.00020	**0.0056**	<0.0100	<0.0050	NA	<0.0100
MW-6DR	8/25/2009	NA	<0.0050	0.0679 U	NA	<0.0010	<0.0050	**0.0054**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-6DR	8/24/2011	NA	<0.010	**0.068**	NA	<0.0010	**0.0068**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR	2/21/2012	NA	<0.010	**0.073**	NA	<0.0010	**0.012**	**0.015**	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR	8/29/2012	NA	<0.010	**0.071**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR	2/19/2013	NA	**0.0032 J**	**0.047**	NA	<0.0010	**0.00072 J**	**0.0049 J**	NA	NA	NA	NA	<0.00020	<0.010	**0.0030 J**	<0.0050	NA	**0.014 J**
MW-6DR	8/12/2013	NA	<0.010	**0.047**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR	2/11/2014	NA	<0.010	**0.080 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR	8/6/2014	NA	<0.010	**0.083 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR	3/3/2015	NA	<0.0065	**0.049**	NA	<0.00070	<0.0014	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	<0.0059
MW-6DR3	7/27/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-6DR3	7/27/2005	NA	<0.005 U	**0.013**	NA	<0.001 U	**0.006**	NA	NA	**0.16**	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
MW-6DR3	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-6DR3	2/16/2006	NA	<0.005 U	**0.015**	NA	<0.001 U	**0.0062**	NA	NA	**0.065**	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
MW-6DR3	2/23/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	<0.05 U	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.019**
MW-6DR3	8/22/2007	NA	<0.0050	**0.0142**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-6DR3	2/27/2008	NA	<0.0050	**0.0155**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.015**
MW-6DR3	2/25/2009	NA	<0.0050	0.0130 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0156**
MW-6DR3	8/25/2009	NA	<0.0050	0.0131 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0109**
MW-6DR3	8/24/2011	NA	<0.010	**0.015**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR3	2/22/2012	NA	<0.010	**0.013**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR3	8/29/2012	NA	<0.010	**0.014**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030 U
MW-6DR3	2/19/2013	NA	**0.0031 J**	**0.015**	NA	**0.000045 J**	**0.0020 J**	**0.0011 J**	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.020 J**
MW-6DR3	8/12/2013	NA	<0.010	**0.015**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR3	2/11/2014	NA	<0.010	<0.013 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR3	8/6/2014	NA	<0.010	<0.014 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-6DR3	3/3/2015	NA	<0.0065	**0.016**	NA	<0.00070	**0.0048 J**	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.01 J**
MW-7	2/14/2006	NA	<0.005 U	**0.32**	NA	<0.001 U	**0.058**	NA	NA	**36**	**0.034**	**0.9**	<0.0002 U	NA	NA	NA	NA	NA
MW-7	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	**0.002**	NA	**0.54**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.012**

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		**NE**	**0.01**	**0.7**	**NE**	**0.002**	**0.01**	**1**	**0.3**	**0.3**	**0.015**	**0.05**	**0.001**	**0.1**	**0.02**	**0.02**	**NE**	**1**
Well ID	**Sample Date**																	
MW-8	7/28/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**1.78**	<0.01 U	**0.119**	<0.00025 U	NA	NA	NA	NA	NA
MW-8	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**2.04**	<0.01 U	**0.138**	<0.00025 U	NA	NA	NA	NA	NA
MW-8	2/14/2006	NA	<0.005 U	**0.14**	NA	<0.001 U	**0.0043**	NA	NA	**5.4**	<0.005 U	**0.4**	<0.0002 U	NA	NA	NA	NA	NA
MW-8	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	**0.063**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	<0.01 U
MW-8	8/21/2007	NA	<0.0050	**0.094**	NA	<0.0010	**0.0064**	**0.0065**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.034**
MW-8	2/26/2008	NA	<0.0050	**0.0184**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-8	2/23/2009	NA	<0.0050	0.0163 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	0.00098 U	<0.0050	<0.0100	<0.0050	NA	**0.01**
MW-8	2/22/2012	NA	<0.010	**0.02**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8	2/20/2013	NA	<0.010	**0.02**	NA	<0.0010	<0.0051	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	<0.031
MW-8	8/13/2013	NA	<0.010	**0.031 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8	2/10/2014	NA	<0.010	<0.017 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8	8/5/2014	NA	<0.010	<0.020 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8	3/2/2015	NA	<0.02 U	**0.019**	NA	<0.00070	<0.0014	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	<0.0059
MW-8D	2/14/2006	NA	<0.005 U	**0.062**	NA	<0.001 U	<0.002 U	NA	NA	**0.28**	<0.005 U	**0.02**	<0.0002 U	NA	NA	NA	NA	NA
MW-8D	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.03**	**0.0084**	NA	**0.87**	<0.005 U	NA	<0.0002 U	**0.016**	<0.01 U	<0.005 U	<0.01 U	**0.081**
MW-8D	8/21/2007	NA	<0.0050	**0.0498**	NA	<0.0010	**0.0067**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0491**
MW-8D	2/26/2008	NA	<0.0050	**0.0593**	NA	<0.0010	**0.0377**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0399**	<0.0100	<0.0050	NA	**0.0413**
MW-8D	2/23/2009	NA	<0.0050	0.0509 U	NA	<0.0010	**0.0107**	<0.0050	NA	NA	NA	NA	0.00098 U	**0.0065**	<0.0100	<0.0050	NA	**0.0396**
MW-8D	2/23/2009	NA	<0.0050	0.0500 U	NA	<0.0010	**0.0105**	<0.0050	NA	NA	NA	NA	0.0010 U	**0.0065**	<0.0100	<0.0050	NA	**0.0407**
MW-8D	8/26/2009	NA	<0.0050	0.0559 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.039**
MW-8D	8/26/2009	NA	<0.0050	0.0572 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0383**
MW-8D	8/24/2011	NA	<0.010	**0.052**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.059**
MW-8D	8/24/2011	NA	<0.010	**0.052**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.056**
MW-8D	2/22/2012	NA	<0.010	**0.054**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8D	2/22/2012	NA	<0.010	**0.056**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8D	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.064**
MW-8D	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.068**
MW-8D	2/20/2013	NA	<0.010	**0.056**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.035**
MW-8D	2/20/2013	NA	<0.010	**0.057**	NA	<0.0010	<0.0051	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	**0.034**
MW-8D	8/13/2013	NA	<0.010	**0.058 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.033**
MW-8D	8/13/2013	NA	<0.010	**0.057 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8D	2/10/2014	NA	<0.010	**0.057 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8D	2/10/2014	NA	<0.010	**0.057 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8D	8/5/2014	NA	<0.010	**0.058 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8D	8/5/2014	NA	<0.010	**0.057 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8D	3/2/2015	NA	<0.0065	**0.061**	NA	<0.00070	<0.0014	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.031 J**
MW-8DR	7/28/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-8DR	7/27/2005	NA	<0.005 U	**0.03**	NA	<0.001 U	**0.032**	NA	NA	**0.39**	<0.005 U	**0.029**	<0.0002 U	NA	NA	NA	NA	NA
MW-8DR	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-8DR	2/14/2006	NA	<0.005 U	**0.024**	NA	<0.001 U	<0.002 U	NA	NA	**0.073**	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
MW-8DR	2/21/2007	<0.005 U	**0.006**	NA	<0.001 U	<0.001 U	**0.0059**	**0.02**	NA	**0.8**	**0.0083**	NA	<0.0002 U	**0.0054**	<0.01 U	<0.005 U	<0.01 U	**0.094**
MW-8DR	8/21/2007	NA	<0.0050	**0.0187**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0327**
MW-8DR	2/26/2008	NA	<0.0050	**0.0224**	NA	<0.0010	<0.0050	**0.0075**	NA	NA	NA	NA	<0.00020	**0.0062**	<0.0100	<0.0050	NA	**0.0402**
MW-8DR	2/23/2009	NA	<0.0050	0.0235 U	NA	<0.0010	**0.0265**	<0.0050	NA	NA	NA	NA	0.00098 U	**0.0148**	<0.0100	<0.0050	NA	**0.0211**
MW-8DR	8/26/2009	NA	<0.0050	0.0237 U	NA	<0.0010	**0.0174**	**0.0085**	NA	NA	NA	NA	<0.00020	**0.0132**	<0.0100	<0.0050	NA	**0.0366**
MW-8DR	8/24/2011	NA	<0.010	**0.027**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.035**
MW-8DR	2/22/2012	NA	<0.010	**0.023**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8DR	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	**0.022**	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.067**
MW-8DR	2/20/2013	NA	<0.010	**0.023**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8DR	8/13/2013	NA	<0.010	<0.020 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8DR	2/10/2014	NA	<0.010	<0.024 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8DR	8/5/2014	NA	<0.010	<0.025 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-8DR	3/2/2015	NA	<0.0065	**0.029**	NA	<0.00070	<0.0014	<0.0053	NA	NA	NA	NA	<0.000049	**0.024**	<0.0074	<0.0028	NA	**0.014 J**

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		**NE**	**0.01**	**0.7**	**NE**	**0.002**	**0.01**	**1**	**0.3**	**0.3**	**0.015**	**0.05**	**0.001**	**0.1**	**0.02**	**0.02**	**NE**	**1**
Well ID	**Sample Date**																	
MW-11	7/27/2004	NA	<0.01 U	**0.45**	NA	<0.01 U	**0.0352**	NA	NA	**40.5**	<0.01 U	**1.01**	<0.00025 U	NA	NA	NA	NA	NA
MW-11	2/15/2006	NA	<0.005 U	**0.19**	NA	<0.001 U	**0.018**	NA	NA	**17**	**0.0062**	**0.39**	<0.0002 U	NA	NA	NA	NA	NA
MW-11D	7/27/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	**0.0226**	<0.00025 U	NA	NA	NA	NA	NA
MW-11D	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	**0.0191**	<0.00025 U	NA	NA	NA	NA	NA
MW-11D	2/15/2006	NA	<0.005 U	**0.031**	NA	<0.001 U	<0.002 U	NA	NA	<0.05 U	<0.005 U	**0.0073**	<0.0002 U	NA	NA	NA	NA	NA
MW-13	7/28/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**2.2**	<0.01 U	**0.133**	<0.00025 U	NA	NA	NA	NA	NA
MW-13	7/26/2005	NA	<0.005 U	**0.044**	NA	<0.001 U	<0.002 U	NA	NA	**0.093**	<0.005 U	**0.015**	<0.0002 U	NA	NA	NA	NA	NA
MW-13	8/31/2005	NA	<0.01 U	**0.122**	NA	<0.01 U	<0.01 U	NA	NA	**4.71**	**0.0159**	**0.337**	<0.00025 U	NA	NA	NA	NA	NA
MW-13	2/15/2006	NA	<0.005 U	**0.12**	NA	<0.001 U	**0.0026**	NA	NA	**5.7**	**0.0074**	**0.37**	<0.0002 U	NA	NA	NA	NA	NA
MW-15	2/14/2006	NA	<0.005 U	**0.72**	NA	<0.001 U	**0.031**	NA	NA	**64**	**0.011**	**3.1**	<0.0002 U	NA	NA	NA	NA	NA
MW-15	2/25/2009	NA	<0.0050	0.0996 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-17	2/14/2006	NA	<0.005 U	**0.12**	NA	<0.001 U	<0.002 U	NA	NA	**1.5**	<0.005 U	**0.2**	<0.0002 U	NA	NA	NA	NA	NA
MW-18	7/28/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**11**	<0.01 U	**0.476**	<0.00025 U	NA	NA	NA	NA	NA
MW-18	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**0.439**	<0.01 U	**0.012**	<0.00025 U	NA	NA	NA	NA	NA
MW-18	2/15/2006	NA	<0.005 U	**0.84**	NA	<0.001 U	**0.064**	NA	NA	**120**	**0.038**	**6.3**	<0.0002 U	NA	NA	NA	NA	NA
MW-18	2/28/2008	NA	<0.0050	**0.0413**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0289**
MW-18D	2/16/2006	NA	<0.005 U	**0.021**	NA	<0.001 U	<0.002 U	NA	NA	**1.2**	<0.005 U	**0.14**	<0.0002 U	NA	NA	NA	NA	NA
MW-18D	2/28/2008	NA	<0.0050	**0.0322**	NA	<0.0010	**0.352**	**0.372**	NA	NA	NA	NA	<0.00020	**0.17**	<0.0100	<0.0050	NA	**0.0864**
MW-20	7/26/2005	NA	<0.005 U	**0.012**	NA	<0.001 U	<0.002 U	NA	NA	**0.35**	<0.005 U	**0.012**	<0.0002 U	NA	NA	NA	NA	NA
MW-20	2/14/2006	NA	<0.005 U	**0.053**	NA	<0.001 U	<0.002 U	NA	NA	**2.8 J**	<0.005 U	**0.2**	<0.0002 U	NA	NA	NA	NA	NA
MW-20	2/15/2006	NA	<0.005 U	**0.050 A**	NA	<0.001 U	**0.0024 A**	NA	NA	**5.4 J**	<0.005 U	**0.24 A**	<0.0002 U	NA	NA	NA	NA	NA
MW-20	8/21/2007	NA	<0.0050	**0.0146**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0107**
MW-20	2/24/2009	NA	<0.0050	0.0110 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-21	7/28/2005	NA	<0.005 U	**0.029**	NA	<0.001 U	**0.002**	NA	NA	**0.57**	**0.0068**	**0.15**	<0.0002 U	NA	NA	NA	NA	NA
MW-21	2/13/2006	NA	<0.0050 U	**0.022**	NA	<0.0010 U	**0.0028**	NA	NA	**0.86**	**0.0077**	**0.11**	<0.00020 U	NA	NA	NA	NA	NA
MW-21	2/21/2007	<0.005 U	**0.0079**	NA	<0.001 U	<0.001 U	<0.005 U	**0.024**	NA	**1.1**	**0.0089**	NA	<0.0002 U	**0.0097**	<0.01 U	<0.005 U	<0.01 U	**0.089**
MW-21	8/20/2007	NA	<0.0050	**0.0168**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	**0.0051**	<0.0100	<0.0050	NA	<0.0100
MW-21	2/25/2008	NA	<0.0050	**0.0204 J+**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	**0.0129**	<0.0100	<0.0050	NA	<0.0100
MW-21	2/24/2009	NA	<0.0050	0.0189 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	**0.0088**	<0.0100	<0.0050	NA	<0.0100
MW-21	8/25/2009	NA	<0.0050	0.0193 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	**0.0099**	<0.0100	<0.0050	NA	<0.0100
MW-21	8/23/2011	NA	<0.010	**0.025**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.012**	<0.020	<0.0050	NA	<0.030
MW-21	2/21/2012	NA	<0.010	**0.024**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.012**	<0.020	<0.0050	NA	<0.030
MW-21	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.012**	<0.020	<0.0050	NA	<0.030
MW-21	2/19/2013	NA	<0.0099	**0.02**	NA	**0.00028 J**	<0.0050	**0.0014 J**	NA	NA	NA	NA	<0.00020	**0.0083 J**	**0.0048 J**	<0.0050	NA	**0.015 J**
MW-21	8/12/2013	NA	<0.010	**0.079**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.031**	<0.020	<0.0050	NA	<0.030
MW-21	2/10/2014	NA	<0.010	**0.074 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.02**	<0.020	<0.0050	NA	<0.030
MW-21	8/5/2014	NA	<0.010	**0.13 J+**	NA	**0.0011**	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.028**	<0.020	<0.0050	NA	<0.030
MW-21	3/4/2015	NA	<0.0065	**0.06**	NA	<0.00070	<0.0014	<0.02 U	NA	NA	NA	NA	<0.000049	**0.015 J**	<0.0074	<0.0028	NA	**0.016 J**
MW-21D	7/28/2005	NA	<0.005 U	**0.021**	NA	<0.001 U	**0.038**	NA	NA	**0.34**	<0.005 U	**0.014**	<0.0002 U	NA	NA	NA	NA	NA
MW-21D	2/13/2006	NA	<0.0050 U	**0.017**	NA	<0.0010 U	<0.0020 U	NA	NA	**0.15**	<0.0050 U	**0.0086**	<0.00020 U	NA	NA	NA	NA	NA
MW-21D	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	**0.089**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.031**
MW-21D	8/20/2007	NA	<0.0050	**0.0209**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.369**
MW-21D	2/25/2008	NA	<0.0050	**0.0229 J+**	NA	<0.0010	**0.006**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.105**
MW-21D	2/24/2009	NA	<0.0050	0.0206 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	0.0818 U
MW-21D	8/25/2009	NA	<0.0050	0.0210 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0621**
MW-21D	8/23/2011	NA	<0.010	**0.026**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.61**
MW-21D	2/21/2012	NA	<0.010	**0.024**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.48**
MW-21D	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.3**
MW-21D	2/19/2013	NA	**0.0020 J**	**0.024**	NA	**0.000065 J**	<0.0050	**0.0013 J**	NA	NA	NA	NA	<0.00020	**0.0045 J**	<0.020	<0.0050	NA	**0.3**
MW-21D	8/13/2013	NA	<0.010	**0.031 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.038**
MW-21D	2/10/2014	NA	<0.010	<0.023 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.1**
MW-21D	8/5/2014	NA	<0.010	<0.027 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.014**	<0.020	<0.0050	NA	**3.5**
MW-21D	3/4/2015	NA	<0.0065	**0.027**	NA	<0.00070	<0.0014	<0.0053	NA	NA	NA	NA	<0.000049	**0.0057 J**	<0.0074	<0.0028	NA	**0.8**

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		**NE**	**0.01**	**0.7**	**NE**	**0.002**	**0.01**	**1**	**0.3**	**0.3**	**0.015**	**0.05**	**0.001**	**0.1**	**0.02**	**0.02**	**NE**	**1**
Well ID	**Sample Date**																	
MW-22	7/28/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**0.408**	<0.01 U	**0.0162**	<0.00025 U	NA	NA	NA	NA	NA
MW-22	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	<0.1 U	<0.01 U	<0.01 U	<0.00025 U	NA	NA	NA	NA	NA
MW-22	2/14/2006	NA	<0.005 U	**0.082**	NA	<0.001 U	<0.002 U	NA	NA	**0.52**	<0.005 U	**0.024**	<0.0002 U	NA	NA	NA	NA	NA
MW-23	7/28/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**5.05**	<0.01 U	**0.183**	<0.00025 U	NA	NA	NA	NA	NA
MW-23	7/26/2005	NA	<0.005 U	**0.039**	NA	<0.001 U	**0.0024**	NA	NA	**0.59**	<0.005 U	**0.026**	<0.0002 U	NA	NA	NA	NA	NA
MW-23	8/31/2005	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**2.6**	**0.0116**	**0.101**	<0.00025 U	NA	NA	NA	NA	NA
MW-23	2/14/2006	NA	<0.005 U	**0.08**	NA	<0.001 U	**0.0058**	NA	NA	**6.3**	<0.005 U	**0.24**	<0.0002 U	NA	NA	NA	NA	NA
MW-23	2/25/2009	NA	<0.0050	0.0313 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-24	2/17/2006	NA	<0.005 U	**0.019**	NA	<0.001 U	**0.015**	NA	NA	**2**	<0.005 U	**0.096**	<0.0002 U	NA	NA	NA	NA	NA
MW-24	2/25/2009	NA	<0.0050	0.0109 U	NA	<0.0010	**0.0274**	**0.0079**	NA	NA	NA	NA	<0.00020	**0.0149**	<0.0100	<0.0050	NA	**0.0106**
MW-25	7/27/2005	NA	<0.005 U	**0.027**	NA	<0.001 U	**0.022**	NA	NA	**0.26**	<0.005 U	**0.018**	<0.0002 UJ	NA	NA	NA	NA	NA
MW-25	2/16/2006	NA	<0.005 U	**0.14**	NA	<0.001 U	**2.5**	NA	NA	**23**	<0.005 U	**0.26**	<0.0002 U	NA	NA	NA	NA	NA
MW-26	7/26/2005	NA	**0.0083**	**1.4**	NA	<0.001 U	**4.1**	NA	NA	**110**	**0.61**	**5.2**	<0.0002 U	NA	NA	NA	NA	NA
MW-26	2/17/2006	NA	**0.0056**	**0.38**	NA	<0.001 U	**0.36**	NA	NA	**16**	**0.17**	**0.93**	<0.0002 U	NA	NA	NA	NA	NA
MW-27	7/26/2005	NA	<0.005 U	**0.024 A**	NA	<0.001 U	<0.002 A	NA	NA	**0.56 J**	<0.005 U	**0.022 A**	<0.0002 U	NA	NA	NA	NA	NA
MW-27	7/26/2005	NA	<0.005 U	**0.026**	NA	<0.001 U	**0.023**	NA	NA	**0.26**	<0.005 U	**0.019**	<0.0002 U	NA	NA	NA	NA	NA
MW-27	2/14/2006	NA	<0.005 U	**0.41**	NA	<0.001 U	**0.0068**	NA	NA	**16**	<0.005 U	**1.2**	<0.0002 U	NA	NA	NA	NA	NA
MW-27	2/27/2008	NA	<0.0050	**0.0822**	NA	<0.0010	**0.0145**	**0.0105**	NA	NA	NA	NA	<0.00020	**0.0076**	<0.0100	<0.0050	NA	**0.0324**
MW-28	7/27/2005	NA	<0.005 U	**0.14 A**	NA	<0.001 U	**0.0027 A**	NA	NA	**3.3 A**	<0.005 U	**0.14 A**	<0.0002 U	NA	NA	NA	NA	NA
MW-28	7/27/2005	NA	<0.005 U	**0.14**	NA	<0.001 U	**0.0027**	NA	NA	**3.4**	<0.005 U	**0.14**	<0.0002 U	NA	NA	NA	NA	NA
MW-28	2/14/2006	NA	<0.005 U	**0.17**	NA	<0.001 U	**0.0039 J**	NA	NA	**5.4 J**	<0.005 U	**0.28 J**	<0.0002 U	NA	NA	NA	NA	NA
MW-28	2/14/2006	NA	<0.005 U	**0.16 A**	NA	<0.001 U	**0.0023 J**	NA	NA	**2.6 J**	<0.005 U	**0.19 J**	<0.0002 U	NA	NA	NA	NA	NA
MW-28	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.013**	**0.0024**	NA	**0.8**	<0.005 U	NA	<0.0002 U	**0.0068**	<0.01 U	<0.005 U	<0.01 U	**0.019**
MW-28	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.011**	**0.0024**	NA	**2.1**	<0.005 U	NA	<0.0002 U	**0.0056**	<0.01 U	<0.005 U	<0.01 U	**0.026**
MW-28	8/22/2007	NA	<0.0050	**0.103 A**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0116 J**
MW-28	8/22/2007	NA	<0.0050	**0.0973 A**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0218 J**
MW-28	2/26/2008	NA	<0.0050	**0.0931**	NA	<0.0010	**0.0056 J**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0113 J**
MW-28	2/26/2008	NA	<0.0050	**0.0855**	NA	<0.0010	<0.0050 UJ	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100 UJ
MW-28	2/25/2009	NA	<0.0050	0.0744 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-28	2/25/2009	NA	<0.0050	0.0754 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-29	7/27/2005	NA	<0.005 U	**0.056**	NA	<0.001 U	**0.66**	NA	NA	**4.3**	<0.005 U	**0.17**	<0.0002 U	NA	NA	NA	NA	NA
MW-29	2/15/2006	NA	<0.005 U	**0.032**	NA	<0.001 U	<0.002 U	NA	NA	<0.05 U	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
MW-30	7/26/2005	NA	<0.005 U	**0.073**	NA	<0.001 U	**0.0036**	NA	NA	**2.5**	<0.005 U	**0.1**	<0.0002 U	NA	NA	NA	NA	NA
MW-30	2/15/2006	NA	<0.005 U	**0.1**	NA	<0.001 U	**0.0055**	NA	NA	**4.2**	<0.005 U	**0.23**	<0.0002 U	NA	NA	NA	NA	NA
MW-30	2/15/2006	NA	<0.005 U	**0.094 A**	NA	<0.001 U	**0.0046 A**	NA	NA	**4.0 A**	<0.005 U	**0.2 A**	<0.0002 U	NA	NA	NA	NA	NA
MW-30	2/26/2009	NA	<0.0050	**0.0316**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-31	7/27/2005	NA	<0.005 U	**0.043**	NA	<0.001 U	<0.002 U	NA	NA	**0.074**	<0.005 U	**0.011**	<0.0002 U	NA	NA	NA	NA	NA
MW-31	2/13/2006	NA	<0.0050 U	**0.06**	NA	<0.0010 U	<0.0020 U	NA	NA	**0.65**	<0.0050 U	**0.068**	<0.00020 U	NA	NA	NA	NA	NA
MW-31	2/27/2008	NA	<0.0050	**0.0576**	NA	<0.0010	**0.0339**	**0.617**	NA	NA	NA	NA	<0.00020	**0.0193**	<0.0100	<0.0050	NA	**0.19**
MW-31	2/24/2009	NA	<0.0050	0.0329 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-31	2/24/2009	NA	<0.0050	0.0306 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-31	8/27/2009	NA	<0.0050	0.0289 U	NA	<0.0010	<0.0050	**0.0075**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-31	8/27/2009	NA	<0.0050	0.0286 U	NA	<0.0010	<0.0050	**0.007**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-32	7/28/2005	NA	<0.005 U	**0.035**	NA	<0.001 U	<0.002 U	NA	NA	**15**	<0.005 U	**0.019**	<0.0002 U	NA	NA	NA	NA	NA
MW-32	2/14/2006	NA	<0.005 U	**0.036**	NA	<0.001 U	<0.002 U	NA	NA	**9.9**	<0.005 U	**0.042**	<0.0002 U	NA	NA	NA	NA	NA
MW-32	2/20/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.19**	**0.0061**	NA	**22**	<0.005 U	NA	<0.0002 U	**0.095**	<0.01 U	<0.005 U	<0.01 U	<0.01 U
MW-32	2/20/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.16**	**0.0052**	NA	**20**	<0.005 U	NA	<0.0002 U	**0.079**	<0.01 U	<0.005 U	<0.01 U	<0.01 U
MW-32	8/21/2007	NA	<0.0050	**0.0344 A**	NA	<0.0010	**0.0181 A**	<0.0050 A	NA	NA	NA	NA	<0.00020	**0.0103 A**	<0.0100	<0.0050	NA	**0.0100 J**
MW-32	8/21/2007	NA	<0.0050	**0.0402 A**	NA	<0.0010	**0.0218 A**	**0.0054 A**	NA	NA	NA	NA	<0.00020	**0.0113 A**	<0.0100	<0.0050	NA	**0.0138 J**
MW-32	2/25/2008	NA	<0.0050	**0.0430 J+**	NA	<0.0010	**0.298**	**0.0077**	NA	NA	NA	NA	<0.00020	**0.156**	<0.0100	<0.0050	NA	<0.0100
MW-32	2/25/2008	NA	<0.0050	**0.0419 J+**	NA	<0.0010	**0.286**	**0.0081**	NA	NA	NA	NA	<0.00020	**0.146**	<0.0100	<0.0050	NA	<0.0100
MW-32	8/26/2009	NA	<0.0050	0.0357 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		**NE**	**0.01**	**0.7**	**NE**	**0.002**	**0.01**	**1**	**0.3**	**0.3**	**0.015**	**0.05**	**0.001**	**0.1**	**0.02**	**0.02**	**NE**	**1**
Well ID	**Sample Date**																	
MW-33	7/26/2005	NA	<0.005 U	**0.036**	NA	<0.001 U	<0.002 U	NA	NA	<0.05 U	<0.005 U	<0.005 U	**0.00044**	NA	NA	NA	NA	NA
MW-33	2/14/2006	NA	<0.005 U	**0.22**	NA	<0.001 U	**0.019**	NA	NA	**9.6**	<0.005 U	**0.39**	<0.0002 U	NA	NA	NA	NA	NA
MW-33	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.015**	**0.0078**	NA	**8.5**	**0.0054**	NA	<0.0002 U	**0.0075**	<0.01 U	<0.005 U	<0.01 U	**0.045**
MW-33	8/21/2007	NA	<0.0050	**0.0556**	NA	<0.0010	**0.0747**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0388**	<0.0100	<0.0050	NA	**0.0152**
MW-33	2/26/2008	NA	<0.0050	**0.0335**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-33	2/26/2009	NA	<0.0050	**0.0289**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-33	8/23/2011	NA	<0.010	**0.088**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-33	2/22/2012	NA	<0.010	**0.036**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-33	2/19/2013	NA	**0.0012 J**	**0.033**	NA	**0.000092 J**	<0.0050	**0.00046 J**	NA	NA	NA	NA	<0.00020	<0.010	**0.0041 J**	<0.0050	NA	**0.017 J**
MW-33	2/11/2014	NA	<0.010	**0.032 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-33	8/5/2014	NA	<0.010	<0.045 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-34	7/25/2005	NA	<0.005 U	**0.11**	NA	<0.001 U	<0.002 U	NA	NA	**4**	<0.005 U	**0.16**	<0.0002 U	NA	NA	NA	NA	NA
MW-34	2/14/2006	NA	<0.005 U	**0.15 A**	NA	<0.001 U	**0.011 J**	NA	NA	**27 A**	<0.005 U	**0.2 A**	<0.0002 U	NA	NA	NA	NA	NA
MW-34	2/15/2006	NA	<0.005 U	**0.14**	NA	<0.001 U	**0.0037 J**	NA	NA	**23**	<0.005 U	**0.2**	<0.0002 U	NA	NA	NA	NA	NA
MW-34	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	**0.0028**	NA	**5.5**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.011**
MW-34	8/21/2007	NA	<0.0050	**0.0538**	NA	<0.0010	**0.0347**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0296**
MW-34	2/26/2008	NA	<0.0050	**0.107**	NA	<0.0010	<0.0050	**0.005**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-34	8/26/2009	NA	<0.0050	0.0850 U	NA	<0.0010	**0.0091**	<0.0050	NA	NA	NA	NA	<0.00020	**0.006**	<0.0100	<0.0050	NA	<0.0100
MW-34	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-34	2/19/2013	NA	**0.0029 J**	**0.08**	NA	<0.0010	<0.0050	**0.00054 J**	NA	NA	NA	NA	<0.00020	**0.00065 J**	**0.0036 J**	<0.0050	NA	**0.012 J**
MW-34	8/14/2013	NA	<0.010	**0.082**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-34	8/5/2014	NA	<0.010	**0.087 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-35	7/25/2005	NA	<0.005 U	**0.046**	NA	<0.001 U	**0.0039**	NA	NA	**0.21**	<0.005 U	**0.031**	<0.0002 U	NA	NA	NA	NA	NA
MW-35	8/21/2007	NA	<0.0050	**0.0791**	NA	<0.0010	**0.005**	**0.0072**	NA	NA	NA	NA	<0.00020	**0.0075**	<0.0100	<0.0050	NA	**0.0844**
MW-35R	8/25/2009	NA	<0.0050	0.0914 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-35R	2/11/2014	NA	<0.010	**0.12**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-36	2/13/2006	NA	<0.0050 U	**0.15**	NA	<0.0010 U	**0.0084**	NA	NA	**7.1**	**0.0077**	**0.87**	<0.00020 U	NA	NA	NA	NA	NA
MW-36	2/27/2008	NA	<0.0050	**0.0889**	NA	<0.0010	**0.0082**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0057**	<0.0100	<0.0050	NA	<0.0100
MW-36	2/24/2009	NA	<0.0050	0.0523 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-36	8/26/2009	NA	<0.0050	0.0861 U	NA	<0.0010	**0.0053**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-36	2/22/2012	NA	<0.010	**0.077**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-36	8/29/2012	NA	<0.010	**0.065**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-36	2/19/2013	NA	<0.0099	**0.072**	NA	**0.00011 J**	<0.0050	<0.0099	NA	NA	NA	NA	<0.00020	<0.0099	<0.020	<0.0050	NA	**0.015 J**
MW-36	8/14/2013	NA	<0.010	**0.06**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-36	2/11/2014	NA	<0.010	**0.059 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-36	8/6/2014	NA	<0.010	**0.065 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-37	2/13/2006	NA	<0.0050 U	**0.034**	NA	<0.0010 U	**0.0046**	NA	NA	**1.9**	**0.0053**	**2**	<0.00020 U	NA	NA	NA	NA	NA
MW-37	8/6/2014	NA	<0.010	<0.027 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-38	2/20/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	**0.27**	<0.005 U	NA	<0.0002 U	**0.0055**	<0.01 U	<0.005 U	<0.01 U	**0.011**
MW-38	8/20/2007	NA	<0.0050	**0.0242**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-38	2/25/2008	NA	<0.0050	**0.0153 J+**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-38	2/24/2009	NA	<0.0050	0.0151 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-38	8/27/2009	NA	<0.0050	0.0270 U	NA	<0.0010	**0.0094**	<0.0050	NA	NA	NA	NA	<0.00020	**0.0076**	<0.0100	<0.0050	NA	<0.0100
MW-38	8/23/2011	NA	<0.010	**0.017**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-38	2/21/2012	NA	<0.010	**0.013**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-38	8/29/2012	NA	<0.010	**0.022**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.034 U
MW-38	2/19/2013	NA	**0.0012 J**	**0.014**	NA	**0.000075 J**	<0.0051	<0.010	NA	NA	NA	NA	<0.00020	**0.00064 J**	<0.020	<0.0051	NA	**0.015 J**
MW-38	8/13/2013	NA	<0.010	<0.010	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-38	2/10/2014	NA	<0.010	<0.015 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-38	8/5/2014	NA	<0.010	<0.029 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		NE	0.01	0.7	NE	0.002	0.01	1	0.3	0.3	0.015	0.05	0.001	0.1	0.02	0.02	NE	1
Well ID	Sample Date																	
MW-39	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	**0.14**	<0.005 U	NA	<0.0002 U	**0.0093**	<0.01 U	<0.005 U	<0.01 U	<0.01 U
MW-39	8/20/2007	NA	<0.0050	**0.0331**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-39	2/25/2008	NA	<0.0050	**0.0312 J+**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-39	2/25/2008	NA	<0.0050	**0.0296 J+**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-39	2/23/2009	NA	<0.0050	0.0372 U	NA	<0.0010	**0.0147**	<0.0050	NA	NA	NA	NA	<0.00020 UJ	**0.0059**	<0.0100	<0.0050	NA	<0.0100
MW-39	2/23/2009	NA	<0.0050	0.0363 U	NA	<0.0010	**0.0159**	<0.0050	NA	NA	NA	NA	0.0019 U	**0.0055**	<0.0100	<0.0050	NA	<0.0100
MW-39	8/27/2009	NA	<0.0050	0.0357 U	NA	<0.0010	**0.005**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0101**
MW-39	8/27/2009	NA	<0.0050	0.0326 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-39	8/23/2011	NA	<0.010	**0.032**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	8/23/2011	NA	<0.010	**0.035**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	2/21/2012	NA	<0.010	**0.034**	NA	<0.0010	**0.011**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	2/21/2012	NA	<0.010	**0.034**	NA	<0.0010	**0.011**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	**0.0051**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	2/19/2013	NA	**0.0012 J**	**0.034**	NA	**0.00023 J**	**0.016**	<0.0099	NA	NA	NA	NA	<0.00020	**0.0036 J**	<0.020	<0.0050	NA	**0.015 J**
MW-39	2/19/2013	NA	**0.0012 J**	**0.035**	NA	**0.00013 J**	**0.016**	<0.010	NA	NA	NA	NA	<0.00020	**0.0034 J**	**0.0037 J**	<0.0050	NA	**0.016 J**
MW-39	8/12/2013	NA	<0.010	**0.033**	NA	<0.0010	**0.014**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	8/12/2013	NA	<0.010	**0.033**	NA	<0.0010	**0.011**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	2/10/2014	NA	<0.010	<0.034 U	NA	<0.0010	**0.016**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	2/10/2014	NA	<0.010	<0.033 U	NA	<0.0010	**0.015**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	8/5/2014	NA	<0.010	<0.031 U	NA	<0.0010	**0.012**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39	8/5/2014	NA	<0.010	<0.032 U	NA	<0.0010	**0.011**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39D	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	**0.44**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	<0.01 U
MW-39D	8/20/2007	NA	<0.0050	**0.0136 A**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100 A
MW-39D	8/20/2007	NA	<0.0050	**0.0140 A**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100 A
MW-39D	2/25/2008	NA	<0.0050	**0.0138 J+**	NA	<0.0010	**0.0058**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-39D	2/23/2009	NA	<0.0050	0.0621 U	NA	<0.0010	**0.0137**	**0.0382**	NA	NA	NA	NA	0.0019 U	**0.0131**	<0.0100	<0.0050	NA	**0.0244**
MW-39D	8/27/2009	NA	<0.0050	0.0158 U	NA	<0.0010	**0.0056**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-39D	8/23/2011	NA	<0.010	**0.016**	NA	<0.0010	**0.0058**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39D	2/21/2012	NA	<0.010	**0.014**	NA	<0.0010	**0.0056**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39D	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	**0.0065**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39D	2/19/2013	NA	**0.0028 J**	**0.015**	NA	**0.00010 J**	**0.0047 J**	**0.00043 J**	NA	NA	NA	NA	<0.00020	<0.010	**0.0043 J**	<0.0051	NA	**0.012 J**
MW-39D	8/12/2013	NA	<0.010	**0.015**	NA	<0.0010	**0.0064**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39D	2/10/2014	NA	<0.010	<0.013 U	NA	<0.0010	**0.0056**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-39D	8/5/2014	NA	<0.010	<0.016 U	NA	<0.0010	**0.0064**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40	2/20/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.0056**	<0.002 U	NA	**0.16**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.012**
MW-40	8/21/2007	NA	<0.0050	**0.0331**	NA	<0.0010	**0.0185**	**0.0052**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0165**
MW-40	2/26/2008	NA	<0.0050	**0.0164**	NA	<0.0010	**0.0056**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-40	2/24/2009	NA	<0.0050	0.0151 U	NA	<0.0010	**0.0059**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-40	8/27/2009	NA	<0.0050	0.0157 U	NA	<0.0010	**0.0056**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-40	8/23/2011	NA	<0.010	**0.017**	NA	<0.0010	**0.0059**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40	2/21/2012	NA	<0.010	**0.016**	NA	<0.0010	**0.0056**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	**0.0067**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40	2/19/2013	NA	**0.0012 J**	**0.018**	NA	**0.000087 J**	**0.0046 J**	<0.010	NA	NA	NA	NA	<0.00020	**0.0011 J**	<0.020	<0.0050	NA	**0.013 J**
MW-40	8/13/2013	NA	<0.010	<0.010	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40	2/10/2014	NA	<0.010	<0.018 U	NA	<0.0010	**0.0072**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40	8/5/2014	NA	<0.010	<0.019 U	NA	<0.0010	**0.0079**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		**NE**	**0.01**	**0.7**	**NE**	**0.002**	**0.01**	**1**	**0.3**	**0.3**	**0.015**	**0.05**	**0.001**	**0.1**	**0.02**	**0.02**	**NE**	**1**
Well ID	**Sample Date**																	
MW-40D	2/20/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.026**	**0.024**	NA	**4**	<0.005 U	NA	<0.0002 U	**0.014**	<0.01 U	<0.005 U	<0.01 U	<0.01 U
MW-40D	8/21/2007	NA	<0.0050	**0.0275**	NA	<0.0010	**0.0119**	**0.0055**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0526**
MW-40D	2/26/2008	NA	<0.0050	**0.0081**	NA	<0.0010	**0.0863**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	**0.0168**	<0.0050	NA	<0.0100
MW-40D	2/24/2009	NA	<0.0050	0.0239 U	NA	<0.0010	**0.0052**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-40D	8/27/2009	NA	<0.0050	0.0314 U	NA	<0.0010	**0.008**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-40D	8/23/2011	NA	<0.010	**0.026**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40D	2/21/2012	NA	<0.010	**0.024**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40D	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40D	2/19/2013	NA	**0.0021 J**	**0.027**	NA	<0.0010	**0.0047 J**	**0.0011 J**	NA	NA	NA	NA	<0.00020	**0.00056 J**	**0.0022 J**	<0.0050	NA	**0.012 J**
MW-40D	8/13/2013	NA	<0.010	**0.027 J+**	NA	<0.0010	**0.0066**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40D	2/10/2014	NA	<0.010	<0.026 U	NA	<0.0010	**0.0051**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-40D	8/5/2014	NA	<0.010	<0.027 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-41	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	<0.05 U	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.014**
MW-41	8/20/2007	NA	<0.0050	**0.0445**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-41	2/26/2008	NA	<0.0050	**0.0426**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-41	2/24/2009	NA	<0.0050	0.0316 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-41	8/27/2009	NA	<0.0050	0.0327 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
MW-41	8/23/2011	NA	<0.010	**0.034**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-41	2/21/2012	NA	<0.010	**0.03**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-41	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-41	2/19/2013	NA	<0.010	**0.03**	NA	**0.00018 J**	<0.0051	<0.010	NA	NA	NA	NA	<0.00020	<0.010	**0.0024 J**	<0.0051	NA	**0.014 J**
MW-41	8/14/2013	NA	<0.010	**0.027**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-41	2/10/2014	NA	<0.010	<0.030 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
MW-41	8/5/2014	NA	<0.010	<0.022 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
PMW-1D	8/7/2014	NA	NA	NA	NA	NA	NA	NA	**0.28**	**1.9**	NA	NA	NA	NA	NA	NA	NA	NA
PMW-1S	8/7/2014	NA	NA	NA	NA	NA	NA	NA	**0.12**	**0.23**	NA	NA	NA	NA	NA	NA	NA	NA
PMW-2D	8/7/2014	NA	NA	NA	NA	NA	NA	NA	<0.10	**0.37**	NA	NA	NA	NA	NA	NA	NA	NA
PMW-2S	8/7/2014	NA	NA	NA	NA	NA	NA	NA	<0.10	**0.29**	NA	NA	NA	NA	NA	NA	NA	NA
POC-1A	7/27/2004	NA	**0.0271**	**1.47**	NA	<0.01 U	**0.0289**	NA	NA	**67.3**	**0.016**	**4.56**	**0.00211**	NA	NA	NA	NA	NA
POC-1A	7/27/2005	NA	<0.005 U	**0.076**	NA	<0.001 U	**0.0026**	NA	NA	**1.5**	<0.005 U	**0.18**	<0.0002 U	NA	NA	NA	NA	NA
POC-1A	2/16/2006	NA	<0.005 U	**0.25 J**	NA	<0.001 U	**0.011 J**	NA	NA	**11**	<0.005 U	**0.83 J**	<0.0002 U	NA	NA	NA	NA	NA
POC-1A	2/16/2006	NA	<0.005 U	**0.14 J**	NA	<0.001 U	**0.0058 J**	NA	NA	**7.4 A**	<0.005 U	**0.47 J**	<0.0002 U	NA	NA	NA	NA	NA
POC-1A	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	<0.05 U	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	<0.01 U
POC-1A	2/20/2013	NA	<0.010	**0.093**	NA	<0.0010	<0.0051	<0.010	NA	NA	NA	NA	**0.0023**	<0.010	<0.020	<0.0051	NA	<0.031
POC-1A	8/13/2013	NA	<0.010	**0.12 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	**0.0023**	<0.010	<0.020	<0.0050	NA	<0.030
POC-1A	2/11/2014	NA	<0.010	**0.12**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	**0.0012**	<0.010	<0.020	<0.0050	NA	<0.030
POC-1A	8/6/2014	NA	<0.010	**0.071 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	**0.0004**	<0.010	<0.020	<0.0050	NA	<0.030
POC-1A	3/4/2015	NA	<0.0065	**0.063**	NA	<0.00070	**0.0017 J**	<0.0053	NA	NA	NA	NA	**0.000049 J**	<0.0049	<0.0074	<0.0028	NA	<0.0059
POC-1A	9/2/2015	NA	NA	NA	NA	NA	**0.0218**	NA	NA	NA	NA	NA	NA	**0.0164**	NA	NA	NA	NA
POC-1B	7/27/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**0.61**	<0.01 U	**0.0191**	<0.00025 U	NA	NA	NA	NA	NA
POC-1B	7/26/2005	NA	<0.005 U	**0.0075**	NA	<0.001 U	**0.0045**	NA	NA	**0.081**	<0.005 U	**0.0098**	<0.0002 U	NA	NA	NA	NA	NA
POC-1B	2/16/2006	NA	<0.005 U	**0.0076**	NA	<0.001 U	**0.0036**	NA	NA	<0.05 U	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
POC-1B	2/21/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.013**	**0.0065**	NA	**0.24**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.035**
POC-1B	2/23/2012	NA	<0.010	**0.015**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.76**
POC-1B	8/29/2012	NA	<0.010	**0.029**	NA	<0.0010	**0.019**	**0.013**	NA	NA	NA	NA	<0.00020	**0.022**	<0.020	<0.0050	NA	**0.32 J+**
POC-1B	2/20/2013	NA	<0.010	**0.032**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	**0.016**	<0.020	<0.0050	NA	**0.04**
POC-1B	8/13/2013	NA	<0.010	**0.050 J+**	NA	<0.0010	**0.008**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.052**
POC-1B	2/11/2014	NA	<0.010	**0.043 J+**	NA	<0.0010	**0.0055**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-1B	8/6/2014	NA	<0.010	<0.035 U	NA	<0.0010	**0.0055**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-1B	3/4/2015	NA	<0.0065	**0.031**	NA	<0.00070	**0.0055 J**	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.024 J**
POC-1B	9/2/2015	NA	NA	NA	NA	NA	**0.00842 J**	NA	NA	NA	NA	NA	NA	<0.00490	NA	NA	NA	NA

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		NE	0.01	0.7	NE	0.002	0.01	1	0.3	0.3	0.015	0.05	0.001	0.1	0.02	0.02	NE	1
Well ID	Sample Date																	
POC-2A	7/27/2004	NA	<0.01 U	**0.424**	NA	<0.01 U	**0.0166**	NA	NA	**42.5**	<0.01 U	**1.23**	**0.00161**	NA	NA	NA	NA	NA
POC-2A	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	<0.002 U	NA	**2.9**	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.023**
POC-2A	2/20/2013	NA	<0.010	**0.018**	NA	<0.0010	<0.0051	<0.010	NA	**0.42**	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	<0.031
POC-2A	8/13/2013	NA	<0.010	**0.051 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2A	2/11/2014	NA	<0.010	**0.047 J+**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2A	8/7/2014	NA	<0.010	**0.079 J+**	NA	<0.0010	<0.0050	<0.010	<0.10	**0.46**	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2A	3/3/2015	NA	**0.0068 J**	**0.05**	NA	<0.00070	<0.0014	<0.0053	NA	NA	NA	NA	<0.000049	**0.0062 J**	<0.0074	<0.0028	NA	**0.0088 J**
POC-2A	9/2/2015	NA	NA	NA	NA	NA	**0.00562 J**	NA	NA	NA	NA	NA	NA	<0.00490	NA	NA	NA	NA
POC-2B	7/27/2004	NA	<0.01 U	<0.1 U	NA	<0.01 U	<0.01 U	NA	NA	**0.246**	<0.01 U	**0.0111**	<0.00025 U	NA	NA	NA	NA	NA
POC-2B	7/27/2005	NA	<0.005 U	**0.038**	NA	<0.001 U	**0.0025**	NA	NA	<0.05 U	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
POC-2B	2/16/2006	NA	<0.005 U	**0.015**	NA	<0.001 U	**0.0056 J**	NA	NA	**0.22 J**	<0.005 U	**0.0099 J**	<0.0002 U	NA	NA	NA	NA	NA
POC-2B	2/16/2006	NA	<0.005 U	**0.016 A**	NA	<0.001 U	**0.01 J**	NA	NA	**0.38 J**	<0.005 U	**0.016 J**	<0.0002 U	NA	NA	NA	NA	NA
POC-2B	2/22/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.013**	<0.002 U	NA	<0.05 U	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.018**
POC-2B	2/28/2008	NA	<0.0050	**0.0133**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0122**
POC-2B	8/25/2009	NA	<0.0050	0.0096 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
POC-2B	8/24/2011	NA	<0.010	**0.011**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2B	2/23/2012	NA	<0.010	<0.010	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2B	8/29/2012	NA	<0.010	**0.012**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2B	2/20/2013	NA	<0.010	<0.010	NA	<0.0010	<0.0051	<0.010	NA	<0.050	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	<0.031
POC-2B	8/13/2013	NA	<0.010	<0.020 U	NA	<0.0010	**0.034**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2B	2/11/2014	NA	<0.010	<0.010	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
POC-2B	8/7/2014	NA	<0.010	<0.018 U	NA	<0.0010	<0.0050	<0.010	<0.10	<0.10	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.040 U
POC-2B	3/3/2015	NA	<0.0065	**3**	NA	**0.0023 J**	**0.26**	<0.0053	NA	NA	NA	NA	<0.000049	**0.3**	**0.084**	<0.0028	NA	**2.4**
POC-2B	9/2/2015	NA	NA	NA	NA	NA	**0.143**	NA	NA	NA	NA	NA	NA	**0.146**	NA	NA	NA	NA
RW-4	7/26/2005	NA	<0.005 U	**0.026**	NA	<0.001 U	**0.0082**	NA	NA	**0.11**	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
RW-4	2/16/2006	NA	<0.005 U	**0.033**	NA	<0.001 U	**0.0049**	NA	NA	**0.17**	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
RW-4	2/23/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	**0.0058**	**0.0048**	NA	<0.05 U	**0.0085**	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.016**
RW-4	2/23/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	**0.0058**	NA	**0.054**	<0.005 U	NA	**0.00039**	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.035**
RW-4	8/22/2007	NA	<0.0050	**0.0226 A**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-4	8/22/2007	NA	<0.0050	**0.0224 A**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-4	3/3/2008	NA	<0.0050	**0.0276**	NA	<0.0010	**0.0058**	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-4	2/25/2009	NA	<0.0050	0.0250 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-4	2/25/2009	NA	<0.0050	0.0254 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-4	8/26/2009	NA	<0.0050	0.0236 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-4	8/26/2009	NA	<0.0050	0.0201 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-4	8/25/2011	NA	<0.010	**0.017**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	8/25/2011	NA	<0.010	**0.017**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	2/22/2012	NA	<0.010	**0.025**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	2/22/2012	NA	<0.010	**0.025**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	8/29/2012	NA	<0.010	**0.025**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	8/29/2012	NA	<0.010	**0.025**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	2/20/2013	NA	<0.010	**0.014**	NA	<0.0010	<0.0051	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	<0.030
RW-4	2/20/2013	NA	<0.010	**0.014**	NA	<0.0010	<0.0051	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	<0.031
RW-4	8/14/2013	NA	<0.010	**0.02**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	8/14/2013	NA	<0.010	**0.021**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	2/17/2014	NA	<0.010	**0.033**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	2/17/2014	NA	<0.010	**0.032**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	8/7/2014	NA	<0.010	<0.041 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	8/7/2014	NA	<0.010	<0.041	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-4	3/4/2015	NA	**0.0069 J**	**0.34**	NA	<0.00070	**0.0059 J**	<0.0053	NA	NA	NA	NA	<0.000049	**0.012 J**	**0.015 J**	<0.0028	NA	**0.012 J**
RW-4	3/4/2015	NA	<0.0065	**0.33**	NA	<0.00070	**0.0098 J**	**0.0070 J**	NA	NA	NA	NA	**0.00016 J**	**0.012 J**	**0.013 J**	<0.0028	NA	**0.0096 J**
RW-4	9/3/2015	NA	NA	NA	NA	NA	**0.0155**	NA	NA	NA	NA	NA	NA	**0.00860 J**	NA	NA	NA	NA
RW-4	9/3/2015	NA	NA	NA	NA	NA	**0.0149**	NA	NA	NA	NA	NA	NA	**0.0102**	NA	NA	NA	NA

Table E-6
Historical Metal Concentrations in Groundwater
Former Parker Hannifin Facility
Wake Forest, North Carolina

	Compound	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
NC 2L Groundwater Standards		**NE**	**0.01**	**0.7**	**NE**	**0.002**	**0.01**	**1**	**0.3**	**0.3**	**0.015**	**0.05**	**0.001**	**0.1**	**0.02**	**0.02**	**NE**	**1**
Well ID	**Sample Date**																	
RW-6	7/26/2005	NA	<0.005 U	**0.14**	NA	<0.001 U	**0.0051**	NA	NA	**0.65**	**0.007**	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
RW-6	2/15/2006	NA	<0.005 U	**0.15**	NA	<0.001 U	**0.0049**	NA	NA	**0.07**	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
RW-6	2/23/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	**0.003**	NA	<0.05 U	<0.005 U	NA	<0.0002 U	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.13**
RW-6	8/21/2007	NA	<0.0050	**0.134**	NA	<0.0010	**0.147**	**0.042**	NA	NA	NA	NA	<0.00020	**0.11**	<0.0100	<0.0050	NA	**0.0508**
RW-6	2/27/2008	NA	<0.0050	**0.15**	NA	<0.0010	**0.0059**	**0.0077 J**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0127**
RW-6	2/27/2008	NA	<0.0050	**0.148**	NA	<0.0010	**0.0059**	<0.0050 UJ	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0109**
RW-6	2/25/2009	NA	<0.0050	**0.128**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.012**
RW-6	8/25/2009	NA	<0.0050	0.136 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	<0.0100
RW-6	8/25/2011	NA	<0.010	**0.14**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-6	2/22/2012	NA	<0.010	**0.14**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-6	8/29/2012	NA	<0.010	**0.14**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.067 U
RW-6	2/19/2013	NA	<0.010	**0.033**	NA	**0.000065 J**	<0.0050	**0.075**	NA	NA	NA	NA	<0.00020	**0.00058 J**	**0.0034 J**	<0.0050	NA	**0.039**
RW-6	8/14/2013	NA	<0.010	**0.1**	NA	<0.0010	<0.0050	**0.044**	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.66**
RW-6	2/17/2014	NA	<0.010	**0.13**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.13**
RW-6	8/6/2014	NA	<0.010	**0.16 J+**	NA	<0.0010	**0.0051**	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-6	3/2/2015	NA	**0.0085 J+**	**0.41**	NA	<0.00070	**0.0017 J**	**0.013 J**	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.11**
RW-6	3/2/2015	NA	**0.0086 J+**	**0.41**	NA	<0.00070	<0.0014	**0.019 J**	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.11**
RW-6	9/3/2015	NA	NA	NA	NA	NA	<0.00140	NA	NA	NA	NA	NA	NA	<0.00490	NA	NA	NA	NA
RW-19	2/16/2006	NA	<0.005 U	**0.044**	NA	<0.001 U	<0.002 U	NA	NA	<0.05 U	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
RW-19	2/16/2006	NA	<0.005 U	**0.046 A**	NA	<0.001 U	<0.002 U	NA	NA	<0.05 U	<0.005 U	<0.005 U	<0.0002 U	NA	NA	NA	NA	NA
RW-19	2/23/2007	<0.005 U	<0.005 U	NA	<0.001 U	<0.001 U	<0.005 U	**0.011**	NA	<0.05 U	<0.005 U	NA	**0.00047**	<0.005 U	<0.01 U	<0.005 U	<0.01 U	**0.056**
RW-19	8/22/2007	NA	<0.0050	**0.0409**	NA	<0.0010	<0.0050	**0.0055**	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.269**
RW-19	2/26/2008	NA	<0.0050	**0.0394**	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.0224**
RW-19	2/24/2009	NA	<0.0050	0.0347 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.139**
RW-19	8/25/2009	NA	<0.0050	0.0386 U	NA	<0.0010	<0.0050	<0.0050	NA	NA	NA	NA	<0.00020	<0.0050	<0.0100	<0.0050	NA	**0.019**
RW-19	8/24/2011	NA	<0.010	**0.039**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**1**
RW-19	2/22/2012	NA	<0.010	**0.032**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-19	8/28/2012	NA	<0.010	<0.20	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.081**
RW-19	2/20/2013	NA	<0.010	**0.031**	NA	<0.0010	<0.0051	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0051	NA	<0.030
RW-19	8/13/2013	NA	<0.010	<0.023 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-19	2/17/2014	NA	<0.010	**0.031**	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	**0.27**
RW-19	8/5/2014	NA	<0.010	<0.035 U	NA	<0.0010	<0.0050	<0.010	NA	NA	NA	NA	<0.00020	<0.010	<0.020	<0.0050	NA	<0.030
RW-19	3/2/2015	NA	<0.0065	**0.034**	NA	<0.00070	**0.0016 J**	<0.0053	NA	NA	NA	NA	<0.000049	<0.0049	<0.0074	<0.0028	NA	**0.92**
RW-19	9/3/2015	NA	NA	NA	NA	NA	<0.00140	NA	NA	NA	NA	NA	NA	<0.00490	NA	NA	NA	NA

Notes:
2L Groundwater Standard - NCAC 15A NCAC 2L Groundwater Standard (April 2013)
NE - Not Established
NA - Not Analyzed

Table E-7
Permit Required Groundwater Monitoring and Recovery Wells, Parameters, and Sampling Frequency
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Monitoring Parameters	Sampling Frequency
Groundwater Quality Monitoring Wells - Point of Compliance Wells		
POC-1A	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-1B	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-2A	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-2B	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
Corrective Action System Effectiveness Monitoring Wells		
MW-3	VOCs, Metals	Annual
MW-4	VOCs, Metals	Annual
MW-6	VOCs, 1,4-Dioxane	Annual
MW-6DR3	VOCs, 1,4-Dioxane	Annual
MW-8	VOCs	Annual
MW-8D	VOCs	Annual
MW-8DR	VOCs	Annual
MW-15	VOCs, 1,4-Dioxane	Annual
MW-21	VOCs	Annual
MW-21D	VOCs	Annual
MW-33	VOCs, 1,4-Dioxane	Annual
MW-34	VOCs, 1,4-Dioxane	Annual
MW-36	VOCs	Annual
MW-38	VOCs	Annual
MW-39D	VOCs	Annual
MW-40D	VOCs	Annual
Corrective Action Groundwater Extraction Wells		
RW-4	VOCs, 1,4-Dioxane, Metals	Annual
RW-6	VOCs, 1,4-Dioxane, Metals	Annual
RW-19	VOCs, 1,4-Dioxane, Metals	Annual

Notes:
VOCs - Volatile Organic Compounds: 1,2 Dichloroethane, 1,1 Dichloroethene, cis-1,2 Dichloroethene, trans-1,2 Dichloroethene, Dichloropropane 1,4-Dioxane, Methyl Ethyl Ketone, Tetrachloroethene, Trichloroethene, and Vinyl Chloride.
Metals - chromium and nickel.
App. IX* - Sampled every 5 years.
Only wells included in the monitoring requirements of the RCRA Part B permit are listed.

Table E-8
Summary of VOCs to be Removed from Permit
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit VOCs / NC2L Standard / Location Concentration (ug/L)										
			Acetone	Benzene	Bromo-dichloromethane	Carbon Disulfide	Chloroform	1,1-DCA	Dibromo-chloromethane/ Chlorodibromomethane	Dichloro-difluoromethane (CFC-12)	Toluene	1,1,1-TCA	Trichloro-fluoromethane
			6000	1	0.6 ug/l	700	70	6	0.4 ug/l	1000	600	200	2000
MW-1	7/28/2004	MW-1_07/28/2004	< 25 U	< 1 U	na	< 1 U	< 1 U	< 1 U	na	< 5 U	< 1 U	< 1 U	< 1 U
MW-1	1/27/2005	MW-1_01/27/2005	< 25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U
MW-1	7/26/2005	925918153/MW-1	na	< 1.0 U	< 1 U	na	< 1.0 U	< 1.0 U	< 1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-1	8/31/2005	MW-1_08/31/2005	< 25 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 5 U	< 1 U	< 1 U	< 1 U
MW-1	2/13/2006	MW-1_02/13/06	< 25 U	< 1.0 U	< 1 U		< 1.0 U	< 1.0 U	< 1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-10	2/16/2016	MW-10-021616	< 10.0	< 0.331	< 1.0 U	< 0.275	< 0.324	< 0.259	< 1.0 U	< 0.551	< 0.780	< 0.319	< 1.20
MW-11	7/27/2004	MW-11_07/27/2004	< 25 U	< 1 U	< 0.380	< 1 U	< 1 U	< 1 U	< 0.327	< 5 U	< 1 U	< 1 U	< 1 U
MW-11	2/15/2006	MW-11_02/15/2006	< 25 U	< 1 U	< 1 U		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-11	2/18/2016	MW-11-021816	< 10.0	< 0.331	< 1 U	< 0.275	< 0.324	< 0.259	< 1 U	< 0.551	< 0.780	< 0.319	< 1.20
MW-11D	7/27/2004	MW-11D_07/27/2004	< 1000 U	< 40 U	< 0.380	< 40 U	< 40 U	< 40 U	< 0.327	< 200 U	< 40 U	< 40 U	< 40 U
MW-11D	8/31/2005	MW-11d_08/31/2005	< 1000 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 200 U	< 40 U	< 40 U	< 40 U
MW-11D	2/15/2006	MW-11D_02/15/2006	< 120 U	< 5 U	< 40 U		< 5 U	< 5 U	< 40 U	< 5 U	< 5 U	< 5 U	6.7
MW-11D	2/17/2016	MW-11D-021716	< 10.0	< 0.331	< 5 U	< 0.275	0.712 J	< 0.259	< 5 U	< 0.551	< 0.780	< 0.319	< 1.20
MW-13	7/28/2004	MW-13_07/28/2004	< 50 U	< 2 U	< 0.380	< 2 U	< 2 U	< 2 U	< 0.327	< 10 U	< 2 U	< 2 U	< 2 U
MW-13	7/26/2005	925918062/MW-13	na	< 1.0 U	< 2 U	na	< 1.0 U	< 1.0 U	< 2 U	< 1.0 U	< 1.0 U	< 1.0 U	1.9
MW-13	8/31/2005	MW-13_08/31/2005	< 25 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 5 U	< 1 U	< 1 U	1.04
MW-13	2/15/2006	MW-13_02/15/2006	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-13	9/3/2015	MW-13-090315	< 1.15 U	< 0.0896	< 1 U	< 0.101	< 0.0860	< 0.114	< 1 U	< 0.127	< 0.102	< 0.0940	< 0.130
MW-15	2/14/2006	MW-15_02/14/2006	< 25 U	< 1 U	< 0.0800	na	< 1 U	< 1 U	< 0.128	< 1 U	< 1 U	< 1 U	2.3
MW-15	2/25/2009	MW-15-022509	< 125	< 5.0	< 1 U	na	< 5.0	< 5.0	< 1 U	< 5.0	< 5.0	< 5.0	< 5.0
MW-17	2/14/2006	MW-17_02/14/2006	< 25 U	< 1 U	< 5.0	na	< 1 U	< 1 U	< 5.0	< 1 U	< 1 U	< 1 U	< 1 U
MW-18	7/28/2004	MW-18_07/28/2004	< 25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U
MW-18	8/31/2005	MW-18_08/31/2005	< 25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U
MW-18	2/15/2006	MW-18_02/15/2006	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-18	2/28/2008	MW-18-022808	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-18D	2/16/2006	MW-18D_02/16/2006	< 25 U	< 1 U	< 1.0	na	< 1 U	< 1 U	< 1.0	< 1 U	< 1 U	< 1 U	< 1 U
MW-18D	2/28/2008	MW-18D-022808	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-1B	8/31/2005	MW-1b_08/31/2005	< 2500 U	< 100 U	< 1.0	< 100 U	< 100 U	< 100 U	< 1.0	< 500 U	< 100 U	< 100 U	< 100 U
MW-2	2/16/2006	MW-2_02/16/2006	< 50 U	< 2 U	< 100 U	na	< 2 U	< 2 U	< 100 U	< 2 U	< 2 U	< 2 U	< 2 U
MW-2	2/25/2009	MW-2-022509	< 25.0	< 1.0	< 2 U	na	1.3	< 1.0	< 2 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	2/18/2016	MW-2-021816	< 10.0	< 0.331	< 1.0	< 0.275	< 0.324	< 0.259	< 1.0	< 0.551	< 0.780	< 0.319	< 1.20
MW-20	7/26/2005	925918013/MW-20	na	< 1.0 U	< 0.380	na	< 1.0 U	< 1.0 U	< 0.327	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-20	2/14/2006	MW-20_02/14/2006	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-20	2/15/2006	MW-20_DUP-5_02/15/2006	< 25 U	< 1 U	< 1 U	na	< 1 A	< 1 U	< 1 U	< 1 U	< 1 U	< 1 A	< 1 A
MW-20	8/21/2007	MW-20-082107	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-20	2/24/2009	MW-20-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-21	7/28/2005	925924227/MW-21	na	< 1.0 U	< 1.0	na	< 1.0 U	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-21	2/13/2006	MW-21_02/13/06	< 25 U	< 1.0 U	< 1.0 U	na	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-21	2/21/2007	MW-21_2212007	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-21	8/20/2007	MW-21-082007	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-21	2/25/2008	MW-21-022508	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-21	2/24/2009	MW-21-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-21	8/25/2009	MW-21-082509	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-21	8/23/2011	MW-21-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-21	2/21/2012	MW-21-022112	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21	8/28/2012	MW-21-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21	2/19/2013	MW-21-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21	8/12/2013	MW-21-081213	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21	2/10/2014	MW-21-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21	8/5/2014	MW-21-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21	3/4/2015	MW-21-030415	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-21	9/1/2015	MW-21-090115	< 1.22 U	< 0.0896	< 0.38	< 0.101	< 0.0860	< 0.114	< 0.33	< 0.127	0.477 J	< 0.0940	< 0.130
MW-21	2/16/2016	MW-21-021616	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-21D	7/28/2005	925924235/MW-21D		< 1.0 U	< 0.380	na	< 1.0 U	< 1.0 U	< 0.327	< 1.0 U	4	< 1.0 U	< 1.0 U
MW-21D	2/13/2006	MW-21D_02/13/06	< 25 U	< 1.0 U	< 1.0 U	na	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-21D	2/21/2007	MW-21D_2212007	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-21D	8/20/2007	MW-21D-082007	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-21D	2/25/2008	MW-21D-022508	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-21D	2/24/2009	MW-21D-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-21D	8/25/2009	MW-21D-082509	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-21D	8/23/2011	MW-21D-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-21D	2/21/2012	MW-21D-022112	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21D	8/28/2012	MW-21D-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21D	2/19/2013	MW-21D-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21D	8/13/2013	MW-21D-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21D	2/10/2014	MW-21D-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21D	8/5/2014	MW-21D-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-21D	3/4/2015	MW-21D-030415	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-21D	9/1/2015	MW-21D-090115	< 5.28 U	< 0.0896	< 0.38	< 0.101	< 0.0860	< 0.114	< 0.33	< 0.127	4.5	< 0.0940	< 0.130
MW-21D	2/16/2016	DUP-01-021616	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	0.884 J	< 0.319	< 1.20
MW-21D	2/16/2016	MW-21D-021616	< 10.0	< 0.331	< 0.380	< 0.275	< 0.324	< 0.259	< 0.327	< 0.551	0.979 J	< 0.319	< 1.20
MW-22	7/28/2004	MW-22_07/28/2004	< 50 U	< 2 U	< 0.380	< 2 U	< 2 U	< 2 U	< 0.327	< 10 U	< 2 U	< 2 U	< 2 U
MW-22	8/31/2005	MW-22_08/31/2005	< 50 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 10 U	< 2 U	< 2 U	< 2 U
MW-22	2/14/2006	MW-22_02/14/2006	< 25 U	< 1 U	< 2 U	na	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	1.9	< 1 U
MW-23	7/28/2004	MW-23_07/28/2004	< 50 U	< 2 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 10 U	< 2 U	< 2 U	< 2 U
MW-23	7/26/2005	925918021/MW-23		< 1.0 U	< 2 U	na	< 1.0 U	< 1.0 U	< 2 U	< 1.0 U	< 1.0 U	< 1.0 U	4.2
MW-23	8/31/2005	MW-23_08/31/2005	< 50 U	< 2 U	< 1.0 U	< 2 U	< 2 U	< 2 U	< 1.0 U	< 10 U	< 2 U	< 2 U	2.08
MW-23	2/14/2006	MW-23_02/14/2006	< 25 U	< 1 U	< 2 U	na	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-23	2/25/2009	MW-23-022509	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	1.2
MW-24	2/17/2006	MW-24_02/17/2006	< 25 U	< 1 U	< 1.0	na	< 1 U	< 1 U	< 1.0	< 1 U	< 1 U	< 1 U	< 1 U
MW-24	2/25/2009	MW-24-022509	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-24	2/18/2016	MW-24-021816	< 10.0	< 0.331	< 1.0	< 0.275	0.406 J	< 0.259	< 1.0	< 0.551	< 0.780	< 0.319	< 1.20
MW-25	7/27/2005	925918302/MW-25	na	< 1.0 U	< 0.380	na	1.6	< 1.0 U	< 0.327	< 1.0 U	< 1.0 U	< 1.0 U	3.4
MW-25	2/16/2006	MW-25_02/16/2006	< 25 U	< 1 U	< 1.0 U	na	1.5	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-26	7/26/2005	925918054/MW-26	na	< 1.0 U	< 1 U	na	< 1.0 U	< 1.0 U	< 1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	2/17/2006	MW-26_02/17/2006	34	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	2.8	< 1 U	< 1 U
MW-27	7/26/2005	925918039/MW-27	na	< 1.0 U	< 1 U	na	< 1.0 U	< 1.0 U	< 1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-27	7/26/2005	925918047/MW-27 Dup	na	< 1.0 U	< 1.0 U	na	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.3
MW-27	2/14/2006	MW-27_02/14/2006	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-27	2/27/2008	MW-27-022708	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-27	2/24/2009	MW-27-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-28	7/27/2005	925917833/MW-28	na	< 1.0 U	< 1.0	na	< 1.0 U	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	1.4	< 1.0 U
MW-28	7/27/2005	925917858/MW-28 Dup	na	< 1.0 U	< 1.0 U	na	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.5 A	< 1.0 U
MW-28	2/14/2006	MW-28_02/14/2006	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	2.5	< 1 U
MW-28	2/14/2006	MW-28_DUP-3_02/14/2006	< 25 U	< 1 U	< 1 U	na	< 1 A	< 1 U	< 1 U	< 1 U	< 1 U	2.5 A	< 1 A
MW-28	2/21/2007	DUP-2_2212007	< 120 U	< 5 U	< 1 U	na	< 5 U	< 5 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW-28	2/21/2007	MW-28_2212007	< 25 U	< 1 U	< 5 U	na	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-28	8/22/2007	MW-28-082207	< 62.5	< 2.5	< 1 U	na	< 2.5	< 2.5	< 1 U	< 2.5	< 2.5	< 2.5	< 2.5
MW-28	8/22/2007	MW-28 DUP-082207	< 62.5	< 2.5	< 2.5	na	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
MW-28	2/26/2008	DUP-3-022608	< 125	< 5.0	< 2.5	na	< 5.0	< 5.0	< 2.5	< 5.0	< 5.0	< 5.0	< 5.0
MW-28	2/26/2008	MW-28-022608	< 50.0	< 2.0	< 5.0	na	< 2.0	< 2.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0
MW-28	2/25/2009	MW-28-022509	< 50.0	< 2.0	< 2.0	na	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
MW-28	2/25/2009	MW-28DUP-022509	< 50.0	< 2.0	< 2.0	na	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
MW-29	7/27/2005	925918070/MW-29	na	< 1.0 U	< 2.0	na	< 1.0 U	< 1.0 U	< 2.0	< 1.0 U	< 1.0 U	< 1.0 U	1.5
MW-29	2/15/2006	MW-29_02/15/2006	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	1.2
MW-29	9/3/2015	MW-29-090315	< 1.05	< 0.0896	< 1 U	< 0.101	< 0.0860	< 0.114	< 1 U	< 0.127	0.959	< 0.0940	< 0.130
MW-2B	8/31/2005	MW-2b_08/31/2005	< 2500 U	< 100 U	< 0.0800	< 100 U	< 100 U	< 100 U	< 0.128	< 500 U	< 100 U	< 100 U	< 100 U
MW-3	7/27/2004	MW-3_07/27/2004	< 500 U	< 20 U	< 100 U	< 20 U	< 20 U	< 20 U	< 100 U	< 100 U	< 20 U	< 20 U	< 20 U
MW-3	8/31/2005	MW-3_08/31/2005	< 500 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 100 U	< 20 U	< 20 U	< 20 U
MW-3	2/16/2006	MW-3_02/16/2006	< 50 U	< 2 U	< 20 U	na	< 2 U	< 2 U	< 20 U	< 2 U	< 2 U	< 2 U	< 2 U
MW-3	2/22/2007	MW-3_2222007	< 120 U	< 5 U	< 2 U	na	< 5 U	< 5 U	< 2 U	< 5 U	< 5 U	< 5 U	< 5 U
MW-3	8/22/2007	MW-3-082207	< 125	< 5.0	< 5 U	na	< 5.0	< 5.0	< 5 U	< 5.0	< 5.0	< 5.0	< 5.0
MW-3	2/27/2008	MW-3-022708	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Table E-8
Summary of VOCs to be Removed from Permit
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit VOCs / NC2L Standard / Location Concentration (ug/L)										
			Acetone	Benzene	Bromo-dichloromethane	Carbon Disulfide	Chloroform	1,1-DCA	Dibromo-chloromethane/ Chlorodibromomethane	Dichloro-difluoromethane (CFC-12)	Toluene	1,1,1-TCA	Trichloro-fluoromethane
			6000	1	0.6 ug/l	700	70	6	0.4 ug/l	1000	600	200	2000
MW-3	2/25/2009	MW-3-022509	< 250	< 10.0	< 5.0	na	< 10.0	< 10.0	< 5.0	< 10.0	< 10.0	< 10.0	< 10.0
MW-3	8/26/2009	MW-3-082609	< 250	< 10.0	< 10.0	na	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
MW-3	8/25/2011	MW-3-082511	< 100	< 10	< 10.0	< 100	< 10	< 10	< 10.0	< 20	< 10	< 10	< 10
MW-3	2/23/2012	MW-3-022312	< 100	< 10	< 10	< 100	< 10	< 10	< 10	< 20	< 10	< 10	< 10
MW-3	8/29/2012	MW-3-082912	< 5.0	< 0.50	< 10	< 5.0	0.99	< 0.50	< 10	< 1.0	< 0.50	< 0.50	< 0.50
MW-3	2/20/2013	MW-3-022013	< 5.0	< 0.50	< 0.50	< 5.0	1.3	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-3	8/14/2013	MW-3-081413	< 5.0	< 0.50	< 0.50	< 5.0	1.6	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-3	2/11/2014	MW-3-021114	< 5.0 UJ	< 0.50 UJ	< 0.50	< 5.0 UJ	0.97 J	< 0.50 UJ	< 0.50	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
MW-3	8/6/2014	MW-3-080614	< 5.0	< 0.50	< 0.50 UJ	< 5.0	2.2	< 0.50	< 0.50 UJ	< 1.0	< 0.50	< 0.50	< 0.50
MW-3	3/4/2015	MW-3-030415	< 10	< 0.33	< 0.50	< 0.28	2.0 J	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-3	9/2/2015	MW-3-090215	< 1.05	< 0.0896	< 0.38	< 0.101	0.499 J	< 0.114	< 0.33	< 0.127	< 0.102	< 0.0940	< 0.130
MW-3	2/18/2016	MW-3-021816	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-30	7/26/2005	925918005/MW-30		< 1.0 U	< 0.380	na	< 1.0 U	< 1.0 U	< 0.327	< 1.0 U	< 1.0 U	< 1.0 U	3.9
MW-30	2/15/2006	MW-30_02/15/2006	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-30	2/15/2006	MW-30_DUP-4_02/15/2006	< 25 U	< 1 U	< 1 U	na	< 1 A	< 1 U	< 1 U	< 1 U	< 1 U	< 1 A	1.6 A
MW-30	2/26/2009	MW-30-022609	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-31	7/27/2005	925918310/MW-31		< 1.0 U	< 1.0	na	< 1.0 U	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0 U	5.8
MW-31	2/13/2006	MW-31_02/13/06	< 25 U	< 1.0 U	< 1.0 U	na	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.4
MW-31	2/27/2008	MW-31-022708	< 25.0	< 1.0	< 1.0 U	na	< 1.0	< 1.0	< 1.0 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-31	2/24/2009	MW-31-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-31	2/24/2009	MW-31DUP-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-31	8/27/2009	MW-31-082709	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-31	8/27/2009	MW-31-082709DUP	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-32	7/28/2005	925924243/MW-32		< 1.0 U	< 1.0	na	< 1.0 U	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-32	2/14/2006	MW-32_02/14/2006	< 25 U	< 1 U	< 1.0 U	na	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-32	2/20/2007	DUP-1_2202007	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-32	2/20/2007	MW-32_2202007	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-32	8/21/2007	MW-32 DUP-082107	< 25.0	< 1.0	< 1 U	na	5.1 A	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0 A	< 1.0 A
MW-32	8/21/2007	MW-32-082107	< 25.0	< 1.0	< 1.0	na	5.1 A	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 A	< 1.0 A
MW-32	2/25/2008	DUP-2-022508	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-32	2/25/2008	MW-32-022508	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-32	8/26/2009	MW-32-082609	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-32	9/1/2015	MW-32-090115	< 1.05	< 0.0896	< 1.0	< 0.101	< 0.0860	< 0.114	< 1.0	< 0.127	< 0.102	< 0.0940	< 0.130
MW-33	7/26/2005	MW-33_07/26/05	< 120 U	< 5 U	< 0.0800	na	< 5 U	< 5 U	< 0.128	< 5 U	< 5 U	< 5 U	< 5 U
MW-33	2/14/2006	MW-33_02/14/2006	< 25 U	< 1 U	< 5 U	na	1.1	1.1	< 5 U	< 1 U	< 1 U	2.8	< 1 U
MW-33	2/21/2007	MW-33_2212007	< 120 U	< 5 U	< 1 U	na	< 5 U	< 5 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW-33	8/21/2007	MW-33-082107	< 125	< 5.0	< 5 U	na	< 5.0	< 5.0	< 5 U	< 5.0	< 5.0	< 5.0	< 5.0
MW-33	2/26/2008	MW-33-022608	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MW-33	2/26/2009	MW-33-022609	< 50.0	< 2.0	< 5.0	na	< 2.0	< 2.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0
MW-33	8/23/2011	MW-33-082311	< 5.0	< 0.50	< 2.0	< 5.0	< 0.50	< 0.50	< 2.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-33	2/22/2012	MW-33-022212	8.2	< 0.50	< 0.50	< 5.0	0.6	0.29 J	< 0.50	< 1.0	< 0.50	0.33 J	< 0.50
MW-33	2/19/2013	MW-33-021913	< 5.0	< 0.50	< 0.50	< 5.0	0.91	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-33	2/11/2014	MW-33-021114	< 5.0	< 0.50	< 0.50	< 5.0	0.78	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-33	8/5/2014	MW-33-080514	< 5.0	< 0.50	< 0.50	< 5.0	1.8	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-33	3/2/2015	MW-33-030215	< 10	< 0.33	< 0.50	< 0.28	3.4 J	< 0.26	< 0.50	< 0.55	4.1 J	< 0.32	< 1.2
MW-33	9/1/2015	MW-33-090115	< 1.05	< 0.0896	< 0.38	< 0.101	2.16	< 0.114	< 0.33	< 0.127	< 0.102	< 0.0940	< 0.130
MW-33	2/17/2016	MW-33-021716	< 10.0	< 0.331	< 0.0800	< 0.275	3.76 J	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-34	7/25/2005	MW-34_07/25/05	< 120 U	< 5 U	< 0.380	na	< 5 U	< 5 U	< 0.327	< 5 U	< 5 U	< 5 U	< 5 U
MW-34	2/14/2006	MW-34_DUP-1_02/14/2006	< 25 U	< 1 U	< 5 U	na	1.4 A	< 1 U	< 5 U	< 1 U	< 1 U	< 1 A	< 1 A
MW-34	2/15/2006	MW-34_02/15/2006	< 25 U	< 1 U	< 1 U	na	1.4	< 1 U	< 1 U	< 1 U	< 1 U	2.3	< 1 U
MW-34	2/22/2007	MW-34_2222007	< 50 U	< 2 U	< 1 U	na	< 2 U	< 2 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW-34	8/21/2007	MW-34-082107	< 25.0	< 1.0	< 2 U	na	< 1.0	< 1.0	< 2 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-34	2/26/2008	MW-34-022608	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-34	8/26/2009	MW-34-082609	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-34	8/28/2012	MW-34-082812	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-34	2/19/2013	MW-34-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-34	8/14/2013	MW-34-081413	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-34	8/5/2014	MW-34-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-34	3/2/2015	MW-34-030215	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-34	9/1/2015	MW-34-090115	< 1.09 U	< 0.0896	< 0.38	< 0.101	< 0.0860	< 0.114	< 0.33	< 0.127	< 0.102	< 0.0940	< 0.130
MW-34	2/17/2016	MW-34-021716	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-35	7/25/2005	MW-35_07/25/05	< 25 U	< 1 U	< 0.380	na	< 1 U	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	< 1 U
MW-35	8/21/2007	MW-35-082107	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-35R	8/25/2009	MW-35R-082509	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-35R	2/11/2014	MW-35R-021114	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-36	2/13/2006	MW-36_02/13/06	< 25 U	< 1.0 U	< 0.50	na	< 1.0 U	< 1.0 U	< 0.50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-36	2/27/2008	MW-36-022708	< 25.0	< 1.0	< 1.0 U	na	< 1.0	< 1.0	< 1.0 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-36	2/24/2009	MW-36-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-36	8/26/2009	MW-36-082609	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-36	2/22/2012	MW-36-022212	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-36	8/29/2012	MW-36-082912	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-36	2/19/2013	MW-36-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-36	8/14/2013	MW-36-081413	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-36	2/11/2014	MW-36-021114	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-36	8/6/2014	MW-36-080614	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-36	9/2/2015	DUP-01-09022015	< 1.05	< 0.0896	< 0.50	< 0.101	< 0.0860	< 0.114	< 0.50	< 0.127	< 0.102	< 0.0940	< 0.130
MW-36	9/2/2015	MW-36-090215	< 1.05 UJ	< 0.0896 UJ	< 0.0800	< 0.101 UJ	< 0.0860 UJ	< 0.114 UJ	< 0.128	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
MW-36	2/18/2016	MW-36-021816	< 10.0	< 0.331	< 0.0800 UJ	< 0.275	< 0.324	< 0.259	< 0.128 UJ	< 0.551	< 0.780	< 0.319	< 1.20
MW-37	2/13/2006	MW-37_02/13/06	< 25 U	< 1.0 U	< 0.380	na	< 1.0 U	< 1.0 U	< 0.327	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-37	8/21/2007	MW-37-082107	< 25.0	< 1.0	< 1.0 U	na	< 1.0	< 1.0	< 1.0 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-37	8/6/2014	MW-37-080614	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-37	3/4/2015	MW-37-030415	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-37	2/18/2016	MW-37-021816	< 10.0	< 0.331	< 0.38	< 0.275	< 0.324	< 0.259	< 0.33	< 0.551	< 0.780	< 0.319	< 1.20
MW-38	2/20/2007	MW-38_2202007	< 25 U	< 1 U	< 0.380	na	< 1 U	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	< 1 U
MW-38	8/20/2007	MW-38-082007	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-38	2/25/2008	MW-38-022508	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-38	2/24/2009	MW-38-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-38	8/27/2009	MW-38-082709	29.8	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-38	8/23/2011	MW-38-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-38	2/21/2012	MW-38-022112	7.9	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-38	8/29/2012	MW-38-082912	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-38	2/19/2013	MW-38-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-38	8/13/2013	MW-38-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-38	2/10/2014	MW-38-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-38	8/5/2014	MW-38-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-38	3/3/2015	MW-38-030315	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-38	9/1/2015	MW-38-090115	< 1.05 UJ	< 0.0896 UJ	< 0.38	< 0.101 UJ	< 0.0860 UJ	< 0.114 UJ	< 0.33	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
MW-38	2/19/2016	MW-38-021916	< 10.0	< 0.331	< 0.0800 UJ	< 0.275	< 0.324	< 0.259	< 0.128 UJ	< 0.551	< 0.780	< 0.319	< 1.20
MW-39	2/21/2007	MW-39_2212007	< 25 U	< 1 U	< 0.380	na	< 1 U	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	< 1 U
MW-39	8/20/2007	MW-39-082007	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	2/25/2008	MW-39-022508-DUP	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	2/25/2008	MW-39-022508	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	2/23/2009	MW-39-022309	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	2/23/2009	MW-39DUP-022309	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	8/27/2009	MW-39-082709	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	8/27/2009	MW-39-082709DUP	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	8/23/2011	DUP-2-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	8/23/2011	MW-39-082311	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	2/21/2012	DUP-02-022112	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	2/21/2012	MW-39-022112	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	8/28/2012	DUP-02-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	8/28/2012	MW-39-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	2/19/2013	DUP-02-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	2/19/2013	MW-39-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50

Table E-8
Summary of VOCs to be Removed from Permit
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit VOCs / NC2L Standard / Location Concentration (ug/L)										
			Acetone	Benzene	Bromo-dichloromethane	Carbon Disulfide	Chloroform	1,1-DCA	Dibromo-chloromethane/ Chlorodibromomethane	Dichloro-difluoromethane (CFC-12)	Toluene	1,1,1-TCA	Trichloro-fluoromethane
			6000	1	0.6 ug/l	700	70	6	0.4 ug/l	1000	600	200	2000
MW-39	8/12/2013	DUP-02-081213	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	8/12/2013	MW-39-081213	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	2/10/2014	DUP-02-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	2/10/2014	MW-39-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	8/5/2014	DUP-02-08052014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	8/5/2014	MW-39-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39	3/3/2015	MW-39-030315	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-39	2/19/2016	MW-39-021916	< 10.0	< 0.331	< 0.38	< 0.275	< 0.324	< 0.259	< 0.33	< 0.551	< 0.780	< 0.319	< 1.20
MW-39D	2/21/2007	MW-39D_2212007	< 25 U	< 1 U	< 0.380	na	< 1 U	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	< 1 U
MW-39D	8/20/2007	MW-39D DUP-082007	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-39D	8/20/2007	MW-39D-082007	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39D	2/25/2008	MW-39D-022508	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39D	2/23/2009	MW-39D-022309	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39D	8/27/2009	MW-39D-082709	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39D	8/23/2011	MW-39D-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-39D	2/21/2012	MW-39D-022112	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39D	8/28/2012	MW-39D-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39D	2/19/2013	MW-39D-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39D	8/12/2013	MW-39D-081213	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39D	2/10/2014	MW-39D-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39D	8/5/2014	MW-39D-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-39D	3/3/2015	MW-39D-030315	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-39D	9/1/2015	MW-39D-090115	< 1.05 UJ	< 0.0896 UJ	< 0.38	< 0.101 UJ	< 0.0860 UJ	< 0.114 UJ	< 0.33	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
MW-39D	2/19/2016	MW-39D-021916	< 10.0	< 0.331	< 0.0800 UJ	< 0.275	< 0.324	< 0.259	< 0.128 UJ	< 0.551	< 0.780	< 0.319	< 1.20
MW-4	8/13/2013	MW-4-081313	< 100	< 10	< 0.380	< 100	11	< 10	< 0.327	< 20	< 10	< 10	< 10
MW-4	2/11/2014	MW-4-021114	< 100 UJ	< 10 UJ	< 10	< 100 UJ	< 10 UJ	< 10 UJ	< 10	< 20 UJ	< 10 UJ	< 10 UJ	< 10 UJ
MW-4	3/3/2015	MW-4-030315	< 250 U	< 1.6	< 10 UJ	< 1.4	3.9 J	< 1.3	< 10 UJ	< 2.8	< 3.9	< 1.6	< 6.0
MW-4	2/19/2016	MW-4-021916	< 10.0	< 0.331	< 1.9	< 0.275	6.00 J	< 0.259	< 1.6	< 0.551	2.28 J	0.339 J	< 1.20
MW-40	2/20/2007	MW-40_2202007	< 25 U	< 1 U	1.90 J	na	< 1 U	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	< 1 U
MW-40	8/21/2007	MW-40-082107	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-40	2/26/2008	MW-40-022608	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-40	2/24/2009	MW-40-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-40	8/27/2009	MW-40-082709	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-40	8/23/2011	MW-40-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-40	2/21/2012	MW-40-022112	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40	8/28/2012	MW-40-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40	2/19/2013	MW-40-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40	8/13/2013	MW-40-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40	2/10/2014	MW-40-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40	8/5/2014	MW-40-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40	3/2/2015	MW-40-030215	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-40	2/18/2016	MW-40-021816	< 10.0	< 0.331	< 0.38	< 0.275	0.533 J	< 0.259	< 0.33	< 0.551	< 0.780	< 0.319	< 1.20
MW-40D	2/20/2007	MW-40D_2202007	< 25 U	< 1 U	< 0.380		< 1 U	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	< 1 U
MW-40D	8/21/2007	MW-40D-082107	< 25.0	< 1.0	< 1 U		< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-40D	2/26/2008	MW-40D-022608	< 25.0	< 1.0	< 1.0		3.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-40D	2/24/2009	MW-40D-022409	< 25.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-40D	8/27/2009	MW-40D-082709	< 25.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-40D	8/23/2011	MW-40D-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-40D	2/21/2012	MW-40D-022112	< 5.0 U	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40D	8/28/2012	MW-40D-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40D	2/19/2013	MW-40D-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40D	8/13/2013	MW-40D-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40D	2/10/2014	MW-40D-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40D	8/5/2014	MW-40D-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-40D	3/2/2015	MW-40D-030215	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-40D	9/1/2015	MW-40D-090115	< 1.05 UJ	< 0.0896 UJ	< 0.38	< 0.101 UJ	< 0.0860 UJ	< 0.114 UJ	< 0.33	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
MW-40D	2/18/2016	MW-40D-021816	< 10.0	< 0.331	< 0.0800 UJ	< 0.275	< 0.324	< 0.259	< 0.128 UJ	< 0.551	< 0.780	< 0.319	< 1.20
MW-41	2/21/2007	MW-41_2212007	< 25 U	< 1 U	< 0.380	na	< 1 U	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	< 1 U
MW-41	8/20/2007	MW-41-082007	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-41	2/26/2008	MW-41-022608	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-41	2/24/2009	MW-41-022409	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-41	8/27/2009	MW-41-082709	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-41	8/23/2011	MW-41-082311	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-41	2/21/2012	MW-41-022112	19	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-41	8/28/2012	MW-41-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-41	2/19/2013	MW-41-021913	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-41	8/14/2013	MW-41-081413	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-41	2/10/2014	MW-41-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-41	8/5/2014	MW-41-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-41	3/2/2015	MW-41-030215	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-41	2/17/2016	MW-41-021716	< 10.0	< 0.331	< 0.38	< 0.275	< 0.324	< 0.259	< 0.33	< 0.551	< 0.780	< 0.319	< 1.20
MW-6	7/27/2004	MW-6_07/27/2004	< 500 U	< 20 U	< 0.380	< 20 U	< 20 U	< 20 U	< 0.327	< 100 U	< 20 U	< 20 U	< 20 U
MW-6	1/27/2005	MW-6_01/27/2005	< 1250 U	< 50 U	< 20 U	< 50 U	< 50 U	< 50 U	< 20 U	< 250 U	< 50 U	< 50 U	< 50 U
MW-6	7/26/2005	925918161/MW-6		< 1.0 U	< 50 U	na	1.6	< 1.0 U	< 50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-6	7/26/2005	925918179/MW-6 DUP		< 1.0 U	< 1.0 U	na	1.8 A	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.4
MW-6	8/31/2005	MW-6_08/31/2005	< 1250 U	< 50 U	< 1.0 U	< 50 U	< 50 U	< 50 U	< 1.0 U	< 250 U	< 50 U	< 50 U	< 50 U
MW-6	2/15/2006	MW-6_02/15/2006	< 250 U	< 10 U	< 50 U	na	< 10 U	< 10 U	< 50 U	< 10 U	< 10 U	< 10 U	< 10 U
MW-6	2/22/2007	MW-6_2222007	< 120 U	< 5 U	< 10 U	na	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U
MW-6	8/21/2007	MW-6-082107	< 125	< 5.0	< 5 U	na	< 5.0	< 5.0	< 5 U	< 5.0	< 5.0	< 5.0	< 5.0
MW-6	2/27/2008	MW-6-022708	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MW-6	2/25/2009	MW-6-022509	< 50.0	< 2.0	< 5.0	na	< 2.0	< 2.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0
MW-6	8/25/2009	MW-6-082509	< 50.0	< 2.0	< 2.0	na	2.5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
MW-6	8/24/2011	MW-6-082411	< 100	< 10	< 2.0	< 100	< 10	< 10	< 2.0	< 20	< 10	< 10	< 10
MW-6	2/21/2012	MW-6-022112	< 100	< 10	< 10	< 100	< 10	< 10	< 10	< 20	< 10	< 10	< 10
MW-6	8/29/2012	MW-6-082912	< 25	< 2.5	< 10	< 25	< 2.5	< 2.5	< 10	< 5.0	< 2.5	< 2.5	< 2.5
MW-6	2/19/2013	MW-6-021913	< 25	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
MW-6	8/12/2013	MW-6-081213	< 25	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
MW-6	2/11/2014	MW-6-021114	< 25 UJ	< 2.5 UJ	< 2.5	< 25 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5	< 5.0 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
MW-6	8/6/2014	MW-6-080614	< 25	< 2.5	< 2.5 UJ	< 25	< 2.5	< 2.5	< 2.5 UJ	< 5.0	< 2.5	< 2.5	< 2.5
MW-6	3/2/2015	MW-6-030215	< 10	< 0.33	< 2.5	< 0.28	2.9 J	0.38 J	< 2.5	< 0.55	< 0.78	< 0.32	< 1.2
MW-6	9/2/2015	MW-6-090215	< 1.05	< 0.0896	< 0.38	< 0.101	1.28	0.401 J	< 0.33	< 0.127	0.301 J	< 0.0940	< 0.130
MW-6	2/16/2016	MW-6-021616	< 10.0	< 0.331	< 0.0800	< 0.275	2.39 J	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-6D	2/15/2006	MW-6D_02/15/2006	< 500 U	< 20 U	< 0.380	na	< 20 U	< 20 U	< 0.327	< 20 U	< 20 U	< 20 U	< 20 U
MW-6D	2/22/2007	MW-6D_2222007	< 250 U	< 10 U	< 20 U	na	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U
MW-6D	8/21/2007	MW-6D-082107	< 250	< 10.0	< 10 U	na	< 10.0	< 10.0	< 10 U	< 10.0	< 10.0	< 10.0	< 10.0
MW-6D	2/27/2008	MW-6D-022708	< 250	< 10.0	< 10.0	na	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
MW-6D	2/25/2009	MW-6D-022509	< 250	< 10.0	< 10.0	na	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
MW-6D	8/25/2009	MW-6D-082509	< 125	< 5.0	< 10.0	na	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 5.0	< 5.0
MW-6D	8/24/2011	MW-6D-082411	< 100	< 10	< 5.0	< 100	< 10	< 10	< 5.0	< 20	< 10	< 10	< 10
MW-6D	2/22/2012	MW-6D-022212	120 J	< 10	< 10	< 100	< 10	< 10	< 10	< 20	< 10	< 10	< 10
MW-6D	8/29/2012	MW-6D-082912	< 25	< 2.5	< 10	< 25	< 2.5	< 2.5	< 10	< 5.0	< 2.5	< 2.5	< 2.5
MW-6D	2/19/2013	MW-6D-021913	< 25	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
MW-6D	8/12/2013	MW-6D-081213	< 25	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
MW-6D	2/11/2014	MW-6D-021114	< 25 UJ	< 2.5 UJ	< 2.5	< 25 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5	< 5.0 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
MW-6D	8/6/2014	MW-6D-080614	< 25	< 2.5	< 2.5 UJ	< 25	< 2.5	< 2.5	< 2.5 UJ	< 5.0	< 2.5	< 2.5	< 2.5
MW-6D	3/2/2015	MW-6D-030215	< 10	< 0.33	< 2.5	< 0.28	2.5 J	< 0.26	< 2.5	< 0.55	< 0.78	< 0.32	< 1.2
MW-6D	2/17/2016	MW-6D-021716	83.3	< 0.331	< 0.38	0.755 J	0.502 J	< 0.259	< 0.33	< 0.551	< 0.780	< 0.319	< 1.20
MW-6DR	7/27/2004	MW-6DR_07/27/2004	< 500 U	< 20 U	< 0.380	< 20 U	< 20 U	< 20 U	< 0.327	< 100 U	< 20 U	< 20 U	< 20 U
MW-6DR	1/27/2005	MW-6DR_01/27/2005	< 500 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 100 U	< 20 U	< 20 U	< 20 U
MW-6DR	7/28/2005	925924219/MW-6DR		< 1.0 U	< 20 U	na	1	< 1.0 U	< 20 U	< 1.0 U	< 1.0 U	< 1.0 U	14
MW-6DR	8/31/2005	MW-6DR_08/31/2005	< 500 U	< 20 U	< 1.0 U	< 20 U	< 20 U	< 20 U	< 1.0 U	< 100 U	< 20 U	< 20 U	< 20 U
MW-6DR	2/16/2006	MW-6DR_02/16/2006	< 50 U	< 2 U	< 20 U	na	< 2 U	< 2 U	< 20 U	< 2 U	< 2 U	< 2 U	3.8 J
MW-6DR	2/16/2006	MW-6DR_DUP-6_02/16/2006	< 120 U	< 5 U	< 2 U	na	< 5 U	< 5 U	< 2 U	< 5 U	< 5 U	< 5 U	6 J
MW-6DR	2/22/2007	MW-6DR_2222007	< 25 U	< 1 U	< 5 U	na	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	4.1

Table E-8
Summary of VOCs to be Removed from Permit
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit VOCs / NC2L Standard / Location Concentration (ug/L)										
			Acetone	Benzene	Bromo-dichloromethane	Carbon Disulfide	Chloroform	1,1-DCA	Dibromo-chloromethane/ Chlorodibromomethane	Dichloro-difluoromethane (CFC-12)	Toluene	1,1,1-TCA	Trichloro-fluoromethane
			6000	1	0.6 ug/l	700	70	6	0.4 ug/l	1000	600	200	2000
MW-6DR	8/22/2007	MW-6DR-082207	< 125	< 5.0	< 1 U	na	< 5.0	< 5.0	< 1 U	< 5.0	< 5.0	< 5.0	< 5.0
MW-6DR	2/27/2008	MW-6DR-022708	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MW-6DR	2/25/2009	MW-6DR-022509	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MW-6DR	8/25/2009	MW-6DR-082509	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MW-6DR	8/24/2011	MW-6DR-082411	< 50	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0
MW-6DR	2/21/2012	MW-6DR-022112	< 5.0	< 0.50	< 5.0	< 5.0	0.78	< 0.50	< 5.0	< 1.0	0.72	< 0.50	1.4
MW-6DR	8/29/2012	MW-6DR-082912	< 5.0	< 0.50	< 0.50	< 5.0	0.55	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	1.8
MW-6DR	2/19/2013	MW-6DR-021913	< 50	< 5.0	< 0.50	< 50	< 5.0	< 5.0	< 0.50	< 10	< 5.0	< 5.0	< 5.0
MW-6DR	8/12/2013	MW-6DR-081213	< 25	< 2.5	< 5.0	< 25	4.3	< 2.5	< 5.0	< 5.0	< 2.5	< 2.5	< 2.5
MW-6DR	2/11/2014	MW-6DR-021114	< 25	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
MW-6DR	8/6/2014	MW-6DR-080614	< 50	< 5.0	< 2.5	< 50	< 5.0	< 5.0	< 2.5	< 10	< 5.0	< 5.0	< 5.0
MW-6DR	3/3/2015	MW-6DR-030315	< 10	< 0.33	< 5.0	4	< 0.32	< 0.26	< 5.0	< 0.55	< 0.78	< 0.32	< 1.2
MW-6DR	2/17/2016	MW-6DR-021716	< 10.0	< 0.331	< 0.38	< 0.275	1.32 J	< 0.259	< 0.33	< 0.551	< 0.780	< 0.319	< 1.20
MW-6DR3	7/27/2004	MW-6DR3_07/27/2004	< 100 U	< 4 U	< 0.380	< 4 U	< 4 U	< 4 U	< 0.327	< 20 U	< 4 U	< 4 U	< 4 U
MW-6DR3	7/27/2005	925918088/MW-6DR3		< 1.0 U	< 4 U	na	1.6	< 1.0 U	< 4 U	< 1.0 U	< 1.0 U	< 1.0 U	1.5
MW-6DR3	8/31/2005	MW-6DR3_08/31/2005	< 250 U	< 10 U	< 1.0 U	< 10 U	< 10 U	< 10 U	< 1.0 U	< 50 U	< 10 U	< 10 U	< 10 U
MW-6DR3	2/16/2006	MW-6DR3_02/16/2006	< 25 U	< 1 U	< 10 U	na	1	< 1 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-6DR3	2/23/2007	MW-6DR3_2232007	< 25 U	< 1 U	< 1 U	na	1.1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-6DR3	8/22/2007	MW-6DR3-082207	< 25.0	< 1.0	< 1 U	na	1.3	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-6DR3	2/27/2008	MW-6DR3-022708	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-6DR3	2/25/2009	MW-6DR3-022509	< 25.0	< 1.0	< 1.0	na	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-6DR3	8/25/2009	MW-6DR3-082509	< 25.0	< 1.0	< 1.0	na	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-6DR3	8/24/2011	MW-6DR3-082411	< 5.0	< 0.50	< 1.0	< 5.0	0.96	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
MW-6DR3	2/22/2012	MW-6DR3-022212	< 5.0	< 0.50	< 0.50	< 5.0	1	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-6DR3	8/29/2012	MW-6DR3-082912	< 5.0	< 0.50	< 0.50	< 5.0	0.98	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-6DR3	2/19/2013	MW-6DR3-021913	< 5.0	< 0.50	< 0.50	< 5.0	1	< 0.50	< 0.50	< 1.0	0.5	< 0.50	< 0.50
MW-6DR3	8/12/2013	MW-6DR3-081213	< 5.0	< 0.50	< 0.50	< 5.0	0.86	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50
MW-6DR3	2/11/2014	MW-6DR3-021114	< 25	< 2.5	< 0.50	< 25	< 2.5	< 2.5	< 0.50	< 5.0	< 2.5	< 2.5	< 2.5
MW-6DR3	8/6/2014	MW-6DR3-080614	< 5.0	< 0.50	< 2.5	< 5.0	0.81	< 0.50	< 2.5	< 1.0	< 0.50	< 0.50	< 0.50
MW-6DR3	3/3/2015	MW-6DR3-030315	< 10	< 0.33	< 0.50	< 0.28	0.90 J	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-6DR3	9/2/2015	MW-6DR3-090215	< 1.05 UJ	< 0.0896	< 0.38	< 0.101	0.648	< 0.114	< 0.33	< 0.127	1.18	< 0.0940	< 0.130
MW-6DR3	2/17/2016	MW-6DR3-021716	< 10.0	< 0.331	< 0.0800	< 0.275	0.638 J	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-7	2/14/2006	MW-7_02/14/2006	< 25 U	< 1 U	< 0.380	na	2.3	< 1 U	< 0.327	< 1 U	< 1 U	< 1 U	2.9
MW-7	2/22/2007	MW-7_2222007	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-8	7/28/2004	MW-8_07/28/2004	< 25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U
MW-8	8/31/2005	MW-8_08/31/2005	< 25 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	1.32
MW-8	2/14/2006	MW-8_02/14/2006	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-8	2/21/2007	MW-8_2212007	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW-8	8/21/2007	MW-8-082107	30.7	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-8	2/26/2008	MW-8-022608	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.2
MW-8	2/23/2009	MW-8-022309	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-8	8/26/2009	MW-8-082609	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1
MW-8	2/22/2012	MW-8-022212	5.8 J	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	1.2
MW-8	2/20/2013	MW-8-022013	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	2.3
MW-8	8/13/2013	MW-8-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	1.4
MW-8	2/10/2014	MW-8-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	0.89
MW-8	8/5/2014	MW-8-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	2.3
MW-8	3/2/2015	MW-8-030215	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	< 1.2
MW-8	9/1/2015	MW-8-090115	< 1.05	< 0.0896	< 0.38	< 0.101	< 0.0860	< 0.114	< 0.33	< 0.127	< 0.102	< 0.0940	1.42
MW-8	2/17/2016	MW-8-021716	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-8D	2/14/2006	MW-8D_02/14/2006	< 25 U	< 1 U	< 0.380	na	< 1 U	< 1 U	< 0.327	< 1 U	1.6	< 1 U	1.3
MW-8D	2/21/2007	MW-8D_2212007	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	2.7
MW-8D	8/21/2007	MW-8D-082107	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	2.2
MW-8D	2/26/2008	MW-8D-022608	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.1
MW-8D	2/23/2009	MW-8D-022309	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.8
MW-8D	2/23/2009	MW-8DDUP-022309	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.9
MW-8D	8/26/2009	MW-8D-082609	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.9
MW-8D	8/26/2009	MW-8D-082609DUP	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.9
MW-8D	8/24/2011	DUP-1-082411	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	3.6
MW-8D	8/24/2011	MW-8D-082411	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	3.6
MW-8D	2/22/2012	DUP-01-022212	3.2 J	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	0.40 J	< 0.50	3.3
MW-8D	2/22/2012	MW-8D-022212	< 5.0 U	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	0.38 J	< 0.50	3.8
MW-8D	8/28/2012	DUP-01-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	4.6
MW-8D	8/28/2012	MW-8D-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	4.6
MW-8D	2/20/2013	DUP-01-022013	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	3.4
MW-8D	2/20/2013	MW-8D-022013	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	3.8
MW-8D	8/13/2013	DUP-01-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	1.9
MW-8D	8/13/2013	MW-8D-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	1.9
MW-8D	2/10/2014	DUP-01-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	2.6
MW-8D	2/10/2014	MW-8D-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	2.8
MW-8D	8/5/2014	DUP-01-08052014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	2.5
MW-8D	8/5/2014	MW-8D-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	2.5
MW-8D	3/2/2015	MW-8D-030215	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	1.5 J
MW-8D	9/1/2015	MW-8D-090115	< 1.08 U	< 0.0896	< 0.38	< 0.101	< 0.0860	< 0.114	< 0.33	< 0.127	0.396 J	< 0.0940	0.433 J
MW-8D	2/17/2016	MW-8D-021716	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
MW-8DR	7/28/2004	MW-8DR_07/28/2004	< 25 U	< 1 U	< 0.380	< 1 U	< 1 U	< 1 U	< 0.327	< 5 U	< 1 U	< 1 U	4.84
MW-8DR	7/27/2005	925917874/MW-8DR		< 1.0 U	< 1 U	na	< 1.0 U	< 1.0 U	< 1 U	< 1.0 U	< 1.0 U	< 1.0 U	5.9
MW-8DR	8/31/2005	MW-8DR_08/31/2005	< 100 U	< 4 U	< 1.0 U	< 4 U	< 4 U	< 4 U	< 1.0 U	< 20 U	< 4 U	< 4 U	< 4 U
MW-8DR	2/14/2006	MW-8DR_02/14/2006	< 25 U	< 1 U	< 4 U	na	< 1 U	< 1 U	< 4 U	< 1 U	< 1 U	< 1 U	3.4
MW-8DR	2/21/2007	MW-8DR_2212007	< 25 U	< 1 U	< 1 U	na	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	4.1
MW-8DR	8/21/2007	MW-8DR-082107	< 25.0	< 1.0	< 1 U	na	< 1.0	< 1.0	< 1 U	< 1.0	< 1.0	< 1.0	2.5
MW-8DR	2/26/2008	MW-8DR-022608	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4
MW-8DR	2/23/2009	MW-8DR-022309	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.3
MW-8DR	8/26/2009	MW-8DR-082609	< 25.0	< 1.0	< 1.0	na	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.6
MW-8DR	8/24/2011	MW-8DR-082411	< 5.0	< 0.50	< 1.0	< 5.0	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	4.1
MW-8DR	2/22/2012	MW-8DR-022212	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	1.2	< 0.50	3.7
MW-8DR	8/28/2012	MW-8DR-082812	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	1.8
MW-8DR	2/20/2013	MW-8DR-022013	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	4.8
MW-8DR	8/13/2013	MW-8DR-081313	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	3.5
MW-8DR	2/10/2014	MW-8DR-021014	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	4.1
MW-8DR	8/5/2014	MW-8DR-080514	< 5.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	4.7
MW-8DR	3/2/2015	MW-8DR-030215	< 10	< 0.33	< 0.50	< 0.28	< 0.32	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	4.0 J
MW-8DR	9/1/2015	MW-8DR-090115	< 1.05	< 0.0896	< 0.38	< 0.101	< 0.0860	< 0.114	< 0.33	< 0.127	< 0.102	< 0.0940	2
MW-8DR	2/17/2016	MW-8DR-021716	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	2.18 J
MW-9	2/23/2007	MW-9_2232007	< 120 U	< 5 U	< 0.380	na	< 5 U	< 5 U	< 0.327	< 5 U	< 5 U	< 5 U	< 5 U
MW-9	8/25/2009	MW-9-082509	< 25.0	< 1.0	< 5 U	na	< 1.0	< 1.0	< 5 U	< 1.0	< 1.0	< 1.0	< 1.0
MW-9	2/22/2012	MW-9-022212	67	< 0.50	< 1.0	< 5.0	0.43 J	< 0.50	< 1.0	< 1.0	1.2	< 0.50	1.3
PMW-1D	8/7/2014	PMW-1D-080714	< 500	< 50	< 0.50	< 500	< 50	< 50	< 0.50	< 100	< 50	< 50	< 50
PMW-1D	3/3/2015	PMW-1D-030315	< 120 U	**1.1**	< 50	1	0.62 J	< 0.26	< 50	< 0.55	3.1 J	< 0.32	< 1.2
PMW-1D	2/19/2016	PMW-1D-021916	116 J	< 1.66	< 0.38	< 1.38	< 1.62	< 1.30	< 0.33	< 2.76	< 3.90	< 1.60	< 6.00
PMW-1S	8/7/2014	PMW-1S-080714	< 500	< 50	< 1.90	< 500	< 50	< 50	< 1.64	< 100	< 50	< 50	< 50
PMW-1S	3/3/2015	PMW-1S-030315	< 50 U	< 0.33	< 50	< 0.28	6.6	< 0.26	< 50	< 0.55	< 0.78	< 0.32	< 1.2
PMW-1S	2/18/2016	PMW-1S-021816	42.6 J	< 0.331	< 0.38	< 0.275	1.12 J	< 0.259	< 0.33	< 0.551	< 0.780	< 0.319	< 1.20
PMW-2D	8/7/2014	PMW-2D-080714	< 500	< 50	< 0.380	< 500	< 50	< 50	< 0.327	< 100	< 50	< 50	< 50
PMW-2D	3/3/2015	PMW-2D-030315	< 500 U	< 3.3	< 50	< 2.8	4.5 J	< 2.6	< 50	< 5.5	< 7.8	< 3.2	< 12
PMW-2D	2/19/2016	PMW-2D-021916	133	< 0.331	< 3.8	< 0.275	< 0.324	< 0.259	< 3.3	< 0.551	< 0.780	< 0.319	< 1.20
PMW-2S	8/7/2014	PMW-2S-080714	< 500	< 50	< 0.380	< 500	< 50	< 50	< 0.327	< 100	< 50	< 50	< 50
PMW-2S	3/3/2015	PMW-2S-030315	< 250 U	< 1.6	< 50	2.5 J	2.1 J	< 1.3	< 50	< 2.8	< 3.9	< 1.6	< 6.0
PMW-2S	2/19/2016	PMW-2S-021916	27.5 J	< 0.331	< 1.9	< 0.275	0.364 J	< 0.259	< 1.6	< 0.551	< 0.780	< 0.319	< 1.20
POC-1A	7/27/2004	POC-1A_07/27/2004	< 1000 U	< 40 U	< 0.380	< 40 U	< 40 U	< 40 U	< 0.327	< 200 U	< 40 U	< 40 U	< 40 U
POC-1A	1/26/2005	POC-1A_01/26/2005	< 1000 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 200 U	< 40 U	< 40 U	< 40 U
POC-1A	7/26/2005	925918187/POC-1A 14:22		< 1.0 U	< 40 U	na	1.6	< 1.0 U	< 40 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
POC-1A	2/16/2006	POC-1A_02/16/2006	< 50 U	< 2 U	< 1.0 U	na	< 2 U	< 2 U	< 1.0 U	< 2 U	< 2 U	< 2 U	< 2 U
POC-1A	2/16/2006	POC-1A_DUP-7_02/16/2006	< 62 U	< 2.5 U	< 2 U	na	< 2.5 U	< 2.5 U	< 2 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 A

Table E-8
Summary of VOCs to be Removed from Permit
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit VOCs / NC2L Standard / Location Concentration (ug/L)										
			Acetone	Benzene	Bromo-dichloromethane	Carbon Disulfide	Chloroform	1,1-DCA	Dibromo-chloromethane/ Chlorodibromomethane	Dichloro-difluoromethane (CFC-12)	Toluene	1,1,1-TCA	Trichloro-fluoromethane
			6000	1	0.6 ug/l	700	70	6	0.4 ug/l	1000	600	200	2000
POC-1A	2/22/2007	POC-1A_2222007	< 250 U	< 10 U	< 2.5 U	na	< 10 U	< 10 U	< 2.5 U	< 10 U	< 10 U	< 10 U	< 10 U
POC-1A	2/25/2009	POC-1A-022509	< 250	< 10.0	< 10 U	na	< 10.0	< 10.0	< 10 U	< 10.0	< 10.0	< 10.0	< 10.0
POC-1A	2/20/2013	POC-1A-022013	< 100	< 10	< 10.0	< 100	< 10	< 10	< 10.0	< 20	< 10	< 10	< 10
POC-1A	8/13/2013	POC-1A-081313	< 50	< 5.0	< 10	< 50	< 5.0	< 5.0	< 10	< 10	< 5.0	< 5.0	< 5.0
POC-1A	2/11/2014	POC-1A-021114	< 25	< 2.5	< 5.0	< 25	< 2.5	< 2.5	< 5.0	< 5.0	< 2.5	< 2.5	< 2.5
POC-1A	8/6/2014	POC-1A-080614	< 25	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
POC-1A	3/4/2015	POC-1A-030415	< 10	< 0.33	< 2.5	< 0.28	< 0.32	< 0.26	< 2.5	< 0.55	< 0.78	< 0.32	< 1.2
POC-1A	9/2/2015	POC-1A-090215	< 1.05	< 0.0896	< 0.38	< 0.101	< 0.0860	< 0.114	< 0.33	< 0.127	< 0.102	< 0.0940	< 0.130
POC-1A	2/18/2016	POC-1A-021816	< 10.0	< 0.331	< 0.0800	< 0.275	< 0.324	< 0.259	< 0.128	< 0.551	< 0.780	< 0.319	< 1.20
POC-1B	7/27/2004	POC-1B_07/27/2004	< 2000 U	< 80 U	< 0.380	< 80 U	< 80 U	< 80 U	< 0.327	< 400 U	< 80 U	< 80 U	< 80 U
POC-1B	1/26/2005	POC-1B_01/26/2005	< 2000 U	< 80 U	< 80 U	< 80 U	< 80 U	< 80 U	< 80 U	< 400 U	< 80 U	< 80 U	< 80 U
POC-1B	7/26/2005	925918146/POC-1B		< 1.0 U	< 80 U	na	4.7	< 1.0 U	< 80 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
POC-1B	2/16/2006	POC-1B_02/16/2006	< 25 U	< 1 U	< 1.0 U	na	4.5	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
POC-1B	2/21/2007	POC-1B_2212007	< 1200 U	< 50 U	< 1 U	na	< 50 U	< 50 U	< 1 U	< 50 U	< 50 U	< 50 U	< 50 U
POC-1B	2/26/2009	POC-1B-022609	< 2500	< 100	< 50 U	na	< 100	< 100	< 50 U	< 100	< 100	< 100	< 100
POC-1B	8/25/2009	POC-1B-082509	< 2500	< 100	< 100	na	< 100	< 100	< 100	< 100	< 100	< 100	< 100
POC-1B	8/24/2011	POC-1B-082411	< 100	< 10	< 100	< 100	< 10	< 10	< 100	< 20	< 10	< 10	< 10
POC-1B	8/25/2011	POC-1B-082511			< 10				< 10				
POC-1B	2/23/2012	POC-1B-022312	1400	< 20		< 200	< 20	< 20		< 40	< 20	< 20	< 20
POC-1B	8/29/2012	POC-1B-082912	430	< 2.5	< 20	< 25	< 2.5	< 2.5	< 20	< 5.0	< 2.5	< 2.5	< 2.5
POC-1B	2/20/2013	POC-1B-022013	< 25	< 2.5	< 2.5	< 25	4.8	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
POC-1B	8/13/2013	POC-1B-081313	< 100	< 10	< 2.5	< 100	< 10	< 10	< 2.5	< 20	< 10	< 10	< 10
POC-1B	2/11/2014	POC-1B-021114	< 100 UJ	< 10 UJ	< 10	< 100 UJ	< 10 UJ	< 10 UJ	< 10	< 20 UJ	< 10 UJ	< 10 UJ	< 10 UJ
POC-1B	8/6/2014	POC-1B-080614	< 50	< 5.0	< 10 UJ	< 50	< 5.0	< 5.0	< 10 UJ	< 10	< 5.0	< 5.0	< 5.0
POC-1B	3/4/2015	POC-1B-030415	< 2000	< 66	< 5.0	< 55	< 65	< 52	< 5.0	< 110	< 160	< 64	< 240
POC-1B	9/2/2015	POC-1B-090215	< 1.05 UJ	< 0.0896 UJ	< 76	< 0.101 UJ	2.59 J	< 0.114 UJ	< 65	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
POC-1B	2/18/2016	POC-1B-021816	31.6 J	< 0.331 UJ	< 0.0800 UJ	< 0.275 UJ	2.14 J	< 0.259 UJ	< 0.128 UJ	< 0.551 UJ	< 0.780 UJ	< 0.319 UJ	< 1.20 UJ
POC-2A	7/27/2004	POC-2A_07/27/2004	< 2500 U	< 100 U	< 0.380 UJ	< 100 U	< 100 U	< 100 U	< 0.327 UJ	< 500 U	< 100 U	< 100 U	< 100 U
POC-2A	1/26/2005	POC-2A_01/26/2005	< 2500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U
POC-2A	2/22/2007	POC-2A_2222007	< 250 U	< 10 U	< 100 U	na	< 10 U	< 10 U	< 100 U	< 10 U	< 10 U	< 10 U	< 10 U
POC-2A	2/20/2013	POC-2A-022013	< 50	< 5.0	< 10 U	< 50	10	< 5.0	< 10 U	< 10	< 5.0	< 5.0	< 5.0
POC-2A	8/13/2013	POC-2A-081313	< 250	< 25	< 5.0	< 250	< 25	< 25	< 5.0	< 50	< 25	< 25	< 25
POC-2A	2/11/2014	POC-2A-021114	< 250 UJ	< 25 UJ	< 25	< 250 UJ	< 25 UJ	< 25 UJ	< 25	< 50 UJ	< 25 UJ	< 25 UJ	< 25 UJ
POC-2A	8/7/2014	POC-2A-080714	< 250	< 25	< 25 UJ	< 250	< 25	< 25	< 25 UJ	< 50	< 25	< 25	< 25
POC-2A	3/3/2015	POC-2A-030315	< 50 U	0.34 J	< 25	0.34 J	14	< 0.26	< 25	< 0.55	< 0.78	< 0.32	< 1.2
POC-2A	9/2/2015	POC-2A-090215	17.8 J	< 0.0896 UJ	< 0.38	< 0.101 UJ	1.78 J	< 0.114 UJ	< 0.33	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
POC-2A	2/19/2016	DUP-03-021916	na	na	< 0.0800 UJ	na	na	na	< 0.128 UJ	na	na	na	na
POC-2A	2/19/2016	POC-2A-021916	25.1 J	< 0.331	na	< 0.275	1.99 J	< 0.259	na	< 0.551	< 0.780	< 0.319	< 1.20
POC-2B	7/27/2004	POC-2B_07/27/2004	< 2500 U	< 100 U	< 0.380	< 100 U	< 100 U	< 100 U	< 0.327	< 500 U	< 100 U	< 100 U	< 100 U
POC-2B	1/26/2005	POC-2B_01/26/2005	< 2500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U
POC-2B	7/27/2005	925918328/POC-2B		< 1.0 U	< 100 U	na	6.9	< 1.0 U	< 100 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
POC-2B	2/16/2006	POC-2B_02/16/2006	< 25 U	< 1 U	< 1.0 U	na	7.3	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
POC-2B	2/16/2006	POC-2B_DUP-8_02/16/2006	< 1200 U	< 50 U	< 1 U	na	< 50 U	< 50 U	< 1 U	< 50 U	< 50 U	< 50 U	< 50 A
POC-2B	2/22/2007	POC-2B_2222007	< 2500 U	< 100 U	< 50 U	na	< 100 U	< 100 U	< 50 U	< 100 U	< 100 U	< 100 U	< 100 U
POC-2B	2/28/2008	POC-2B-022808	< 1250	< 50.0	< 100 U	na	< 50.0	< 50.0	< 100 U	< 50.0	< 50.0	< 50.0	< 50.0
POC-2B	2/26/2009	POC-2B-022609	< 2500	< 100	< 50.0	na	< 100	< 100	< 50.0	< 100	< 100	< 100	< 100
POC-2B	8/25/2009	POC-2B-082509	< 5000	< 200	< 100	na	< 200	< 200	< 100	< 200	< 200	< 200	< 200
POC-2B	8/24/2011	POC-2B-082411	< 500	< 50	< 200	< 500	< 50	< 50	< 200	< 100	< 50	< 50	< 50
POC-2B	2/23/2012	POC-2B-022312	< 2000	< 200	< 50	< 2000	< 200	< 200	< 50	< 400	< 200	< 200	< 200
POC-2B	8/29/2012	POC-2B-082912	< 250	< 25	< 200	< 250	< 25	< 25	< 200	< 50	< 25	< 25	< 25
POC-2B	2/20/2013	POC-2B-022013	< 250	< 25	< 25	< 250	< 25	< 25	< 25	< 50	< 25	< 25	< 25
POC-2B	8/13/2013	POC-2B-081313	< 250	< 25	< 25	< 250	< 25	< 25	< 25	< 50	< 25	< 25	< 25
POC-2B	2/11/2014	POC-2B-021114	< 250 UJ	< 25 UJ	< 25	< 250 UJ	< 25 UJ	< 25 UJ	< 25	< 50 UJ	< 25 UJ	< 25 UJ	< 25 UJ
POC-2B	8/7/2014	POC-2B-080714	< 250	< 25	< 25 UJ	< 250	< 25	< 25	< 25 UJ	< 50	< 25	< 25	< 25
POC-2B	3/3/2015	POC-2B-030315	< 2000	< 66	< 25	< 55	< 65	< 52	< 25	< 110	< 160	< 64	< 240
POC-2B	9/2/2015	POC-2B-090215	< 39.4 U	< 0.448 UJ	< 76	< 0.505 UJ	4.21 J	< 0.570 UJ	< 65	< 0.635 UJ	1.43 J	< 0.470 UJ	< 0.650 UJ
POC-2B	2/19/2016	POC-2B-021916	225	0.423 J	< 0.400 UJ	< 0.275	< 0.324	0.373 J	< 0.640 UJ	< 0.551	1.35 J	< 0.319	< 1.20
RW-19	2/16/2006	RW-19_02/16/2006	< 120 U	< 5 U	< 0.380	na	< 5 U	< 5 U	< 0.327	< 5 U	< 5 U	< 5 U	< 5 U
RW-19	2/16/2006	RW-19_DUP-2_02/16/2006	< 120 U	< 5 U	< 5 U	na	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 A
RW-19	2/23/2007	RW-19_2232007	< 120 U	< 5 U	< 5 U	na	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
RW-19	8/22/2007	RW-19-082207	< 125	< 5.0	< 5 U	na	< 5.0	< 5.0	< 5 U	< 5.0	< 5.0	< 5.0	6.5
RW-19	2/26/2008	RW-19-022608	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	11.4
RW-19	2/24/2009	RW-19-022409	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	7.2
RW-19	8/25/2009	RW-19-082509	< 125	< 5.0	< 5.0	na	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5.4
RW-19	8/24/2011	RW-19-082411	< 5.0	< 0.50	< 5.0	< 5.0	1.2	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	6.7
RW-19	2/22/2012	RW-19-022212	< 5.0	< 0.50	< 0.50	< 5.0	0.94	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	6.7
RW-19	8/28/2012	RW-19-082812	< 5.0	< 0.50	< 0.50	< 5.0	0.99	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	7.5
RW-19	2/20/2013	RW-19-022013	< 50	< 5.0	< 0.50	< 50	< 5.0	< 5.0	< 0.50	< 10	< 5.0	< 5.0	21
RW-19	8/13/2013	RW-19-081313	< 25	< 2.5	< 5.0	< 25	< 2.5	< 2.5	< 5.0	< 5.0	< 2.5	< 2.5	4.8
RW-19	2/17/2014	RW-19-021714	< 50	< 5.0	< 2.5	< 50	< 5.0	< 5.0	< 2.5	< 10	< 5.0	< 5.0	< 5.0
RW-19	8/5/2014	RW-19-080614	< 5.0	< 0.50	< 5.0	< 5.0	0.64	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	4.5
RW-19	3/2/2015	RW-19-030215	< 10	< 0.33	< 0.50	< 0.28	0.61 J	< 0.26	< 0.50	< 0.55	< 0.78	< 0.32	2.4 J
RW-19	9/3/2015	RW-19-090315	< 1.05 UJ	< 0.0896 UJ	< 0.38	< 0.101 UJ	< 0.0860 UJ	< 0.114 UJ	< 0.33	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	1.14 J
RW-19	2/17/2016	RW-19-021716	< 10.0	< 0.331	< 0.0800 UJ	< 0.275	0.407 J	< 0.259	< 0.128 UJ	< 0.551	< 0.780	< 0.319	1.42 J
RW-4	7/26/2005	925918245/RW-4		< 1.0 U	< 0.380	na	5.1	< 1.0 U	< 0.327	< 1.0 U	< 1.0 U	< 1.0 U	1.6
RW-4	2/16/2006	RW-4_02/16/2006	< 25 U	< 1 U	< 1.0 U	na	5	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U
RW-4	2/23/2007	DUP-4_2232007	< 1200 U	< 50 U	< 1 U	na	< 50 U	< 50 U	< 1 U	< 50 U	< 50 U	< 50 U	< 50 U
RW-4	2/23/2007	RW-4_2232007	< 1200 U	< 50 U	< 50 U	na	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
RW-4	8/22/2007	RW-4-082207	< 1250	< 50.0	< 50 U	na	< 50.0	< 50.0	< 50 U	< 50.0	< 50.0	< 50.0	< 50.0
RW-4	8/22/2007	RW-4 DUP-082207	< 250	< 10.0	< 50.0	na	< 10.0	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0
RW-4	3/3/2008	RW-4-030308	< 5000	< 200	< 10.0	na	< 200	< 200	< 10.0	< 200	< 200	< 200	< 200
RW-4	2/25/2009	RW-4-022509	< 2500	< 100	< 200	na	< 100	< 100	< 200	< 100	< 100	< 100	< 100
RW-4	2/25/2009	RW-4DUP-022509	< 2500	< 100	< 100	na	< 100	< 100	< 100	< 100	< 100	< 100	< 100
RW-4	8/26/2009	RW-4-082609	< 1250	< 50.0	< 100	na	< 50.0	< 50.0	< 100	< 50.0	< 50.0	< 50.0	< 50.0
RW-4	8/26/2009	RW-4-082609DUP	< 1250	< 50.0	< 50.0	na	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
RW-4	8/25/2011	DUP-3-082511	< 5.0	< 0.50	< 50.0	< 5.0	12	< 0.50	< 50.0	< 1.0	< 0.50	1.1	< 0.50
RW-4	8/25/2011	RW-4-082511	< 500	< 50	0.75	< 500	< 50	< 50	< 0.50	< 100	< 50	< 50	< 50
RW-4	2/22/2012	DUP-03-022212	< 50	< 5.0	< 50	< 50	4.4 J	< 5.0	< 50	< 10	< 5.0	< 5.0	< 5.0
RW-4	2/22/2012	RW-4-022212	< 500	< 50	< 5.0	< 500	< 50	< 50	< 5.0	< 100	< 50	< 50	< 50
RW-4	8/29/2012	DUP-03-082912	< 50	< 5.0	< 50	< 50	5.8	< 5.0	< 50	< 10	< 5.0	< 5.0	< 5.0
RW-4	8/29/2012	RW-4-082912	< 50	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0
RW-4	2/20/2013	DUP-03-022013	< 250	< 25	< 5.0	< 250	< 25	< 25	< 5.0	< 50	< 25	< 25	< 25
RW-4	2/20/2013	RW-4-022013	< 100	< 10	< 25	< 100	12	< 10	< 25	< 20	< 10	< 10	< 10
RW-4	8/14/2013	DUP-03-081413	< 100	< 10	< 10	< 100	16	< 10	< 10	< 20	< 10	< 10	< 10
RW-4	8/14/2013	RW-4-081413	< 100	< 10	< 10	< 100	15	< 10	< 10	< 20	< 10	< 10	< 10
RW-4	2/17/2014	DUP-03-021714	< 50	< 5.0	< 10	< 50	19	< 5.0	< 10	< 10	< 5.0	< 5.0	< 5.0
RW-4	2/17/2014	RW-4-021714	< 100	< 10	< 5.0	< 100	17	< 10	< 5.0	< 20	< 10	< 10	< 10
RW-4	8/7/2014	DUP-03-08072014	< 500	< 50	< 10	< 500	< 50	< 50	< 10	< 100	< 50	< 50	< 50
RW-4	8/7/2014	RW-4 -080714	< 50	< 5.0	< 50	< 50	17 J	< 5.0	< 50	< 10	< 5.0	< 5.0	< 5.0
RW-4	3/4/2015	DUP-02-03042015	< 250 U	< 1.6	< 5.0	1.6 J	2.1 J	< 1.3	< 5.0	< 2.8	< 3.9	< 1.6	< 6.0
RW-4	3/4/2015	RW-4-030415	< 90 U	< 0.33	< 1.9	1.4	2.1 J	< 0.26	< 1.6	< 0.55	< 0.78	< 0.32	< 1.2
RW-4	9/3/2015	DUP-02-09032015	56.5	< 0.0896	< 0.38	< 0.101	0.832	< 0.114	< 0.33	< 0.127	< 0.102	< 0.0940	< 0.130
RW-4	9/3/2015	RW-4-090315	64.2	< 0.0896 UJ	< 0.0800	< 0.101 UJ	0.497 J	< 0.114 UJ	< 0.128	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
RW-4	2/19/2016	RW-4-021916	41.4 J	< 0.331	< 0.0800 UJ	< 0.275	0.533 J	< 0.259	< 0.128 UJ	< 0.551	< 0.780	< 0.319	< 1.20
RW-6	7/26/2005	925918252/RW-6		< 1.0 U	< 0.380	na	1.5	< 1.0 U	< 0.327	< 1.0 U	< 1.0 U	< 1.0 U	9.7
RW-6	2/15/2006	RW-6_02/15/2006	< 250 U	< 10 U	< 1.0 U	na	< 10 U	< 10 U	< 1.0 U	< 10 U	< 10 U	< 10 U	11
RW-6	2/23/2007	RW-6_2232007	< 250 U	< 10 U	< 10 U	na	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
RW-6	8/21/2007	RW-6-082107	< 250	< 10.0	< 10 U	na	< 10.0	< 10.0	< 10 U	< 10.0	< 10.0	< 10.0	< 10.0
RW-6	2/27/2008	DUP-4-022708	< 250	< 10.0	< 10.0	na	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
RW-6	2/27/2008	RW-6-022708	< 250	< 10.0	< 10.0	na	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
RW-6	2/25/2009	RW-6-022509	< 250	< 10.0	< 10.0	na	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
RW-6	8/25/2009	RW-6-082509	< 250	< 10.0	< 10.0	na	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
RW-6	8/25/2011	RW-6-082511	< 50	< 5.0	< 10.0	< 50	< 5.0	< 5.0	< 10.0	< 10	< 5.0	< 5.0	< 5.0
RW-6	2/22/2012	RW-6-022212	< 50	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	2.7 J

Table E-8
Summary of VOCs to be Removed from Permit
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit VOCs / NC2L Standard / Location Concentration (ug/L)										
			Acetone	Benzene	Bromo-dichloromethane	Carbon Disulfide	Chloroform	1,1-DCA	Dibromo-chloromethane/ Chlorodibromomethane	Dichloro-difluoromethane (CFC-12)	Toluene	1,1,1-TCA	Trichloro-fluoromethane
			6000	1	0.6 ug/l	700	70	6	0.4 ug/l	1000	600	200	2000
RW-6	8/29/2012	RW-6-082912	< 25	< 2.5	< 5.0	< 25	< 2.5	< 2.5	< 5.0	< 5.0	< 2.5	< 2.5	< 2.5
RW-6	2/19/2013	RW-6-021913	< 25	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	12
RW-6	8/14/2013	RW-6-081413	< 50	< 5.0	< 2.5	< 50	< 5.0	< 5.0	< 2.5	< 10	< 5.0	< 5.0	< 5.0
RW-6	2/17/2014	RW-6-021714	< 50	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0
RW-6	8/6/2014	RW-6-080614	< 25	< 2.5	< 5.0	< 25	< 2.5	< 2.5	< 5.0	< 5.0	< 2.5	< 2.5	< 2.5
RW-6	3/2/2015	DUP-01-03022015	< 50	< 1.6	< 2.5	< 1.4	2.6 J	< 1.3	< 2.5	< 2.8	< 3.9	< 1.6	< 6.0
RW-6	3/2/2015	RW-6-030215	< 10	< 0.33	< 1.9	< 0.28	2.4 J	< 0.26	< 1.6	< 0.55	< 0.78	< 0.32	< 1.2
RW-6	9/3/2015	RW-6-090315	< 6.27 U	< 0.0896 UJ	< 0.38	< 0.101 UJ	0.962 J	< 0.114 UJ	< 0.33	< 0.127 UJ	< 0.102 UJ	< 0.0940 UJ	< 0.130 UJ
RW-6	2/17/2016	RW-6-021716	< 10.0	< 0.331	< 0.0800 UJ	< 0.275	1.52 J	< 0.259	< 0.128 UJ	< 0.551	< 0.780	< 0.319	< 1.20
SIW-1	3/3/2015	SIW-1-030315	< 250 U	< 1.6	< 0.380	< 1.4	5.4 J	< 1.3	< 0.327	< 2.8	< 3.9	< 1.6	< 6.0
SIW-1	2/18/2016	SIW-1-021816	< 10.0	< 0.331	< 1.9	0.768 J	2.21 J	< 0.259	< 1.6	< 0.551	< 0.780	< 0.319	< 1.20

Notes:
na - not available / not analyzed
1,1-DCA = 1,1-Dichloroethane
1,1,1-TCA = 1,1,1-Trichloroethane

Table E-9
Summary of Permit Metals
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit Metal / NC2L Standard / Location Concentration (ug/L)									
			Arsenic	Barium	Cadmium	Chromium	Copper	Mercury	Nickel	Selenium	Silver	Zinc
			10	700	2	10	1000	1	100	20	20	1000
MW-1	7/28/2004	MW-1_07/28/2004	< 10 U	130	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-1	7/26/2005	MW-1_07/26/05	< 5 U	70	< 1 U	< 2 U	na	< 0.20	na	na	na	na
MW-1	8/31/2005	MW-1_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	**1.1**	na	na	na	na
MW-1	2/13/2006	MW-1_02/13/06	< 5.0 U	69	< 1.0 U	< 2.0 U	na	< 0.20 U	na	na	na	na
MW-11	7/27/2004	MW-11_07/27/2004	< 10 U	450	< 10 U	**35.2**	na	< 0.25 U	na	na	na	na
MW-11	2/15/2006	MW-11_02/15/2006	< 5 U	190	< 1 U	**18**	na	< 0.2 U	na	na	na	na
MW-11D	7/27/2004	MW-11D_07/27/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-11D	8/31/2005	MW-11d_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-11D	2/15/2006	MW-11D_02/15/2006	< 5 U	31	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-13	7/28/2004	MW-13_07/28/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-13	7/26/2005	MW-13_07/26/05	< 5 U	44	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-13	8/31/2005	MW-13_08/31/2005	< 10 U	122	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-13	2/15/2006	MW-13_02/15/2006	< 5 U	120	< 1 U	2.6	na	< 0.2 U	na	na	na	na
MW-15	2/14/2006	MW-15_02/14/2006	< 5 U	**720**	< 1 U	**31**	na	< 0.2 U	na	na	na	na
MW-15	2/25/2009	MW-15-022509	< 5.0	99.6 U	< 1.0	< 5	< 5	< 0.2	< 5	< 10	< 5	< 10
MW-17	2/14/2006	MW-17_02/14/2006	< 5 U	120	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-18	7/28/2004	MW-18_07/28/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-18	8/31/2005	MW-18_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-18	2/15/2006	MW-18_02/15/2006	< 5 U	**840**	< 1 U	**64**	na	< 0.2 U	na	na	na	na
MW-18	2/28/2008	MW-18-022808	< 5.0	41.3	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	28.9
MW-18D	2/16/2006	MW-18D_02/16/2006	< 5 U	21	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-18D	2/28/2008	MW-18D-022808	< 5.0	32.2	< 1.0	**352**	372	< 0.20	**170**	< 10.0	< 5.0	86.4
MW-1B	8/31/2005	MW-1b_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-2	2/16/2006	MW-2_02/16/2006	< 5 U	91	< 1 U	10	na	< 0.2 U	na	na	na	na
MW-2	2/25/2009	MW-2-022509	< 5.0	10.9 U	< 1.0	< 5	< 5	< 0.2	< 5	< 10	< 5	< 10
MW-20	7/26/2005	MW-20_07/26/05	< 5 U	12	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-20	2/14/2006	MW-20_02/14/2006	< 5 U	53	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-20	2/15/2006	MW-20_DUP-5_02/15/2006	< 5 U	50 A	< 1 U	2.4 A	na	< 0.2 U	na	na	na	na
MW-20	8/21/2007	MW-20-082107	< 5.0	14.6	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	10.7
MW-20	2/24/2009	MW-20-022409	< 5.0	11.0 U	< 1.0	< 5	< 5	< 0.2	< 5	< 10	< 5	< 10
MW-21	7/28/2005	MW-21_07/28/05	< 5 U	29	< 1 U	2	na	< 0.2 U	na	na	na	na
MW-21	2/13/2006	MW-21_02/13/06	< 5.0 U	22	< 1.0 U	2.8	na	< 0.20 U	na	na	na	na
MW-21	2/21/2007	MW-21_2212007	7.9	na	< 1 U	< 5 U	24	< 0.2 U	9.7	< 10 U	< 5 U	89
MW-21	8/20/2007	MW-21-082007	< 5.0	16.8	< 1.0	< 5.0	< 5.0	< 0.20	5.1	< 10.0	< 5.0	< 10.0
MW-21	2/25/2008	MW-21-022508	< 5.0	20.4 J+	< 1.0	< 5.0	< 5.0	< 0.20	12.9	< 10.0	< 5.0	< 10.0
MW-21	2/24/2009	MW-21-022409	< 5.0	18.9 U	< 1.0	< 5.0	< 5.0	< 0.20	8.8	< 10.0	< 5.0	< 10.0
MW-21	8/25/2009	MW-21-082509	< 5.0	19.3 U	< 1.0	< 5.0	< 5.0	< 0.20	9.9	< 10.0	< 5.0	< 10.0
MW-21	8/23/2011	MW-21-082311	< 10	25	< 1.0	< 5.0	< 10	< 0.20	12	< 20	< 5.0	< 30
MW-21	2/21/2012	MW-21-022112	< 10	24	< 1.0	< 5.0	< 10	< 0.20	12	< 20	< 5.0	< 30
MW-21	8/28/2012	MW-21-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	12	< 20	< 5.0	< 30
MW-21	2/19/2013	MW-21-021913	< 9.9	20	0.28 J	< 5.0	1.4 J	< 0.20	8.3 J	4.8 J	< 5.0	15 J
MW-21	8/12/2013	MW-21-081213	< 10	79	< 1.0	< 5.0	< 10	< 0.20	31	< 20	< 5.0	< 30
MW-21	2/10/2014	MW-21-021014	< 10	74 J+	< 1.0	< 5.0	< 10	< 0.20	20	< 20	< 5.0	< 30
MW-21	8/5/2014	MW-21-080514	< 10	130 J+	1.1	< 5.0	< 10	< 0.20	28	< 20	< 5.0	< 30
MW-21	3/4/2015	MW-21-030415	< 6.5	60	< 0.70	< 1.4	< 20 U	< 0.049	15 J	< 7.4	< 2.8	16 J
MW-21	2/16/2016	MW-21-021616	na	na	na	< 1.40	na	na	16.8	na	na	na
MW-21	8/25/2016	MW-21-08252016	<10	45.2	<2	3.11	11.9	<0.2	9.62	<10	<5	9.83
MW-21D	7/28/2005	MW-21D_07/28/05	< 5 U	21	< 1 U	**38**	na	< 0.2 U	na	na	na	na
MW-21D	2/13/2006	MW-21D_02/13/06	< 5.0 U	17	< 1.0 U	< 2.0 U	na	< 0.20 U	na	na	na	na
MW-21D	2/21/2007	MW-21D_2212007	< 5 U	na	< 1 U	< 5 U	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	31
MW-21D	8/20/2007	MW-21D-082007	< 5.0	20.9	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	369
MW-21D	2/25/2008	MW-21D-022508	< 5.0	22.9 J+	< 1.0	6	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	105
MW-21D	2/24/2009	MW-21D-022409	< 5.0	20.6 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	81.8 U
MW-21D	8/25/2009	MW-21D-082509	< 5.0	21.0 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	62.1
MW-21D	8/23/2011	MW-21D-082311	< 10	26	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	610
MW-21D	2/21/2012	MW-21D-022112	< 10	24	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	480
MW-21D	8/28/2012	MW-21D-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	300
MW-21D	2/19/2013	MW-21D-021913	2.0 J	24	0.065 J	< 5.0	1.3 J	< 0.20	4.5 J	< 20	< 5.0	300
MW-21D	8/13/2013	MW-21D-081313	< 10	31 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	38
MW-21D	2/10/2014	MW-21D-021014	< 10	< 23 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	100
MW-21D	8/5/2014	MW-21D-080514	< 10	< 27 U	< 1.0	< 5.0	< 10	< 0.20	14	< 20	< 5.0	**3500**
MW-21D	3/4/2015	MW-21D-030415	< 6.5	27	< 0.70	< 1.4	< 5.3	< 0.049	5.7 J	< 7.4	< 2.8	800
MW-21D	2/16/2016	MW-21D-021616	na	na	na	1.87 J	na	na	9.37 J	na	na	na
MW-21D	8/25/2016	MW-21D-08252016	<10	23.8	<2	3.22	<10	<0.2	<10	<10	<5	153
MW-22	7/28/2004	MW-22_07/28/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-22	8/31/2005	MW-22_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-22	2/14/2006	MW-22_02/14/2006	< 5 U	82	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-23	7/28/2004	MW-23_07/28/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-23	7/26/2005	MW-23_07/26/05	< 5 U	39	< 1 U	2.4	na	< 0.2 U	na	na	na	na
MW-23	8/31/2005	MW-23_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-23	2/14/2006	MW-23_02/14/2006	< 5 U	80	< 1 U	5.8	na	< 0.2 U	na	na	na	na
MW-23	2/25/2009	MW-23-022509	< 5.0	31.3 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-24	2/17/2006	MW-24_02/17/2006	< 5 U	19	< 1 U	**15**	na	< 0.2 U				
MW-24	2/25/2009	MW-24-022509	< 5.0	10.9 U	< 1.0	**27.4**	7.9	< 0.20	14.9	< 10.0	< 5.0	10.6
MW-25	7/27/2005	MW-25_07/27/05	< 5 U	27	< 1 U	**22**	na	< 0.2 UJ	na	na	na	na
MW-25	2/16/2006	MW-25_02/16/2006	< 5 U	140	< 1 U	**2500**	na	< 0.2 U	na	na	na	na
MW-26	7/26/2005	MW-26_07/26/05	8.3	**1400**	< 1 U	**4100**	na	< 0.2 U	na	na	na	na
MW-26	2/17/2006	MW-26_02/17/2006	5.6	380	< 1 U	**360**	na	< 0.2 U	na	na	na	na
MW-27	7/26/2005	MW-27 DUP_07/26/05	< 5 U	24 A	< 1 U	< 2 A	na	< 0.2 U	na	na	na	na
MW-27	7/26/2005	MW-27_07/26/05	< 5 U	26	< 1 U	**23**	na	< 0.2 U	na	na	na	na
MW-27	2/14/2006	MW-27_02/14/2006	< 5 U	410	< 1 U	6.8	na	< 0.2 U	na	na	na	na
MW-27	2/27/2008	MW-27-022708	< 5.0	82.2	< 1.0	**14.5**	10.5	< 0.20	7.6	< 10.0	< 5.0	32.4
MW-28	7/27/2005	MW-28 DUP_07/27/05	< 5 U	140 A	< 1 U	2.7 A	na	< 0.2 U	na	na	na	na
MW-28	7/27/2005	MW-28_07/27/05	< 5 U	140	< 1 U	2.7	na	< 0.2 U	na	na	na	na
MW-28	2/14/2006	MW-28_02/14/2006	< 5 U	170	< 1 U	3.9 J	na	< 0.2 U	na	na	na	na
MW-28	2/14/2006	MW-28_DUP-3_02/14/2006	< 5 U	160 A	< 1 U	2.3 J	na	< 0.2 U	na	na	na	na
MW-28	2/21/2007	DUP-2_2212007	< 5 U	na	< 1 U	**13**	2.4	< 0.2 U	6.8	< 10 U	< 5 U	19
MW-28	2/21/2007	MW-28_2212007	< 5 U	na	< 1 U	**11**	2.4	< 0.2 U	5.6	< 10 U	< 5 U	26
MW-28	8/22/2007	MW-28-082207	< 5.0	103 A	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	11.6 J

Table E-9
Summary of Permit Metals
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit Metal / NC2L Standard / Location Concentration (ug/L)									
			Arsenic	Barium	Cadmium	Chromium	Copper	Mercury	Nickel	Selenium	Silver	Zinc
			10	700	2	10	1000	1	100	20	20	1000
MW-28	8/22/2007	MW-28 DUP-082207	< 5.0	97.3 A	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	21.8 J
MW-28	2/26/2008	DUP-3-022608	< 5.0	93.1	< 1.0	5.6 J	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	11.3 J
MW-28	2/26/2008	MW-28-022608	< 5.0	85.5	< 1.0	< 5.0 UJ	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0 UJ
MW-28	2/25/2009	MW-28-022509	< 5.0	74.4 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-28	2/25/2009	MW-28DUP-022509	< 5.0	75.4 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-29	7/27/2005	MW-29_07/27/05	< 5 U	56	< 1 U	**660**	na	< 0.2 U	na	na	na	na
MW-29	2/15/2006	MW-29_02/15/2006	< 5 U	32	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-2B	8/31/2005	MW-2b_08/31/2005	< 10 U	< 100 U	< 10 U	**96.7**	na	< 0.25 U	na	na	na	na
MW-3	7/27/2004	MW-3_07/27/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-3	8/31/2005	MW-3_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-3	2/16/2006	MW-3_02/16/2006	< 5 U	140	< 1 U	5.5	na	< 0.2 U	na	na	na	na
MW-3	2/22/2007	MW-3_2222007	< 5 U	na	< 1 U	**57**	< 2 U	< 0.2 U	30	< 10 U	< 5 U	20
MW-3	8/22/2007	MW-3-082207	< 5.0	26.6	< 1.0	**13.2**	< 5.0	< 0.20	5.9	< 10.0	< 5.0	< 10.0
MW-3	2/27/2008	MW-3-022708	< 5.0	36.7	< 1.0	**16.7**	< 5.0	< 0.20	8.2	< 10.0	< 5.0	< 10.0
MW-3	2/25/2009	MW-3-022509	< 5.0	19.5 U	< 1.0	**24**	< 5.0	< 0.20	11.6	< 10.0	< 5.0	< 10.0
MW-3	8/26/2009	MW-3-082609	< 5.0	26.8 U	< 1.0	**26.2**	< 5.0	< 0.20	13.5	< 10.0	< 5.0	< 10.0
MW-3	8/25/2011	MW-3-082511	< 10	33	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-3	2/23/2012	MW-3-022312	< 10	27	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-3	8/29/2012	MW-3-082912	< 10	24	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-3	2/20/2013	MW-3-022013	< 10	27	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	< 31
MW-3	8/14/2013	MW-3-081413	< 10	31	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-3	2/11/2014	MW-3-021114	< 10	< 31 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-3	8/6/2014	MW-3-080614	< 10	< 43 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-3	3/4/2015	MW-3-030415	7.6 J	59	< 0.70	< 1.4	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	< 5.9
MW-3	9/2/2015	MW-3-090215	NA	NA	NA	4.21 J	NA	NA	6.29 J	NA	NA	NA
MW-3	2/18/2016	MW-3-021816	NA	NA	NA	< 1.40	NA	NA	< 4.90	NA	NA	NA
MW-3	8/25/2016	MW-3-082516	<10.0	47.7	<2	3.15	<10	<0.200	<10	<10	<5	<50
MW-30	7/26/2005	MW-30_07/26/05	< 5 U	73	< 1 U	3.6	na	< 0.2 U	na	na	na	na
MW-30	2/15/2006	MW-30_02/15/2006	< 5 U	100	< 1 U	5.5	na	< 0.2 U	na	na	na	na
MW-30	2/15/2006	MW-30_DUP-4_02/15/2006	< 5 U	94 A	< 1 U	4.6 A	na	< 0.2 U	na	na	na	na
MW-30	2/26/2009	MW-30-022609	< 5.0	31.6	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-31	7/27/2005	MW-31_07/27/05	< 5 U	43	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-31	2/13/2006	MW-31_02/13/06	< 5.0 U	60	< 1.0 U	< 2.0 U	na	< 0.20 U	na	na	na	na
MW-31	2/27/2008	MW-31-022708	< 5.0	57.6	< 1.0	**33.9**	617	< 0.20	19.3	< 10.0	< 5.0	190
MW-31	2/24/2009	MW-31-022409	< 5.0	32.9 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-31	8/27/2009	MW-31-082709	< 5.0	28.9 U	< 1.0	< 5.0	7.5	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-31	8/27/2009	MW-31-082709DUP	< 5.0	28.6 U	< 1.0	< 5.0	7	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-31	2/24/2009	MW-31DUP-022409	< 5.0	30.6 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-32	7/28/2005	MW-32_07/28/05	< 5 U	35	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-32	2/14/2006	MW-32_02/14/2006	< 5 U	36	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-32	2/20/2007	DUP-1_2202007	< 5 U	na	< 1 U	**190**	6.1	< 0.2 U	95	< 10 U	< 5 U	< 10 U
MW-32	2/20/2007	MW-32_2202007	< 5 U	na	< 1 U	**160**	5.2	< 0.2 U	79	< 10 U	< 5 U	< 10 U
MW-32	8/21/2007	MW-32 DUP-082107	< 5.0	34.4 A	< 1.0	**18.1 A**	< 5.0 A	< 0.20	10.3 A	< 10.0	< 5.0	10.0 J
MW-32	8/21/2007	MW-32-082107	< 5.0	40.2 A	< 1.0	**21.8 A**	5.4 A	< 0.20	11.3 A	< 10.0	< 5.0	13.8 J
MW-32	2/25/2008	DUP-2-022508	< 5.0	43.0 J+	< 1.0	**298**	7.7	< 0.20	**156**	< 10.0	< 5.0	< 10.0
MW-32	2/25/2008	MW-32-022508	< 5.0	41.9 J+	< 1.0	**286**	8.1	< 0.20	**146**	< 10.0	< 5.0	< 10.0
MW-32	8/26/2009	MW-32-082609	< 5.0	35.7 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-33	7/26/2005	MW-33_07/26/05	< 5 U	36	< 1 U	< 2 U	na	0.44	na	na	na	na
MW-33	2/14/2006	MW-33_02/14/2006	< 5 U	220	< 1 U	**19**	na	< 0.2 U	na	na	na	na
MW-33	2/21/2007	MW-33_2212007	< 5 U	na	< 1 U	**15**	7.8	< 0.2 U	7.5	< 10 U	< 5 U	45
MW-33	8/21/2007	MW-33-082107	< 5.0	55.6	< 1.0	**74.7**	< 5.0	< 0.20	38.8	< 10.0	< 5.0	15.2
MW-33	2/26/2008	MW-33-022608	< 5.0	33.5	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-33	2/26/2009	MW-33-022609	< 5.0	28.9	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-33	8/23/2011	MW-33-082311	< 10	88	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-33	2/22/2012	MW-33-022212	< 10	36	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-33	2/19/2013	MW-33-021913	1.2 J	33	0.092 J	< 5.0	0.46 J	< 0.20	< 10	4.1 J	< 5.0	17 J
MW-33	2/11/2014	MW-33-021114	< 10	32 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-33	8/5/2014	MW-33-080514	< 10	< 45 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-34	7/25/2005	MW-34_07/25/05	< 5 U	110	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-34	2/14/2006	MW-34_DUP-1_02/14/2006	< 5 U	150 A	< 1 U	**11 J**	na	< 0.2 U	na	na	na	na
MW-34	2/15/2006	MW-34_02/15/2006	< 5 U	140	< 1 U	3.7 J	na	< 0.2 U	na	na	na	na
MW-34	2/22/2007	MW-34_2222007	< 5 U	na	< 1 U	< 5 U	2.8	< 0.2 U	< 5 U	< 10 U	< 5 U	11
MW-34	8/21/2007	MW-34-082107	< 5.0	53.8	< 1.0	**34.7**	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	29.6
MW-34	2/26/2008	MW-34-022608	< 5.0	107	< 1.0	< 5.0	5	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-34	8/26/2009	MW-34-082609	< 5.0	85.0 U	< 1.0	9.1	< 5.0	< 0.20	6	< 10.0	< 5.0	< 10.0
MW-34	8/28/2012	MW-34-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-34	2/19/2013	MW-34-021913	2.9 J	80	< 1.0	< 5.0	0.54 J	< 0.20	0.65 J	3.6 J	< 5.0	12 J
MW-34	8/14/2013	MW-34-081413	< 10	82	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-34	8/5/2014	MW-34-080514	< 10	87 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-35	7/25/2005	MW-35_07/25/05	< 5 U	46	< 1 U	3.9	na	< 0.2 U	na	na	na	na
MW-35	8/21/2007	MW-35-082107	< 5.0	79.1	< 1.0	5	7.2	< 0.20	7.5	< 10.0	< 5.0	84.4
MW-35R	8/25/2009	MW-35R-082509	< 5.0	91.4 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-35R	2/11/2014	MW-35R-021114	< 10	120	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-36	2/13/2006	MW-36_02/13/06	< 5.0 U	150	< 1.0 U	8.4	na	< 0.20 U	na	na	na	na
MW-36	2/27/2008	MW-36-022708	< 5.0	88.9	< 1.0	8.2	< 5.0	< 0.20	5.7	< 10.0	< 5.0	< 10.0
MW-36	2/24/2009	MW-36-022409	< 5.0	52.3 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-36	8/26/2009	MW-36-082609	< 5.0	86.1 U	< 1.0	5.3	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-36	2/22/2012	MW-36-022212	< 10	77	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-36	8/29/2012	MW-36-082912	< 10	65	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-36	2/19/2013	MW-36-021913	< 9.9	72	0.11 J	< 5.0	< 9.9	< 0.20	< 9.9	< 20	< 5.0	15 J
MW-36	8/14/2013	MW-36-081413	< 10	60	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-36	2/11/2014	MW-36-021114	< 10	59 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-36	8/6/2014	MW-36-080614	< 10	65 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-37	2/13/2006	MW-37_02/13/06	< 5.0 U	34	< 1.0 U	4.6	na	< 0.20 U	na	na	na	na
MW-37	8/6/2014	MW-37-080614	< 10	< 27 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-38	2/20/2007	MW-38_2202007	< 5 U	na	< 1 U	< 5 U	< 2 U	< 0.2 U	5.5	< 10 U	< 5 U	11
MW-38	8/20/2007	MW-38-082007	< 5.0	24.2	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-38	2/25/2008	MW-38-022508	< 5.0	15.3 J+	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-38	2/24/2009	MW-38-022409	< 5.0	15.1 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0

Table E-9
Summary of Permit Metals
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit Metal / NC2L Standard / Location Concentration (ug/L)									
			Arsenic	Barium	Cadmium	Chromium	Copper	Mercury	Nickel	Selenium	Silver	Zinc
			10	700	2	10	1000	1	100	20	20	1000
MW-38	8/27/2009	MW-38-082709	< 5.0	27.0 U	< 1.0	9.4	< 5.0	< 0.20	7.6	< 10.0	< 5.0	< 10.0
MW-38	8/23/2011	MW-38-082311	< 10	17	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-38	2/21/2012	MW-38-022112	< 10	13	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-38	8/29/2012	MW-38-082912	< 10	22	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 34 U
MW-38	2/19/2013	MW-38-021913	1.2 J	14	0.075 J	< 5.1	< 10	< 0.20	0.64 J	< 20	< 5.1	15 J
MW-38	8/13/2013	MW-38-081313	< 10	< 10	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-38	2/10/2014	MW-38-021014	< 10	< 15 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-38	8/5/2014	MW-38-080514	< 10	< 29 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	2/21/2007	MW-39_2212007	< 5 U	na	< 1 U	< 5 U	< 2 U	< 0.2 U	9.3	< 10 U	< 5 U	< 10 U
MW-39	8/20/2007	MW-39-082007	< 5.0	33.1	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-39	2/25/2008	MW-39-022508-DUP	< 5.0	31.2 J+	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-39	2/25/2008	MW-39-022508	< 5.0	29.6 J+	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-39	2/23/2009	MW-39-022309	< 5.0	37.2 U	< 1.0	**14.7**	< 5.0	< 0.20 UJ	5.9	< 10.0	< 5.0	< 10.0
MW-39	8/27/2009	MW-39-082709	< 5.0	35.7 U	< 1.0	5	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	10.1
MW-39	8/27/2009	MW-39-082709DUP	< 5.0	32.6 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-39	8/23/2011	DUP-2-082311	< 10	32	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	8/23/2011	MW-39-082311	< 10	35	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	2/21/2012	DUP-02-022112	< 10	34	< 1.0	**11**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	2/21/2012	MW-39-022112	< 10	34	< 1.0	**11**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	8/28/2012	DUP-02-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	8/28/2012	MW-39-082812	< 10	< 200	< 1.0	5.1	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	2/19/2013	DUP-02-021913	1.2 J	34	0.23 J	**16**	< 9.9	< 0.20	3.6 J	< 20	< 5.0	15 J
MW-39	2/19/2013	MW-39-021913	1.2 J	35	0.13 J	**16**	< 10	< 0.20	3.4 J	3.7 J	< 5.0	16 J
MW-39	8/12/2013	DUP-02-081213	< 10	33	< 1.0	**14**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	8/12/2013	MW-39-081213	< 10	33	< 1.0	**11**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	2/10/2014	DUP-02-021014	< 10	< 34 U	< 1.0	**16**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	2/10/2014	MW-39-021014	< 10	< 33 U	< 1.0	**15**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	8/5/2014	DUP-02-08052014	< 10	< 31 U	< 1.0	**12**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	8/5/2014	MW-39-080514	< 10	< 32 U	< 1.0	**11**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39	2/23/2009	MW-39DUP-022309	< 5.0	36.3 U	< 1.0	**15.9**	< 5.0	**1.9 U**	5.5	< 10.0	< 5.0	< 10.0
MW-39D	2/21/2007	MW-39D_2212007	< 5 U	na	< 1 U	< 5 U	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	< 10 U
MW-39D	8/20/2007	MW-39D DUP-082007	< 5.0	13.6 A	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0 A
MW-39D	8/20/2007	MW-39D-082007	< 5.0	14.0 A	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0 A
MW-39D	2/25/2008	MW-39D-022508	< 5.0	13.8 J+	< 1.0	5.8	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-39D	2/23/2009	MW-39D-022309	< 5.0	62.1 U	< 1.0	**13.7**	38.2	**1.9 U**	13.1	< 10.0	< 5.0	24.4
MW-39D	8/27/2009	MW-39D-082709	< 5.0	15.8 U	< 1.0	5.6	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-39D	8/23/2011	MW-39D-082311	< 10	16	< 1.0	5.8	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39D	2/21/2012	MW-39D-022112	< 10	14	< 1.0	5.6	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39D	8/28/2012	MW-39D-082812	< 10	< 200	< 1.0	6.5	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39D	2/19/2013	MW-39D-021913	2.8 J	15	0.10 J	4.7 J	0.43 J	< 0.20	< 10	4.3 J	< 5.1	12 J
MW-39D	8/12/2013	MW-39D-081213	< 10	15	< 1.0	6.4	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39D	2/10/2014	MW-39D-021014	< 10	< 13 U	< 1.0	5.6	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-39D	8/5/2014	MW-39D-080514	< 10	< 16 U	< 1.0	6.4	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-4	8/13/2013	MW-4-081313	< 10	< 17 U	< 1.0	< 5.0	< 10	**2.3**	< 10	< 20	< 5.0	< 30
MW-4	2/11/2014	MW-4-021114	< 10	< 30 U	< 1.0	< 5.0	< 10	**3.6**	< 10	< 20	< 5.0	< 30
MW-4	8/25/2016	MW-4-082516	<10	55.6	<2	3.44	<10	0.235	<10	<10	<5	9.18
MW-40	2/20/2007	MW-40_2202007	< 5 U	na	< 1 U	5.6	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	12
MW-40	8/21/2007	MW-40-082107	< 5.0	33.1	< 1.0	**18.5**	5.2	< 0.20	< 5.0	< 10.0	< 5.0	16.5
MW-40	2/26/2008	MW-40-022608	< 5.0	16.4	< 1.0	5.6	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-40	2/24/2009	MW-40-022409	< 5.0	15.1 U	< 1.0	5.9	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-40	8/27/2009	MW-40-082709	< 5.0	15.7 U	< 1.0	5.6	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-40	8/23/2011	MW-40-082311	< 10	17	< 1.0	5.9	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40	2/21/2012	MW-40-022112	< 10	16	< 1.0	5.6	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40	8/28/2012	MW-40-082812	< 10	< 200	< 1.0	6.7	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40	2/19/2013	MW-40-021913	1.2 J	18	0.087 J	4.6 J	< 10	< 0.20	1.1 J	< 20	< 5.0	13 J
MW-40	8/13/2013	MW-40-081313	< 10	< 10	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40	2/10/2014	MW-40-021014	< 10	< 18 U	< 1.0	7.2	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40	8/5/2014	MW-40-080514	< 10	< 19 U	< 1.0	7.9	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40D	2/20/2007	MW-40D_2202007	< 5 U	na	< 1 U	**26**	24	< 0.2 U	14	< 10 U	< 5 U	< 10 U
MW-40D	8/21/2007	MW-40D-082107	< 5.0	27.5	< 1.0	**11.9**	5.5	< 0.20	< 5.0	< 10.0	< 5.0	52.6
MW-40D	2/26/2008	MW-40D-022608	< 5.0	8.1	< 1.0	**86.3**	< 5.0	< 0.20	< 5.0	16.8	< 5.0	< 10.0
MW-40D	2/24/2009	MW-40D-022409	< 5.0	23.9 U	< 1.0	5.2	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-40D	8/27/2009	MW-40D-082709	< 5.0	31.4 U	< 1.0	8	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-40D	8/23/2011	MW-40D-082311	< 10	26	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40D	2/21/2012	MW-40D-022112	< 10	24	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40D	8/28/2012	MW-40D-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40D	2/19/2013	MW-40D-021913	2.1 J	27	< 1.0	4.7 J	1.1 J	< 0.20	0.56 J	2.2 J	< 5.0	12 J
MW-40D	8/13/2013	MW-40D-081313	< 10	27 J+	< 1.0	6.6	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40D	2/10/2014	MW-40D-021014	< 10	< 26 U	< 1.0	5.1	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-40D	8/5/2014	MW-40D-080514	< 10	< 27 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-41	2/21/2007	MW-41_2212007	< 5 U	na	< 1 U	< 5 U	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	14
MW-41	8/20/2007	MW-41-082007	< 5.0	44.5	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-41	2/26/2008	MW-41-022608	< 5.0	42.6	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-41	2/24/2009	MW-41-022409	< 5.0	31.6 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-41	8/27/2009	MW-41-082709	< 5.0	32.7 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-41	8/23/2011	MW-41-082311	< 10	34	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-41	2/21/2012	MW-41-022112	< 10	30	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-41	8/28/2012	MW-41-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-41	2/19/2013	MW-41-021913	< 10	30	0.18 J	< 5.1	< 10	< 0.20	< 10	2.4 J	< 5.1	14 J
MW-41	8/14/2013	MW-41-081413	< 10	27	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-41	2/10/2014	MW-41-021014	< 10	< 30 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-41	8/5/2014	MW-41-080514	< 10	< 22 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6	7/27/2004	MW-6_07/27/2004	< 10 U	105	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-6	7/26/2005	MW-6 DUP_07/26/05	< 5 U	72 A	< 1 U	6.8 A	na	< 0.2 U	na	na	na	na
MW-6	7/26/2005	MW-6_07/26/05	< 5 U	72	< 1 U	6.9	na	< 0.2 U	na	na	na	na
MW-6	8/31/2005	MW-6_08/31/2005	14.3	**1040**	< 10 U	**107**	na	< 0.25 U	na	na	na	na
MW-6	2/15/2006	MW-6_02/15/2006	< 5 U	210	< 1 U	**28**	na	< 0.2 U	na	na	na	na
MW-6	2/22/2007	MW-6_2222007	< 5 U		< 1 U	6.9	6.2	< 0.2 U	< 5 U	< 10 U	< 5 U	25
MW-6	8/21/2007	MW-6-082107	< 5.0	43.4	< 1.0	**12.3**	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	12
MW-6	2/27/2008	MW-6-022708	< 5.0	50.3	< 1.0	**12.6**	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	10.6

Table E-9
Summary of Permit Metals
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit Metal / NC2L Standard / Location Concentration (ug/L)									
			Arsenic	Barium	Cadmium	Chromium	Copper	Mercury	Nickel	Selenium	Silver	Zinc
			10	700	2	10	1000	1	100	20	20	1000
MW-6	2/26/2009	MW-6-022609	< 5.0	48.7	< 1.0	5.6	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-6	8/24/2011	MW-6-082411	< 10	46	< 1.0	**19**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6	2/21/2012	MW-6-022112	< 10	42	< 1.0	**16**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6	8/29/2012	MW-6-082912	< 10	49	< 1.0	**14**	< 10	< 0.20	< 10	< 20	< 5.0	< 55 U
MW-6	2/19/2013	MW-6-021913	1.1 J	40	0.12 J	**18**	2.6 J	< 0.20	0.71 J	< 20	< 5.0	18 J
MW-6	8/12/2013	MW-6-081213	< 10	42	< 1.0	**19**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6	2/11/2014	MW-6-021114	< 10	< 39 U	< 1.0	**15**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6	8/6/2014	MW-6-080614	< 10	59 J+	< 1.0	6.3	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6	3/2/2015	MW-6-030215	< 6.5	45	< 0.70	**13**	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	8.4 J
MW-6	2/16/2016	MW-6-021616	na	na	na	8.62 J	na	na	< 4.90	na	na	na
MW-6	8/25/2016	MW-6-082516	<10	55	<2	8.05	<10	<0.2	5.35	<10	<5	17.0
MW-6D	2/15/2006	MW-6D_02/15/2006	< 5 U	270	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-6D	2/22/2007	MW-6D_2222007	< 5 U	na	< 1 U	9.1	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	33
MW-6D	8/21/2007	MW-6D-082107	< 5.0	317	< 1.0	**24.3**	< 5.0	< 0.20	8.6	< 10.0	< 5.0	68.8
MW-6D	2/27/2008	MW-6D-022708	< 5.0	292	< 1.0	7.8	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	32.9
MW-6D	2/25/2009	MW-6D-022509	< 5.0	273	< 1.0	8	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	45.6
MW-6D	8/25/2009	MW-6D-082509	< 5.0	276	< 1.0	8.3	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	15.2
MW-6D	8/24/2011	MW-6D-082411	< 10	310	< 1.0	6	< 10	< 0.20	< 10	< 20	< 5.0	37
MW-6D	2/22/2012	MW-6D-022212	< 10	340	< 1.0	**2600**	52 J+	< 0.20	**2000**	< 20	< 5.0	480
MW-6D	8/29/2012	MW-6D-082912	< 10	240	< 1.0	7.6	< 10	< 0.20	< 10	< 20	< 5.0	< 39 U
MW-6D	2/19/2013	MW-6D-021913	2.8 J	250	< 1.0	4.8 J	0.94 J	< 0.20	< 10	4.0 J	< 5.1	32
MW-6D	8/12/2013	MW-6D-081213	< 10	320	< 1.0	6.1	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6D	2/11/2014	MW-6D-021114	< 10	200 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6D	8/6/2014	MW-6D-080614	< 10	260 J+	< 1.0	5.4	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6D	3/2/2015	MW-6D-030215	< 6.5	270	< 0.70	6.6 J	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	7.6 J
MW-6D	2/17/2016	MW-6D-021716	na	na	na	< 1.40	na	na	< 4.90	na	na	na
MW-6D	8/25/2016	MW-6D-082516	<10	**840**	<2	3.82	<10	<0.2	<10	<10	<5	86.3
MW-6DR	7/27/2004	MW-6DR_07/27/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-6DR	7/28/2005	MW-6DR_07/28/05	< 5 U	83	< 1 U	3.9	na	< 0.2 U	na	na	na	na
MW-6DR	8/31/2005	MW-6DR_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-6DR	2/16/2006	MW-6DR_02/16/2006	< 5 U	86	< 1 U	4.2	na	< 0.2 U	na	na	na	na
MW-6DR	2/16/2006	MW-6DR_DUP-6_02/16/2006	< 5 U	85 A	< 1 U	4.5 A	na	< 0.2 U	na	na	na	na
MW-6DR	2/22/2007	MW-6DR_2222007	< 5 U		< 1 U	< 5 U	3.9	< 0.2 U	< 5 U	< 10 U	< 5 U	10
MW-6DR	8/22/2007	MW-6DR-082207	< 5.0	63.3	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-6DR	2/27/2008	MW-6DR-022708	< 5.0	74.9	< 1.0	5.6	8.5	< 0.20	< 5.0	< 10.0	< 5.0	10.7
MW-6DR	2/25/2009	MW-6DR-022509	< 5.0	64.1 U	< 1.0	**10.1**	8.2	< 0.20	5.6	< 10.0	< 5.0	< 10.0
MW-6DR	8/25/2009	MW-6DR-082509	< 5.0	67.9 U	< 1.0	< 5.0	5.4	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-6DR	8/24/2011	MW-6DR-082411	< 10	68	< 1.0	6.8	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR	2/21/2012	MW-6DR-022112	< 10	73	< 1.0	**12**	15	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR	8/29/2012	MW-6DR-082912	< 10	71	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR	2/19/2013	MW-6DR-021913	3.2 J	47	< 1.0	0.72 J	4.9 J	< 0.20	< 10	3.0 J	< 5.0	14 J
MW-6DR	8/12/2013	MW-6DR-081213	< 10	47	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR	2/11/2014	MW-6DR-021114	< 10	80 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR	8/6/2014	MW-6DR-080614	< 10	83 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR	3/3/2015	MW-6DR-030315	< 6.5	49	< 0.70	< 1.4	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	< 5.9
MW-6DR	2/17/2016	MW-6DR-021716	na	na	na	2.28 J	na	na	< 4.90	na	na	na
MW-6DR	8/25/2016	MW-6DR-082516	<10	123	<2	3.83	9.21	<0.2	<10	<10	<5	<50
MW-6DR3	7/27/2004	MW-6DR3_07/27/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-6DR3	7/27/2005	MW-6DR3_07/27/05	< 5 U	13	< 1 U	6	na	< 0.2 U	na	na	na	na
MW-6DR3	8/31/2005	MW-6DR3_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-6DR3	2/16/2006	MW-6DR3_02/16/2006	< 5 U	15	< 1 U	6.2	na	< 0.2 U	na	na	na	na
MW-6DR3	2/23/2007	MW-6DR3_2232007	< 5 U	na	< 1 U	< 5 U	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	19
MW-6DR3	8/22/2007	MW-6DR3-082207	< 5.0	14.2	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-6DR3	2/27/2008	MW-6DR3-022708	< 5.0	15.5	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	15
MW-6DR3	2/25/2009	MW-6DR3-022509	< 5.0	13.0 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	15.6
MW-6DR3	8/25/2009	MW-6DR3-082509	< 5.0	13.1 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	10.9
MW-6DR3	8/24/2011	MW-6DR3-082411	< 10	15	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR3	2/22/2012	MW-6DR3-022212	< 10	13	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR3	8/29/2012	MW-6DR3-082912	< 10	14	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30 U
MW-6DR3	2/19/2013	MW-6DR3-021913	3.1 J	15	0.045 J	2.0 J	1.1 J	< 0.20	< 10	< 20	< 5.0	20 J
MW-6DR3	8/12/2013	MW-6DR3-081213	< 10	15	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR3	2/11/2014	MW-6DR3-021114	< 10	< 13 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR3	8/6/2014	MW-6DR3-080614	< 10	< 14 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-6DR3	3/3/2015	MW-6DR3-030315	< 6.5	16	< 0.70	4.8 J	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	10 J
MW-6DR3	2/17/2016	MW-6DR3-021716	na	na	na	3.92 J	na	na	< 4.90	na	na	na
MW-6DR3	8/25/2016	MW-6DR3-082516	<10	13.8	<2	6.18	<10	<0.2	<10	<10	<5	<50
MW-7	2/14/2006	MW-7_02/14/2006	< 5 U	320	< 1 U	**58**		< 0.2 U	na	na	na	na
MW-7	2/22/2007	MW-7_2222007	< 5 U		< 1 U	< 5 U	2	< 0.2 U	< 5 U	< 10 U	< 5 U	12
MW-8	7/28/2004	MW-8_07/28/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-8	8/31/2005	MW-8_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-8	2/14/2006	MW-8_02/14/2006	< 5 U	140	< 1 U	4.3	na	< 0.2 U	na	na	na	na
MW-8	2/21/2007	MW-8_2212007	< 5 U		< 1 U	< 5 U	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	< 10 U
MW-8	8/21/2007	MW-8-082107	< 5.0	94	< 1.0	6.4	6.5	< 0.20	< 5.0	< 10.0	< 5.0	34
MW-8	2/26/2008	MW-8-022608	< 5.0	18.4	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
MW-8	2/23/2009	MW-8-022309	< 5.0	16.3 U	< 1.0	< 5.0	< 5.0	0.98 U	< 5.0	< 10.0	< 5.0	10
MW-8	2/22/2012	MW-8-022212	< 10	20	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8	2/20/2013	MW-8-022013	< 10	20	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	< 31
MW-8	8/13/2013	MW-8-081313	< 10	31 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8	2/10/2014	MW-8-021014	< 10	< 17 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8	8/5/2014	MW-8-080514	< 10	< 20 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8	3/2/2015	MW-8-030215	< 20 U	19	< 0.70	< 1.4	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	< 5.9
MW-8	2/17/2016	MW-8-021716	na	na	na	< 1.40	na	na	< 4.90	na	na	na
MW-8	8/25/2016	MW-8-082516	<10	22.5	<2	2.42	<10	<0.2	<10	<10	<5	<50
MW-8D	2/14/2006	MW-8D_02/14/2006	< 5 U	62	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-8D	2/21/2007	MW-8D_2212007	< 5 U	na	< 1 U	**30**	8.4	< 0.2 U	16	< 10 U	< 5 U	81
MW-8D	8/21/2007	MW-8D-082107	< 5.0	49.8	< 1.0	6.7	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	49.1
MW-8D	2/26/2008	MW-8D-022608	< 5.0	59.3	< 1.0	**37.7**	< 5.0	< 0.20	39.9	< 10.0	< 5.0	41.3
MW-8D	2/23/2009	MW-8D-022309	< 5.0	50.9 U	< 1.0	**10.7**	< 5.0	0.98 U	6.5	< 10.0	< 5.0	39.6
MW-8D	8/26/2009	MW-8D-082609	< 5.0	55.9 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	39
MW-8D	8/26/2009	MW-8D-082609DUP	< 5.0	57.2 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	38.3

Table E-9
Summary of Permit Metals
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit Metal / NC2L Standard / Location Concentration (ug/L)									
			Arsenic	Barium	Cadmium	Chromium	Copper	Mercury	Nickel	Selenium	Silver	Zinc
			10	700	2	10	1000	1	100	20	20	1000
MW-8D	8/24/2011	DUP-1-082411	< 10	52	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	59
MW-8D	8/24/2011	MW-8D-082411	< 10	52	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	56
MW-8D	2/22/2012	DUP-01-022212	< 10	54	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8D	2/22/2012	MW-8D-022212	< 10	56	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8D	8/28/2012	DUP-01-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	64
MW-8D	8/28/2012	MW-8D-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	68
MW-8D	2/20/2013	DUP-01-022013	< 10	56	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	35
MW-8D	2/20/2013	MW-8D-022013	< 10	57	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	34
MW-8D	8/13/2013	DUP-01-081313	< 10	58 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	33
MW-8D	8/13/2013	MW-8D-081313	< 10	57 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8D	2/10/2014	DUP-01-021014	< 10	57 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8D	2/10/2014	MW-8D-021014	< 10	57 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8D	8/5/2014	DUP-01-08052014	< 10	58 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8D	8/5/2014	MW-8D-080514	< 10	57 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8D	3/2/2015	MW-8D-030215	< 6.5	61	< 0.70	< 1.4	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	31 J
MW-8D	2/17/2016	MW-8D-021716	na	na	na	< 1.40	na	na	< 4.90	na	na	na
MW-8D	8/25/2016	MW-8D-082516	<10	54.7	<2	2.82	<10	<0.2	<10	<10	<5	23.2
MW-8D	2/23/2009	MW-8DDUP-022309	< 5.0	50.0 U	< 1.0	**10.5**	< 5.0	**1.0 U**	6.5	< 10.0	< 5.0	40.7
MW-8DR	7/28/2004	MW-8DR_07/28/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-8DR	7/27/2005	MW-8DR_07/27/05	< 5 U	30	< 1 U	**32**	na	< 0.2 U	na	na	na	na
MW-8DR	8/31/2005	MW-8DR_08/31/2005	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
MW-8DR	2/14/2006	MW-8DR_02/14/2006	< 5 U	24	< 1 U	< 2 U	na	< 0.2 U	na	na	na	na
MW-8DR	2/21/2007	MW-8DR_2212007	6		< 1 U	5.9	20	< 0.2 U	5.4	< 10 U	< 5 U	94
MW-8DR	8/21/2007	MW-8DR-082107	< 5.0	18.7	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	32.7
MW-8DR	2/26/2008	MW-8DR-022608	< 5.0	22.4	< 1.0	< 5.0	7.5	< 0.20	6.2	< 10.0	< 5.0	40.2
MW-8DR	2/23/2009	MW-8DR-022309	< 5.0	23.5 U	< 1.0	**26.5**	< 5.0	0.98 U	14.8	< 10.0	< 5.0	21.1
MW-8DR	8/26/2009	MW-8DR-082609	< 5.0	23.7 U	< 1.0	**17.4**	8.5	< 0.20	13.2	< 10.0	< 5.0	36.6
MW-8DR	8/24/2011	MW-8DR-082411	< 10	27	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	35
MW-8DR	2/22/2012	MW-8DR-022212	< 10	23	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8DR	8/28/2012	MW-8DR-082812	< 10	< 200	< 1.0	< 5.0	22	< 0.20	< 10	< 20	< 5.0	67
MW-8DR	2/20/2013	MW-8DR-022013	< 10	23	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8DR	8/13/2013	MW-8DR-081313	< 10	< 20 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8DR	2/10/2014	MW-8DR-021014	< 10	< 24 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8DR	8/5/2014	MW-8DR-080514	< 10	< 25 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
MW-8DR	3/2/2015	MW-8DR-030215	< 6.5	29	< 0.70	< 1.4	< 5.3	< 0.049	24	< 7.4	< 2.8	14 J
MW-8DR	2/17/2016	MW-8DR-021716	na	na	na	< 1.40	na	na	< 4.90	na	na	na
MW-8DR	8/25/2016	MW-8DR-8/25/2016	<10	28.5	<2	3.22	<10	<0.2	<10	<10	<5	12.4
PMW-1D	8/7/2014	PMW-1D-080714	na	na	na	na	na	na	na	na	na	na
PMW-1S	8/7/2014	PMW-1S-080714	na	na	na	na	na	na	na	na	na	na
PMW-2D	8/7/2014	PMW-2D-080714	na	na	na	na	na	na	na	na	na	na
PMW-2S	8/7/2014	PMW-2S-080714	na	na	na	na	na	na	na	na	na	na
POC-1A	7/27/2004	POC-1A_07/27/2004	**27.1**	**1470**	< 10 U	**28.9**	na	**2.11**	na	na	na	na
POC-1A	7/27/2005	POC-1A 7/27_07/27/05	< 5 U	76	< 1 U	2.6	na	< 0.2 U	na	na	na	na
POC-1A	2/16/2006	POC-1A_02/16/2006	< 5 U	250 J	< 1 U	**11 J**	na	< 0.2 U	na	na	na	na
POC-1A	2/16/2006	POC-1A_DUP-7_02/16/2006	< 5 U	140 J	< 1 U	5.8 J	na	< 0.2 U	na	na	na	na
POC-1A	2/22/2007	POC-1A_2222007	< 5 U		< 1 U	< 5 U	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	< 10 U
POC-1A	2/20/2013	POC-1A-022013	< 10	93	< 1.0	< 5.1	< 10	**2.3**	< 10	< 20	< 5.1	< 31
POC-1A	8/13/2013	POC-1A-081313	< 10	120 J+	< 1.0	< 5.0	< 10	**2.3**	< 10	< 20	< 5.0	< 30
POC-1A	2/11/2014	POC-1A-021114	< 10	120	< 1.0	< 5.0	< 10	**1.2**	< 10	< 20	< 5.0	< 30
POC-1A	8/6/2014	POC-1A-080614	< 10	71 J+	< 1.0	< 5.0	< 10	0.4	< 10	< 20	< 5.0	< 30
POC-1A	3/4/2015	POC-1A-030415	< 6.5	63	< 0.70	1.7 J	< 5.3	0.049 J	< 4.9	< 7.4	< 2.8	< 5.9
POC-1A	9/2/2015	POC-1A-090215	na	na	na	**21.8**	na	na	16.4	na	na	na
POC-1A	2/18/2016	POC-1A-021816	na	na	na	1.52 J	na	na	< 4.90	na	na	na
POC-1A	8/25/2016	POC-1A-8/25/2016	<10	61.5	<2	4.15	<10	0.0497	<10	<10	<5	<50
POC-1B	7/27/2004	POC-1B_07/27/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
POC-1B	7/26/2005	POC-1B_07/26/05	< 5 U	7.5	< 1 U	4.5	na	< 0.2 U	na	na	na	na
POC-1B	2/16/2006	POC-1B_02/16/2006	< 5 U	7.6	< 1 U	3.6	na	< 0.2 U	na	na	na	na
POC-1B	2/21/2007	POC-1B_2212007	< 5 U		< 1 U	**13**	6.5	< 0.2 U	< 5 U	< 10 U	< 5 U	35
POC-1B	2/23/2012	POC-1B-022312	< 10	15	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	760
POC-1B	8/29/2012	POC-1B-082912	< 10	29	< 1.0	**19**	13	< 0.20	22	< 20	< 5.0	320 J+
POC-1B	2/20/2013	POC-1B-022013	< 10	32	< 1.0	< 5.0	< 10	< 0.20	16	< 20	< 5.0	40
POC-1B	8/13/2013	POC-1B-081313	< 10	50 J+	< 1.0	8	< 10	< 0.20	< 10	< 20	< 5.0	52
POC-1B	2/11/2014	POC-1B-021114	< 10	43 J+	< 1.0	5.5	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-1B	8/6/2014	POC-1B-080614	< 10	< 35 U	< 1.0	5.5	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-1B	3/4/2015	POC-1B-030415	< 6.5	31	< 0.70	5.5 J	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	24 J
POC-1B	9/2/2015	POC-1B-090215	na	na	na	8.42 J	na	na	< 4.90	na	na	na
POC-1B	2/18/2016	POC-1B-021816	na	na	na	6.33 J	na	na	< 4.90	na	na	na
POC-1B	8/25/2016	POC-1B-08252016	<10	39.8	<2	10.5	<10	<0.2	5.32	<10	<5	24.2
POC-2A	7/27/2004	POC-2A_07/27/2004	< 10 U	424	< 10 U	**16.6**	na	**1.61**	na	na	na	na
POC-2A	2/22/2007	POC-2A_2222007	< 5 U		< 1 U	< 5 U	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	23
POC-2A	2/20/2013	POC-2A-022013	< 10	18	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	< 31
POC-2A	8/13/2013	POC-2A-081313	< 10	51 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2A	2/11/2014	POC-2A-021114	< 10	47 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2A	8/7/2014	POC-2A-080714	< 10	79 J+	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2A	3/3/2015	POC-2A-030315	6.8 J	50	< 0.70	< 1.4	< 5.3	< 0.049	6.2 J	< 7.4	< 2.8	8.8 J
POC-2A	9/2/2015	POC-2A-090215	na	na	na	5.62 J	na	na	< 4.90	na	na	na
POC-2A	2/19/2016	POC-2A-021916	na	na	na	< 1.40	na	na	< 4.90	na	na	na
POC-2A	8/25/2016	POC-2A-08252016	<10	70.4	<2	4.69	<10	<0.2	<10	<10	<5	7.80
POC-2B	7/27/2004	POC-2B_07/27/2004	< 10 U	< 100 U	< 10 U	< 10 U	na	< 0.25 U	na	na	na	na
POC-2B	7/27/2005	POC-2B_07/27/05	< 5 U	38	< 1 U	2.5	na	< 0.2 U	na	na	na	na
POC-2B	2/16/2006	POC-2B_02/16/2006	< 5 U	15	< 1 U	5.6 J	na	< 0.2 U	na	na	na	na
POC-2B	2/16/2006	POC-2B_DUP-8_02/16/2006	< 5 U	16 A	< 1 U	**10 J**	na	< 0.2 U	na	na	na	na
POC-2B	2/22/2007	POC-2B_2222007	< 5 U		< 1 U	**13**	< 2 U	< 0.2 U	< 5 U	< 10 U	< 5 U	18
POC-2B	2/28/2008	POC-2B-022808	< 5.0	13.3	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	12.2
POC-2B	8/25/2009	POC-2B-082509	< 5.0	9.6 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
POC-2B	8/24/2011	POC-2B-082411	< 10	11	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2B	2/23/2012	POC-2B-022312	< 10	< 10	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2B	8/29/2012	POC-2B-082912	< 10	12	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2B	2/20/2013	POC-2B-022013	< 10	< 10	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	< 31

Table E-9
Summary of Permit Metals
Former Parker Hannifin Facility, Wake Forest, North Carolina

Sample Location	Sample Date	Sample Code	Permit Metal / NC2L Standard / Location Concentration (ug/L)									
			Arsenic	Barium	Cadmium	Chromium	Copper	Mercury	Nickel	Selenium	Silver	Zinc
			10	700	2	10	1000	1	100	20	20	1000
POC-2B	8/13/2013	POC-2B-081313	< 10	< 20 U	< 1.0	**34**	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2B	2/11/2014	POC-2B-021114	< 10	< 10	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
POC-2B	8/7/2014	POC-2B-080714	< 10	< 18 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 40 U
POC-2B	3/3/2015	POC-2B-030315	< 6.5	**3000**	2.3 J	**260**	< 5.3	< 0.049	**300**	**84**	< 2.8	**2400**
POC-2B	9/2/2015	POC-2B-090215	na	na	na	**143**	na	na	**146**	na	na	na
POC-2B	2/19/2016	POC-2B-021916	na	na	na	**43.3**	na	na	**122**	na	na	na
POC-2B	8/25/2016	POC-2B-08252016	<10	**1790**	<2	**14.2**	43.1	0.0991	75.3	**32.4**	4.45	192
RW-19	2/16/2006	RW-19_02/16/2006	< 5 U	44	< 1 U	< 2 U		< 0.2 U				
RW-19	2/16/2006	RW-19_DUP-2_02/16/2006	< 5 U	46 A	< 1 U	< 2 U		< 0.2 U				
RW-19	2/23/2007	RW-19_2232007	< 5 U		< 1 U	< 5 U	11	0.47	< 5 U	< 10 U	< 5 U	56
RW-19	8/22/2007	RW-19-082207	< 5.0	40.9	< 1.0	< 5.0	5.5	< 0.20	< 5.0	< 10.0	< 5.0	269
RW-19	2/26/2008	RW-19-022608	< 5.0	39.4	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	22.4
RW-19	2/24/2009	RW-19-022409	< 5.0	34.7 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	139
RW-19	8/25/2009	RW-19-082509	< 5.0	38.6 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	19
RW-19	8/24/2011	RW-19-082411	< 10	39	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	1000
RW-19	2/22/2012	RW-19-022212	< 10	32	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-19	8/28/2012	RW-19-082812	< 10	< 200	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	81
RW-19	2/20/2013	RW-19-022013	< 10	31	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	< 30
RW-19	8/13/2013	RW-19-081313	< 10	< 23 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-19	2/17/2014	RW-19-021714	< 10	31	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	270
RW-19	8/5/2014	RW-19-080614	< 10	< 35 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-19	3/2/2015	RW-19-030215	< 6.5	34	< 0.70	1.6 J	< 5.3	< 0.049	< 4.9	< 7.4	< 2.8	920
RW-19	9/3/2015	RW-19-090315	na	na	na	< 1.40	na	na	< 4.90	na	na	na
RW-19	2/17/2016	RW-19-021716	na	na	na	< 1.40	na	na	< 4.90	na	na	na
RW-4	7/26/2005	RW-4_07/26/05	< 5 U	26	< 1 U	8.2	na	< 0.2 U	na	na	na	na
RW-4	2/16/2006	RW-4_02/16/2006	< 5 U	33	< 1 U	4.9	na	< 0.2 U	na	na	na	na
RW-4	2/23/2007	DUP-4_2232007	< 5 U		< 1 U	5.8	4.8	< 0.2 U	< 5 U	< 10 U	< 5 U	16
RW-4	2/23/2007	RW-4_2232007	< 5 U		< 1 U	< 5 U	5.8	0.39	< 5 U	< 10 U	< 5 U	35
RW-4	8/22/2007	RW-4-082207	< 5.0	22.6 A	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-4	8/22/2007	RW-4 DUP-082207	< 5.0	22.4 A	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-4	3/3/2008	RW-4-030308	< 5.0	27.6	< 1.0	5.8	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-4	2/25/2009	RW-4-022509	< 5.0	25.0 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-4	2/25/2009	RW-4DUP-022509	< 5.0	25.4 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-4	8/26/2009	RW-4-082609	< 5.0	23.6 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-4	8/25/2011	DUP-3-082511	< 10	17	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	8/25/2011	RW-4-082511	< 10	17	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	8/26/2009	RW-4-082609DUP	< 5.0	20.1 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-4	2/22/2012	DUP-03-022212	< 10	25	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	2/22/2012	RW-4-022212	< 10	25	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	8/29/2012	DUP-03-082912	< 10	25	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	8/29/2012	RW-4-082912	< 10	25	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	2/20/2013	DUP-03-022013	< 10	14	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	< 30
RW-4	2/20/2013	RW-4-022013	< 10	14	< 1.0	< 5.1	< 10	< 0.20	< 10	< 20	< 5.1	< 31
RW-4	8/14/2013	DUP-03-081413	< 10	20	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	8/14/2013	RW-4-081413	< 10	21	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	2/17/2014	DUP-03-021714	< 10	33	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	2/17/2014	RW-4-021714	< 10	32	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	8/7/2014	DUP-03-08072014	< 10	< 41 U	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	8/7/2014	RW-4 -080714	< 10	< 41	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-4	3/4/2015	DUP-02-03042015	6.9 J	340	< 0.70	5.9 J	< 5.3	< 0.049	12 J	15 J	< 2.8	12 J
RW-4	3/4/2015	RW-4-030415	< 6.5	330	< 0.70	9.8 J	7.0 J	0.16 J	12 J	13 J	< 2.8	9.6 J
RW-4	9/3/2015	DUP-02-09032015	na	na	na	**15.5**	na	na	8.60 J	na	na	na
RW-4	9/3/2015	RW-4-090315	na	na	na	**14.9**	na	na	10.2	na	na	na
RW-4	2/19/2016	RW-4-021916	na	na	na	6.55 J	na	na	< 4.90	na	na	na
RW-6	7/26/2005	RW-6_07/26/05	< 5 U	140	< 1 U	5.1	na	< 0.2 U	na	na	na	na
RW-6	2/15/2006	RW-6_02/15/2006	< 5 U	150	< 1 U	4.9	na	< 0.2 U	na	na	na	na
RW-6	2/23/2007	RW-6_2232007	< 5 U	na	< 1 U	< 5 U	3	< 0.2 U	< 5 U	< 10 U	< 5 U	130
RW-6	8/21/2007	RW-6-082107	< 5.0	134	< 1.0	**147**	42	< 0.20	**110**	< 10.0	< 5.0	50.8
RW-6	2/27/2008	DUP-4-022708	< 5.0	150	< 1.0	5.9	7.7 J	< 0.20	< 5.0	< 10.0	< 5.0	12.7
RW-6	2/27/2008	RW-6-022708	< 5.0	148	< 1.0	5.9	< 5.0 UJ	< 0.20	< 5.0	< 10.0	< 5.0	10.9
RW-6	2/25/2009	RW-6-022509	< 5.0	128	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	12
RW-6	8/25/2009	RW-6-082509	< 5.0	136 U	< 1.0	< 5.0	< 5.0	< 0.20	< 5.0	< 10.0	< 5.0	< 10.0
RW-6	8/25/2011	RW-6-082511	< 10	140	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-6	2/22/2012	RW-6-022212	< 10	140	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-6	8/29/2012	RW-6-082912	< 10	140	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	< 67 U
RW-6	2/19/2013	RW-6-021913	< 10	33	0.065 J	< 5.0	75	< 0.20	0.58 J	3.4 J	< 5.0	39
RW-6	8/14/2013	RW-6-081413	< 10	100	< 1.0	< 5.0	44	< 0.20	< 10	< 20	< 5.0	660
RW-6	2/17/2014	RW-6-021714	< 10	130	< 1.0	< 5.0	< 10	< 0.20	< 10	< 20	< 5.0	130
RW-6	8/6/2014	RW-6-080614	< 10	160 J+	< 1.0	5.1	< 10	< 0.20	< 10	< 20	< 5.0	< 30
RW-6	3/2/2015	DUP-01-03022015	8.5 J+	410	< 0.70	1.7 J	13 J	< 0.049	< 4.9	< 7.4	< 2.8	110
RW-6	3/2/2015	RW-6-030215	8.6 J+	410	< 0.70	< 1.4	19 J	< 0.049	< 4.9	< 7.4	< 2.8	110
RW-6	9/3/2015	RW-6-090315	na	na	na	< 1.40	na	na	< 4.90	na	na	na
RW-6	2/17/2016	RW-6-021716	na	na	na	2.57 J	na	na	< 4.90	na	na	na
S5192	7/27/2005	S5192_07/27/05	na	na	na	na	na	na	na	na	na	160
S5193	7/27/2005	S5193_07/27/05	na	na	na	na	53	na	na	na	na	na

Notes:
na - not available / not analyzed

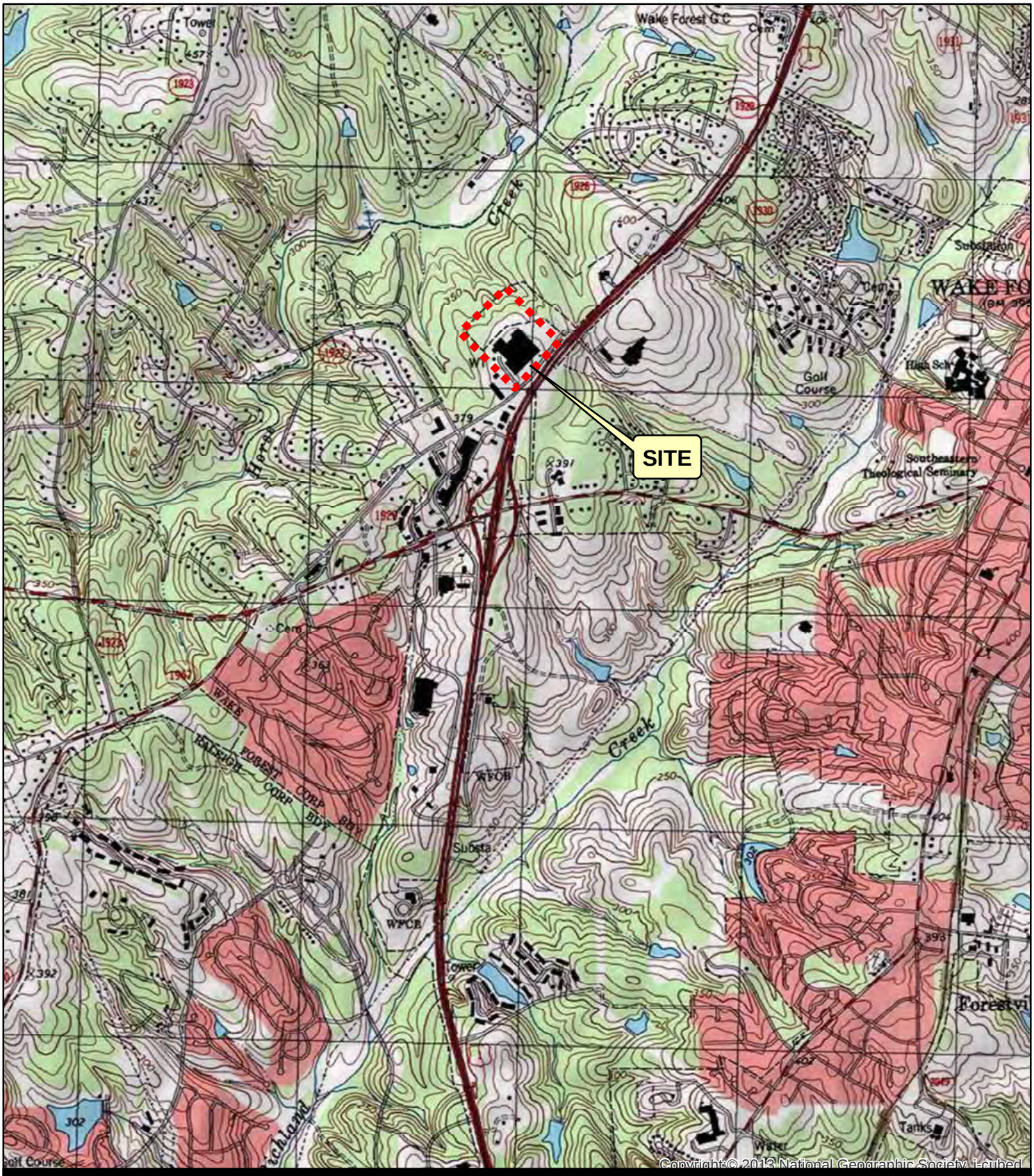
Table E-10
Groundwater Concentration Limits
Former Parker Hannifin Facility
Wake Forest, North Carolina

Constituent	Groundwater Standard (µg/L)
Volatile Organic Compounds	
Acetone	6000
Benzene	1
Bromodichloromethane	0.6
Carbon Disulfide	700
Chloroform	70
Dichlororodiflouromethane	1000
Dibromochloromethane	0.4
1,1-Dichloroethane	6
1,2-Dichloroethane	0.4
1,1-Dichloroethene	350
Methyl ethyl ketone	4000
Cis-1,2-dichloroethene	70
1,4-Dioxane	3
trans-1,2-Dichloroethene	100
Dichloropropane	0.6
Tetrachloroethene	0.7
Toluene	600
1,1,1-Trichloroethane	200
Trichloroethene	3
Trichlorofluoromethane	2000
Vinyl chloride	0.03
Metals	
Chromium	10
Nickel	100

Notes:
µg/L - Micrograms per liter
Remedial goals for groundwater from Title 15A North Carolina Administrative Code 2L Groundwater Standard, April 2013

Figures

Z:\GIS\Projects\P\Parker_Hannifin\Wake_Forest_NC\MXD\2015 Part B Renewal\Fig_B-1_Site_Location_Topo.



Map Location

Site Location Map

Former Parker Hannifin Corp. Facility
Wake Forest, North Carolina

N
W E
S

0 2,000 4,000 Feet 1:24,000

November 2015 USGS Topographic Quadrangle Wake Forest (1983) 60432139

Figure B-1

AECOM

AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607
Phone: (919) 854-6200
Fax: (919) 854-6259
www.aecom.com

Last saved by: CAMPBELLC (2017-03-14) Last Plotted: 2017-03-14
Filename: C:\USERS\CAMPBELLC\DOCUMENTS\AECOM WORK\PARKER HANNIFIN CORP\WAKE FOREST_NC\2017\DWG\FIG B-2_SITE PLAN TOPO_PTB_RENEWAL.DWG
Project Management Initials: Designer: SP Checked: SP Approved: BR ANSI D 22" x 34"

LEGEND

- PARKER HANNIFIN SITE PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- CREEK WITH FLOW DIRECTION
- SWMU 32 — SOLID WASTE MANAGEMENT UNIT
- GROUNDWATER TREATMENT SYSTEM EFFLUENT LINE TO POTW
- NEW FENCE LOCATION
- TOPOGRAPHIC CONTOURS
- MW-14 — MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- MW-11D — MONITORING WELL COMPLETED IN BEDROCK
- RW-4 — RECOVERY WELL
- POC-2A — POINT OF COMPLIANCE MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- SW9 — SURFACE WATER SAMPLE LOCATION
- SIW-1 — SHALLOW INJECTION WELL
- DIW-1 — DEEP INJECTION WELL
- PMW-2s — SHALLOW PILOT MONITORING WELL
- PMW-2d — DEEP PILOT MONITORING WELL

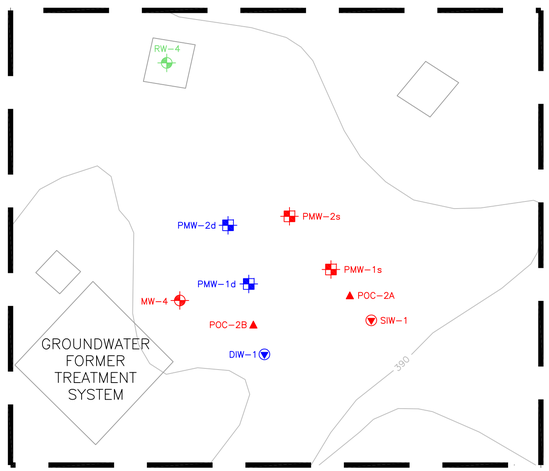
NOTE

PARKER HANNIFIN WILL COORDINATE WITH THE PROPERTY OWNER TO RESTRICT DISTURBANCE OF THE DISPOSAL UNIT (IDENTIFIED AS SWMU-16-FORMER SAND FILTER BEDS).

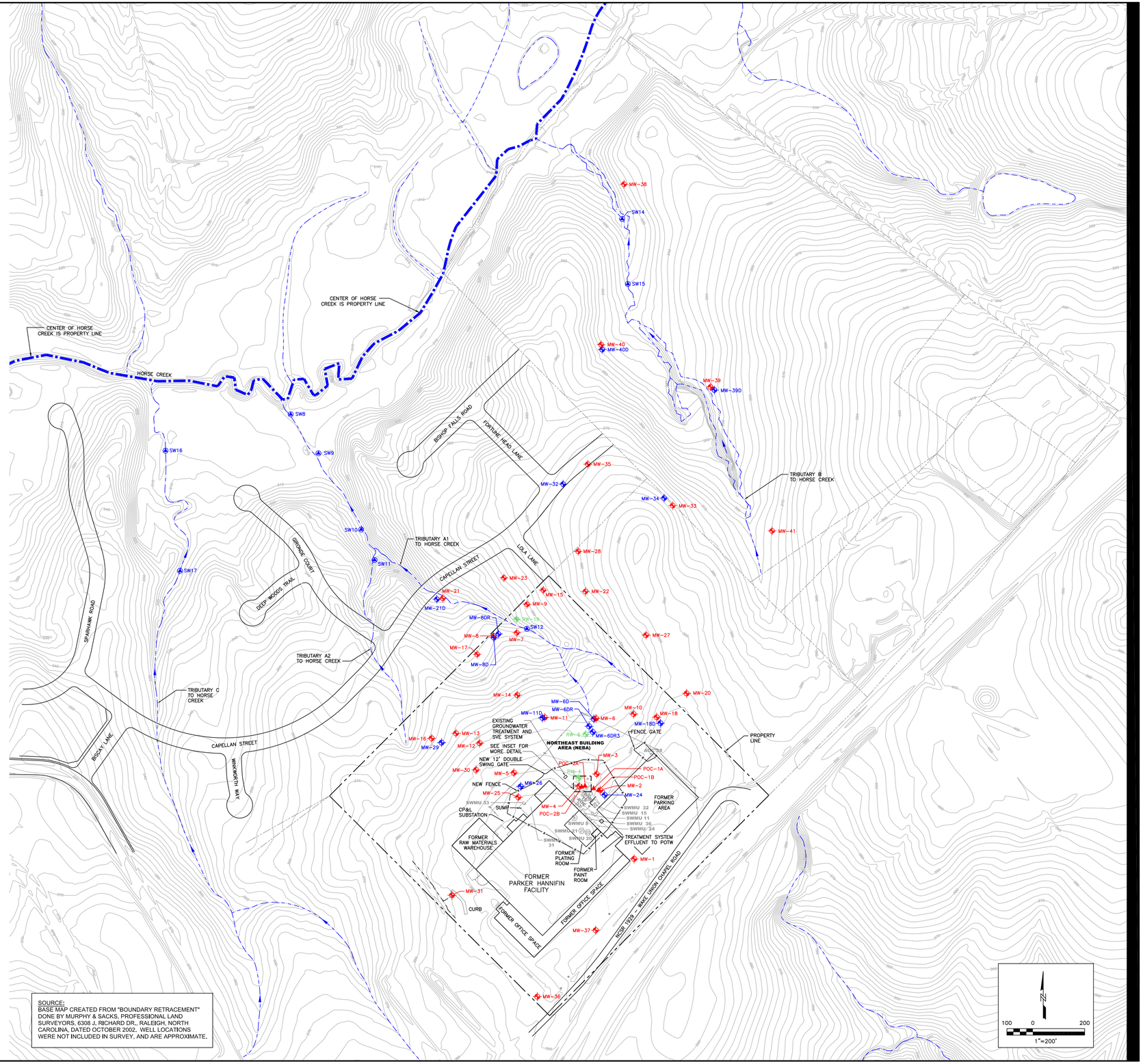
RREF BB-NC SICP, LLC

Being all of a certain parcel of land lying in Wake Forest Township, Wake CouKty, North Carolina bounded on the north by St. Ives Subdivision Phase Two (PB 2005 PG 1502 of the Wake County Registry and the right -of-way terminus of Lola Lane (60' Public R/W), on the east by RREF BB 2012 LT1-NC SIC I, LLC (PIN 1831751080), on the south by Wake Union Church Road (variable width Public R/W) and on the west by PHD@ Wake Union, LLC (PIN 1831633594) and RREF BB 2012 LT1-NC SIC II, LLC (PIN 1831537516) and being more particularly described as follows:

Beginning at an existing iron pipe at on the northern right-of-way of Wake Union Church Road, said pipe also being the southeast corner of PHD@ Wake Union, LLC; thence with said northern right-of-way the following five calls: N 46°01 '21" E 45.89' to an existing iron pipe; thence with a curve turning to the left with an arc length of 318.00', with a radius of 1879.86', with a chord bearing of N 40°24'41" E, with a chord length of 317.62' to an existing iron pipe, N 35°33'55" E 673.56' to an existing iron pipe, with a curve turning to the right with an arc length of 127.82', with a radius of 130.00', with a chord bearing of N 63°43'55" E, with a chord length of 122.73' to an existing iron pipe and N 80°45'14" E 69.40' to an existing iron pipe at the southwest corner of RREF BB 2012 LT1-NC SIC I, LLC; thence leaving said northern right -of-way and with the western line of said SIC I N 45°01'24" W 1,115.64' to an existing mag nail on the southern terminus of Lola Lane; thence with said southern terminus and with the southern line of St. Ives Subdivision Phase II S 44°54'00" W 1,199.81' to an existing iron pipe at the northeast corner of RREF BB 2012 LT1-NC SIC II, LLC; thence with the eastern line of said SIC II S 45°02'27" E 620.64' to an existing iron pipe at the northeast corner of the aforementioned PHD; thence with the eastern line of said PHD S 45°02'04" E 547.95' to the point or place of beginning containing 30.506± acres, more or less and as shown on a survey by Riley Surveying, PA dated November 21, 2016.



INSET – INJECTION AREA
SCALE: 1" = 10'



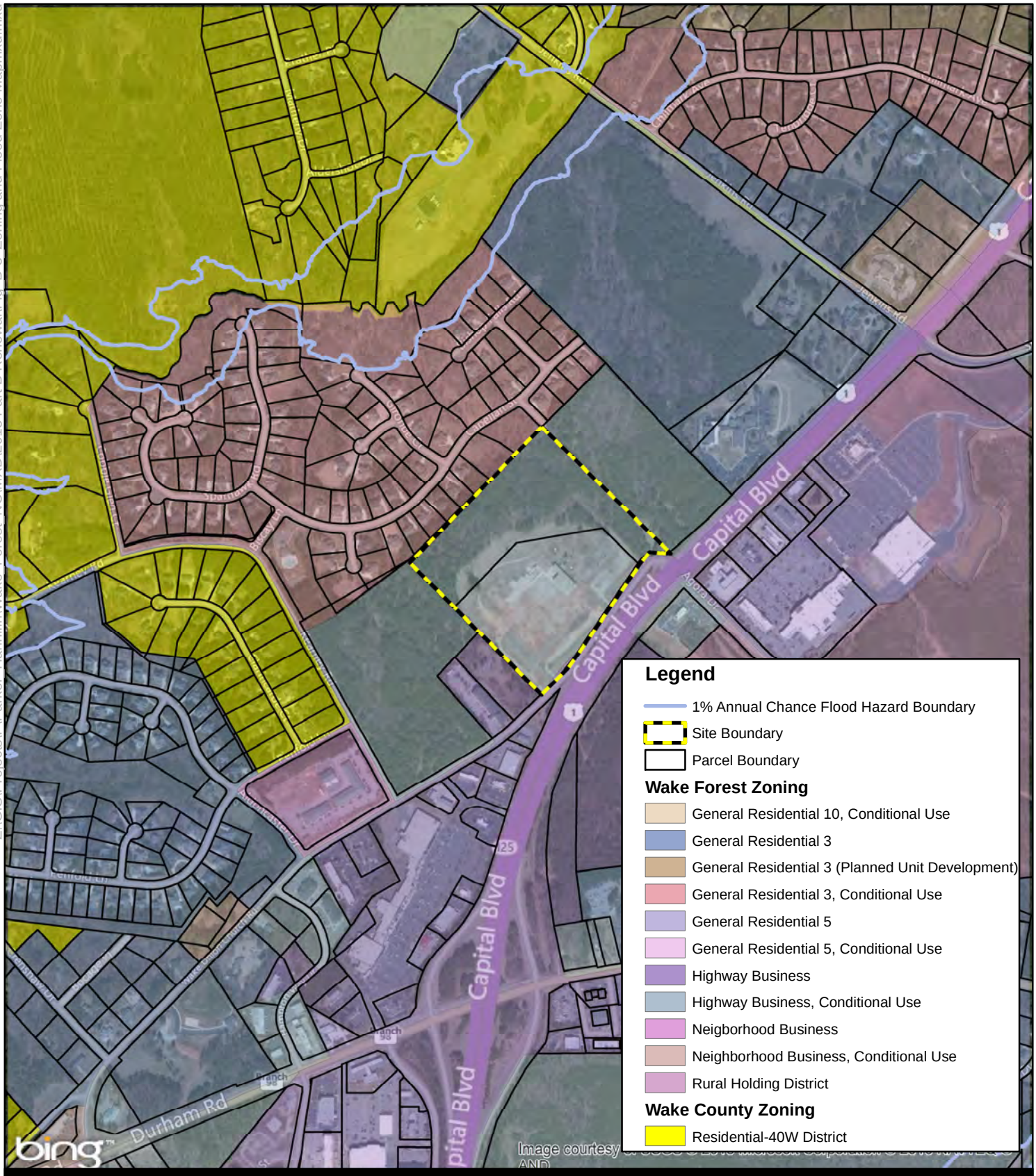
SOURCE:
BASE MAP CREATED FROM "BOUNDARY RETRACEMENT" DONE BY MURPHY & SACKS, PROFESSIONAL LAND SURVEYORS, 6308 J. RICHARD DR., RALEIGH, NORTH CAROLINA, DATED OCTOBER 2002. WELL LOCATIONS WERE NOT INCLUDED IN SURVEY, AND ARE APPROXIMATE.

AECOM

Figure: B-2

SITE TOPOGRAPHIC MAP

PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60432139 Date: 3/14/2017



Map Location

Zoning and Flood Zone Map

Former Parker Hannifin Corp. Facility
Wake Forest, North Carolina

N
W E
S

0 500 1,000 Feet

1:10,000

December 2015

60432139

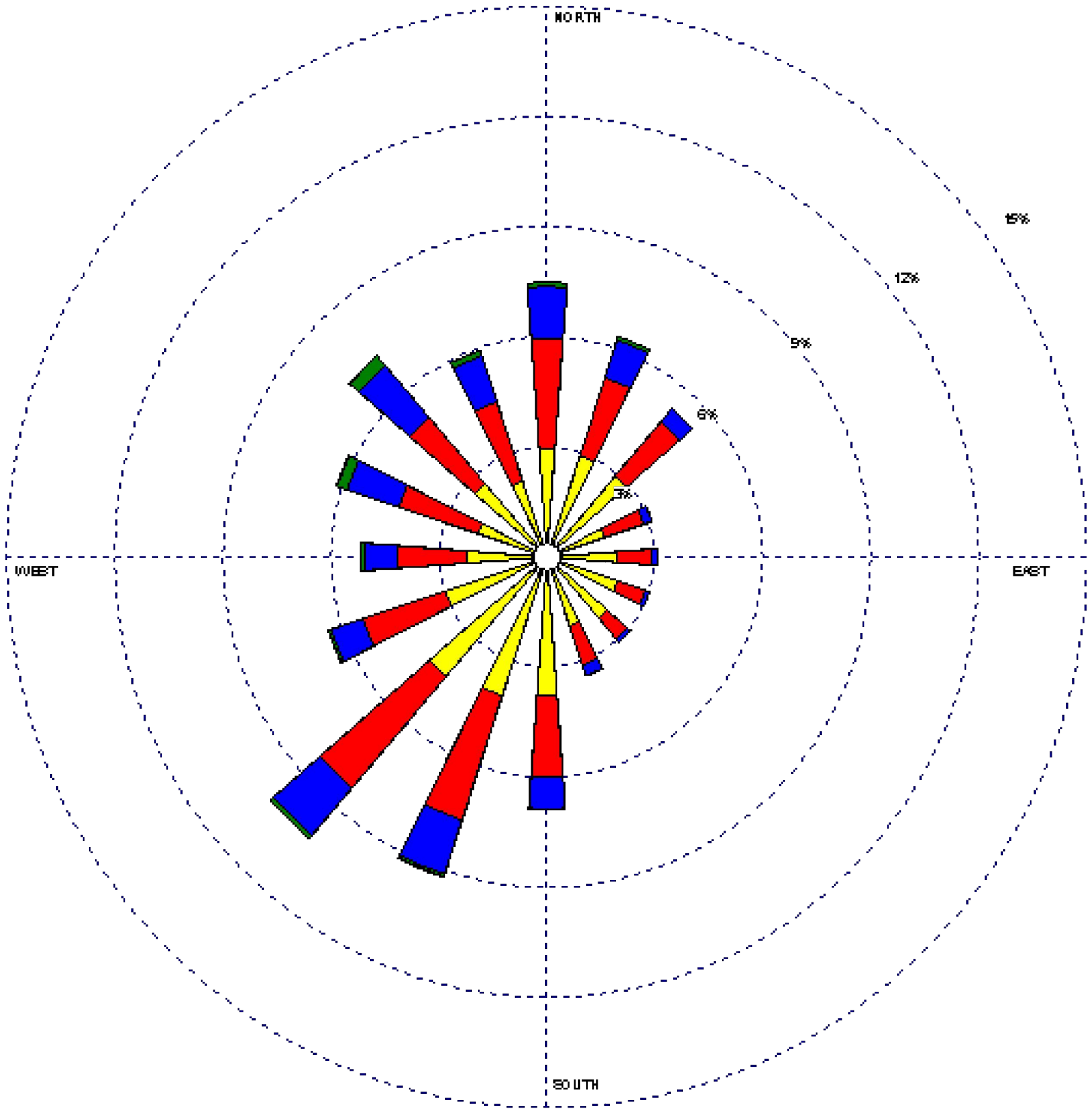
Figure B-3

AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607
Phone: (919) 854-6200
Fax: (919) 854-6259
www.aecom.com

Z:\GIS\Projects\P\Parker_Hannifin\Wake_Forest_NC\MXD\2015 Part B Renewal\Fig_B-3_Zoning and Flood Zone Map.mxd

WIND ROSE PLOT

Station #13722 - RALEIGH/RALEIGH-DURHAM ARPT, NC



Wind Speed (m/s) > 11.06 8.49 - 11.06 5.40 - 8.49 3.34 - 5.40 1.80 - 3.34 0.51 - 1.80	MODELER	DATE 10/30/2002	COMPANY NAME AECOM Technical Services, Inc.
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 3.87 m/s	CALM WINDS 7.91%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Dec 1 - Dec 31 Midnight - 11 PM	PROJECT/PLOT NO. 60432139

WRPLOT View 7.0 by Lakes Environmental Software - www.lakes-environmental.com

PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60432139 Date: 1/6/2016

Wind Rose Diagram

AECOM

Figure: B-4

ANSI D 22" x 34"

Approved:BR

Checked:BR

Designer:SP

Project Management Initials:

Last saved by: PIRESS (2016-02-01) Last Plotted: 2016-02-01
Filename: Z:\CAD\PROJECTS\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\FIG B-5_SECURITY_FENCES.DWG

LEGEND

- PROPERTY LINE
- EDGE OF GRAVEL
- OVERHEAD UTILITY WIRES
- UTILITY POLE
- UTILITY POLE WITH DROP
- ELECTRICAL TRANSFORMER
- SECURITY FENCE

ABBREVIATIONS

AOC	AREA OF CONCERN
SWMU	SOLID WASTE MANAGEMENT UNIT
T.S.	TREATMENT SYSTEM (EXISTING BUILDING)
VLT.	CONCRETE VAULT

FENCE GATE

AOC 38 AREA

NORTHEAST BUILDING AREA

EXISTING GROUNDWATER TREATMENT AND SVE SYSTEM

NEW 12' DOUBLE SWING GATE

T.S.

SWMU 31 / 33 AREA

EXISTING CONCRETE PAD

GRAVEL ROAD

NEW FENCE

EXISTING CONCRETE PAD

EXISTING CONCRETE PAD

WAKE UNION CHAPEL ROAD
SR-1929 VARIABLE WIDTH R/W

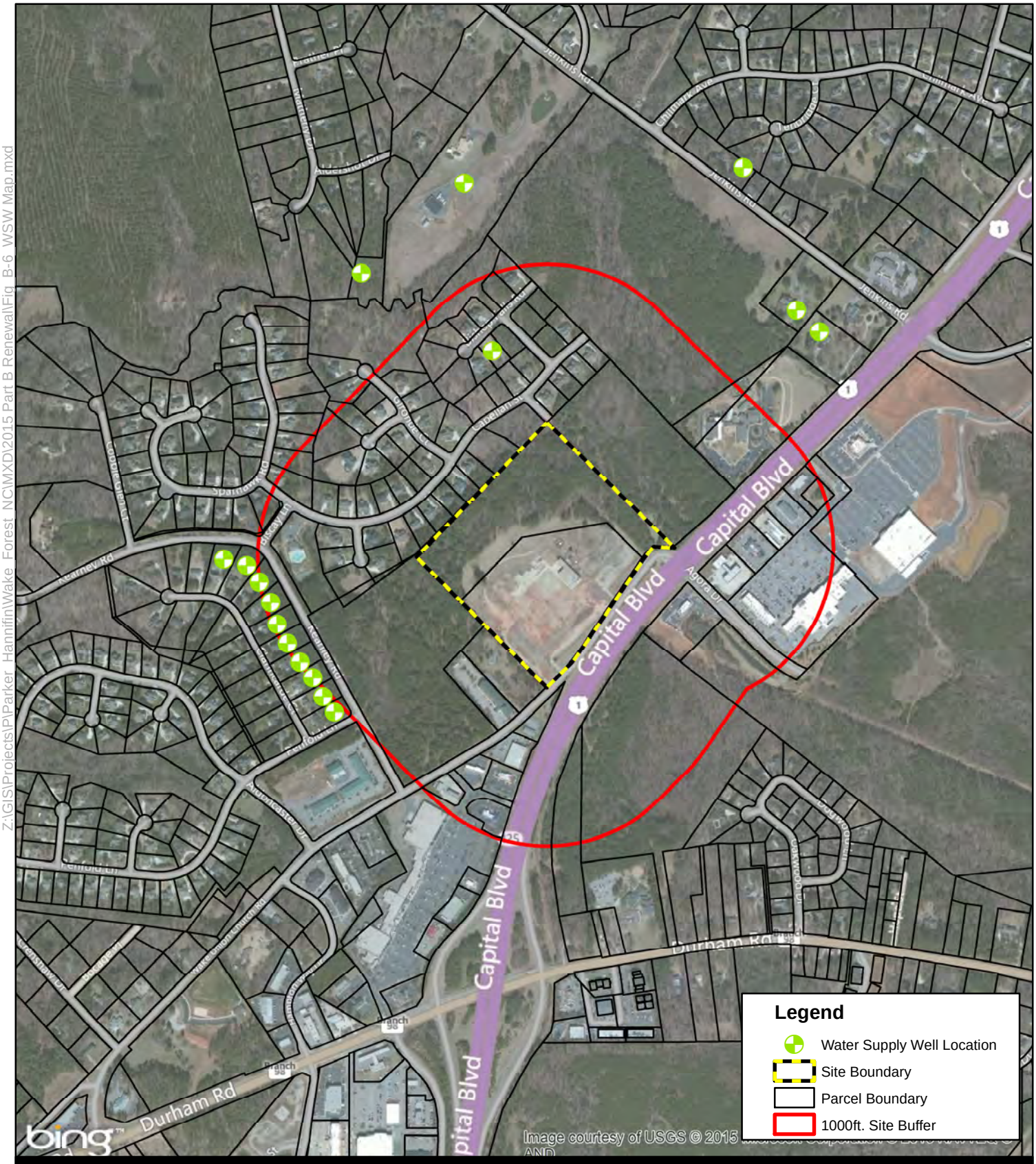
40 0 40 80
SCALE IN FEET
1" = 40'

AECOM

Figure: B-5

SITE ACCESS CONTROL

PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60432139 Date: 2/1/2016



Z:\GIS\Projects\P\Parker_Hannifin\Wake_Forest_NC\MXD\2015 Part B Renewal\Fig_B-6_WSW Map.mxd

Map Location

Water Supply Well Location Map

Former Parker Hannifin Corp. Facility
Wake Forest, North Carolina

N
W E
S

0 500 1,000 Feet

1:10,000

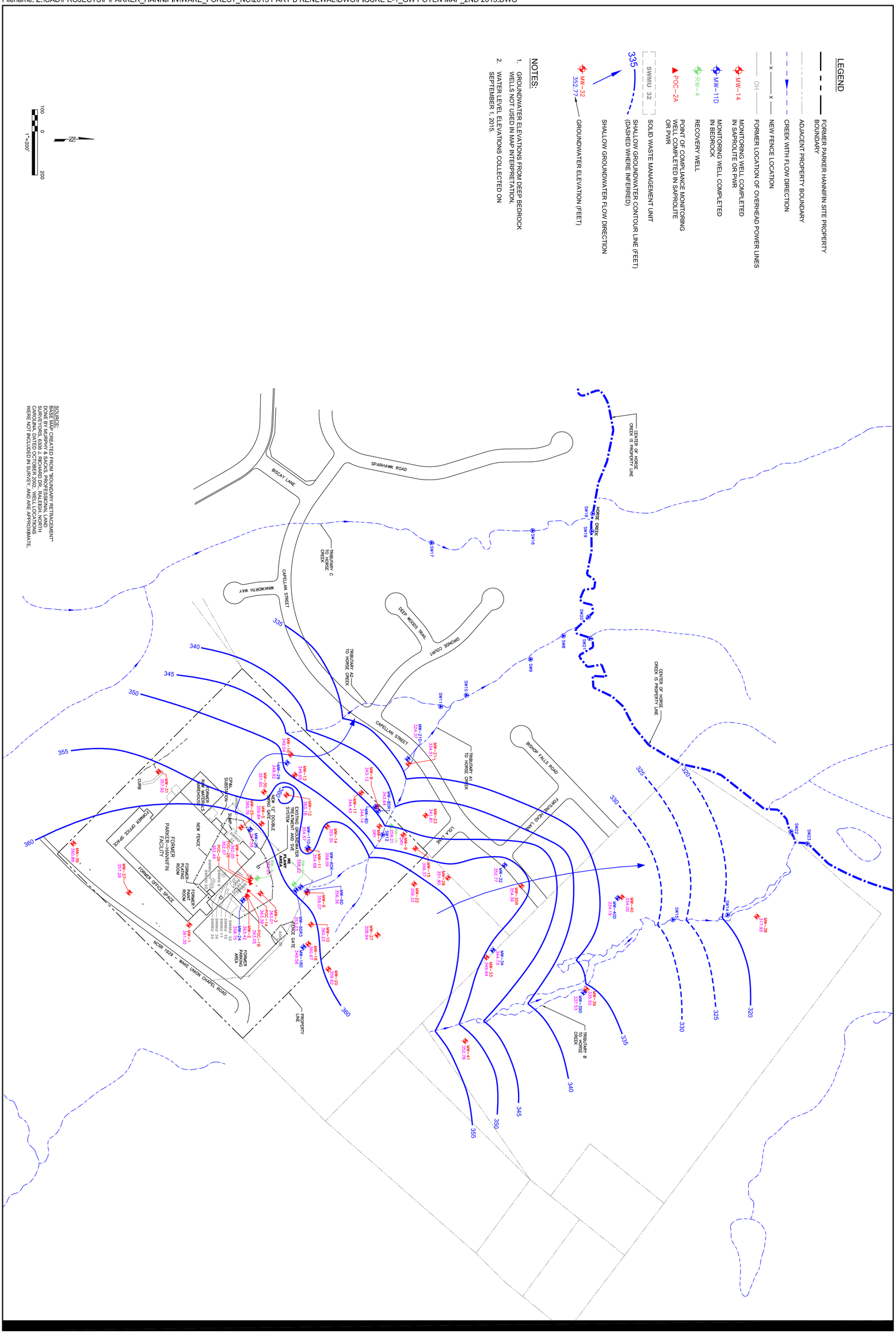
December 2015

60432139

Figure B-6

AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607
Phone: (919) 854-6200
Fax: (919) 854-6259
www.aecom.com

Last saved by: PIRESS(2016-02-01) Last Plotted: 2016-02-01
Filename: Z:\CAD\PROJECTS\P\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\FIGURE E-1_GW POTEN MAP_2ND 2015.DWG
Project Management Initials: Designer: SP Checked: EM Approved: MA ANSI D 22" x 34"

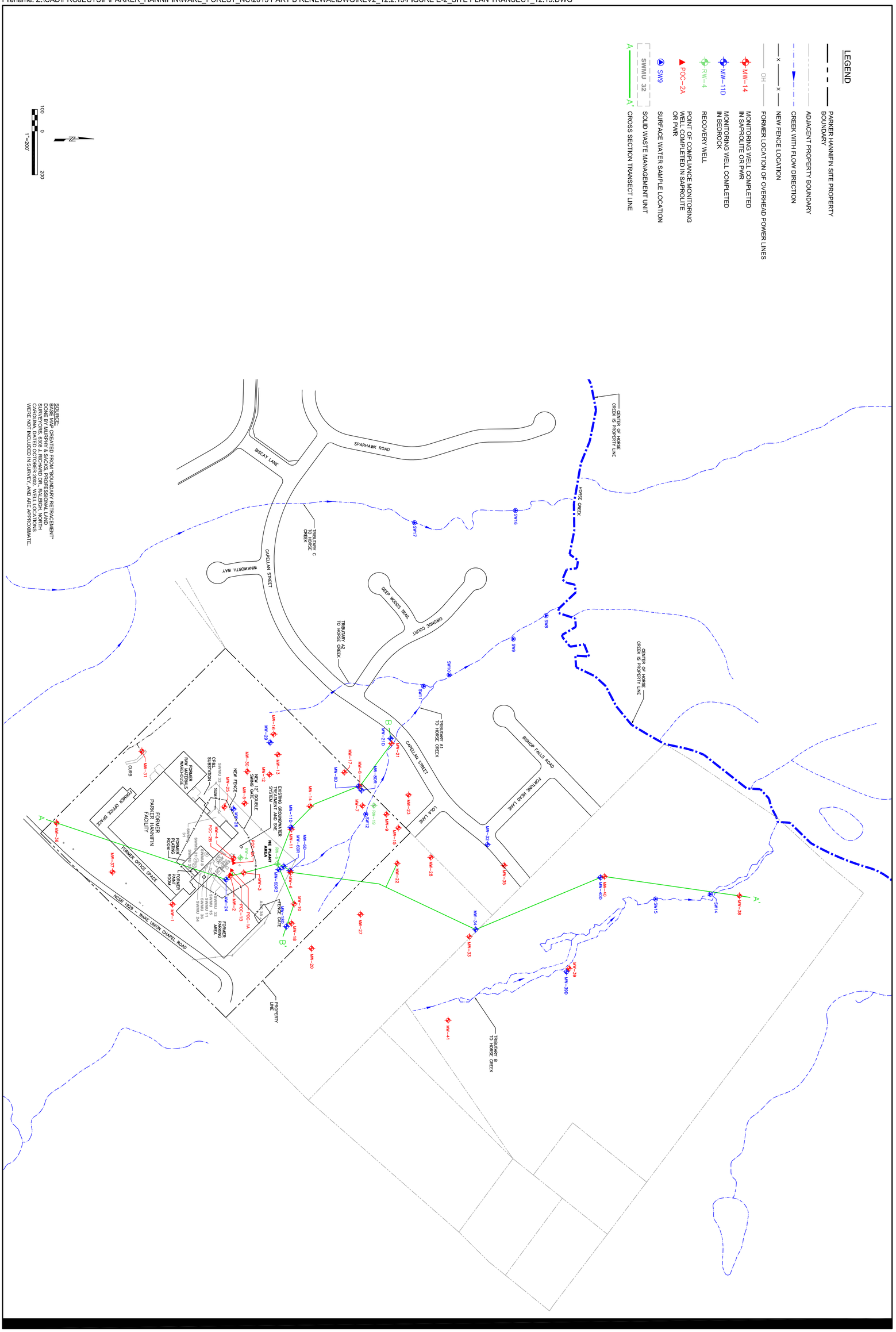


PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 2/1/2016

GROUNDWATER POTENTIOMETRIC SURFACE MAP - SEPTEMBER 2015
PLAN VIEW

AECOM
Figure: E-1

Last saved by: PIRESS(2016-02-01) Last Plotted: 2016-02-01
Filename: Z:\CAD\PROJECTS\P\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\REV2_12.2.15\FIGURE E-2_SITE PLAN TRANSECT_12.15.DWG
Project Management Initials: Designer: SP Checked: EM Approved: MA ANSI D 22" x 34"



PARKER HANNIFIN COPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 2/1/2016

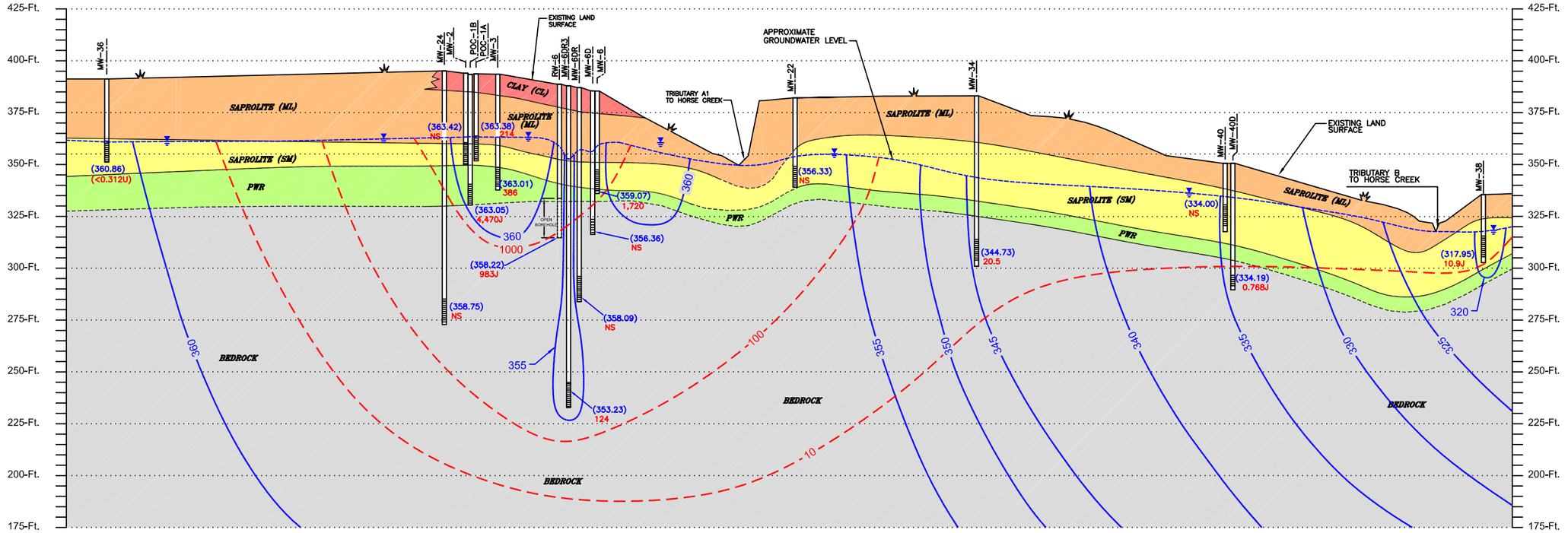
SITE PLAN WITH CROSS-SECTION TRANSECTS

AECOM

Figure: E-2

A
(SOUTH)

A'
(NORTH)



LEGEND

- GROUNDWATER LEVEL (ft, msl) (DASHED WHERE INFERRED)
- MONITORING WELL/ WELL SCREEN INTERVAL
- (353.23) GROUNDWATER ELEVATION (ft, msl)
- 124 TCE CONCENTRATION (ug/L)
- 340 GROUNDWATER CONTOUR (ft, msl)
- 10 TCE CONTOUR (ug/L)

LITHOLOGY LEGEND

- CLAY (CL): RED BROWN MICACEOUS CLAY AND FILL MATERIAL
- SAPROLITE (ML): CLAYEY TO SANDY RED BROWN MICACEOUS SILT WITH RELICT ROCK FABRIC
- SAPROLITE (SM): SILTY TO FINE BROWN MICACEOUS SAND WITH RELICT ROCK FABRIC
- PWR: PARTIALLY WEATHERED ROCK
- BEDROCK: FELSIC GNEISS AND SCHIST WITH SOME PEGMATITE VEINS

NOTES:

1. GROUNDWATER ELEVATIONS RECORDED ON SEPTEMBER 1, 2015.
2. ANALYTICAL RESULTS FROM SEPTEMBER 1-3, 2015.

VERTICAL SCALE: 1"=55'
HORIZONTAL SCALE: 1"=275'
VERTICAL EXAGGERATION: 5X

AECOM

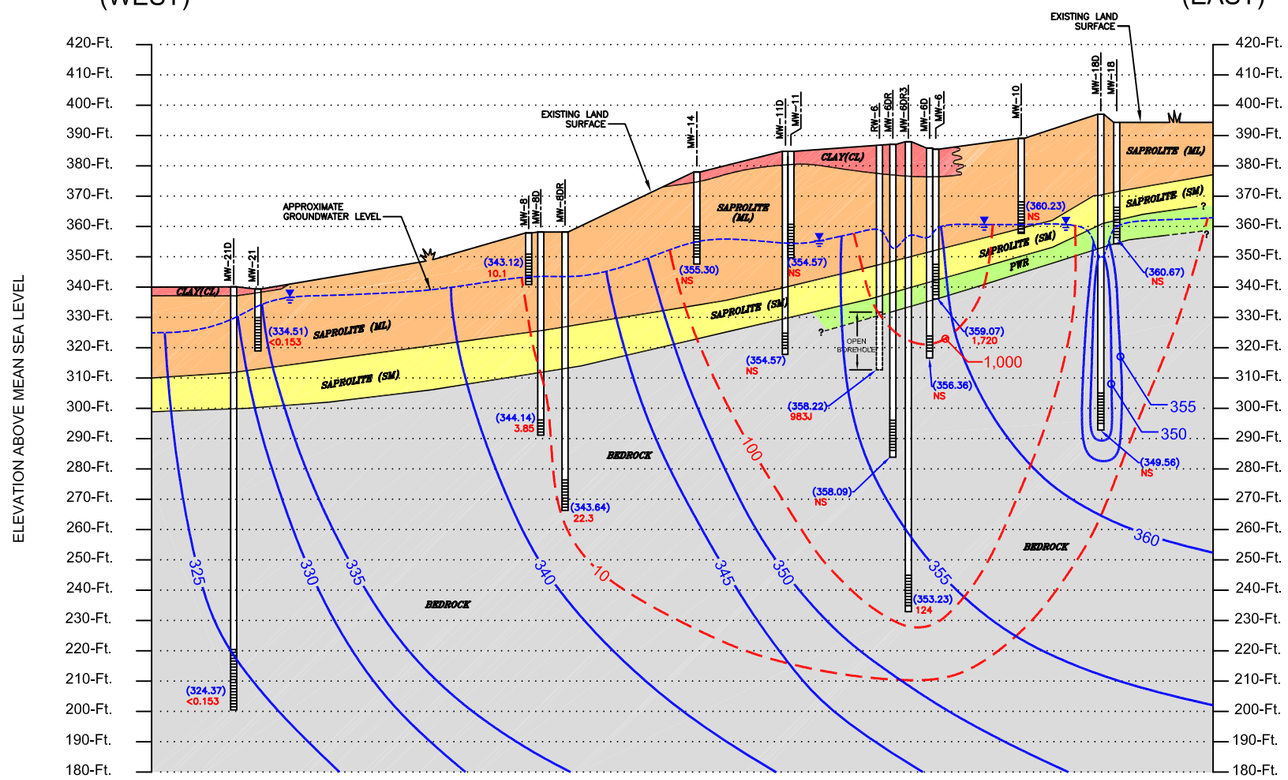
Figure: E-3

CROSS SECTION A - A'
SEPTEMBER 2015

PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 12/2/2015

Last saved by: CAMPBELLC (2015-12-02) Last Plotted: 2015-12-02
Filename: Z:\CAD\PROJECTS\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\REV2_12.2.15\FIGURE E-3_CROSS SECTION A-A'_12.15.DWG

Project Management Initials: Designer: SP Checked:EM Approved:MA ANSI B 11" x 17"



LEGEND

- GROUNDWATER LEVEL (ft, msl) (DASHED WHERE INFERRED)
- MONITORING WELL/ WELL SCREEN INTERVAL
- (324.37) GROUNDWATER ELEVATION (ft, msl)
- <0.153 TCE CONCENTRATION (ug/L)
- 340 GROUNDWATER CONTOUR (ft, msl)
- 10 TCE CONTOUR (ug/L)

LITHOLOGY LEGEND

- CLAY (CL): RED BROWN MICACEOUS CLAY AND FILL MATERIAL
- SAPROLITE (ML): CLAYEY TO SANDY RED BROWN MICACEOUS SILT WITH RELICT ROCK FABRIC
- SAPROLITE (SM): SILTY TO FINE BROWN MICACEOUS SAND WITH RELICT ROCK FABRIC
- PWR: PARTIALLY WEATHERED ROCK
- BEDROCK: FELSIC GNEISS AND SCHIST WITH SOME PEGMATITE VEINS

NOTES:

1. GROUNDWATER ELEVATIONS RECORDED ON SEPTEMBER 1, 2015.
2. ANALYTICAL RESULTS FROM SEPTEMBER 1-3, 2015.

VERTICAL SCALE: 1"=50'
HORIZONTAL SCALE: 1"=250'
VERTICAL EXAGGERATION: 5X

AECOM

Figure: E-4

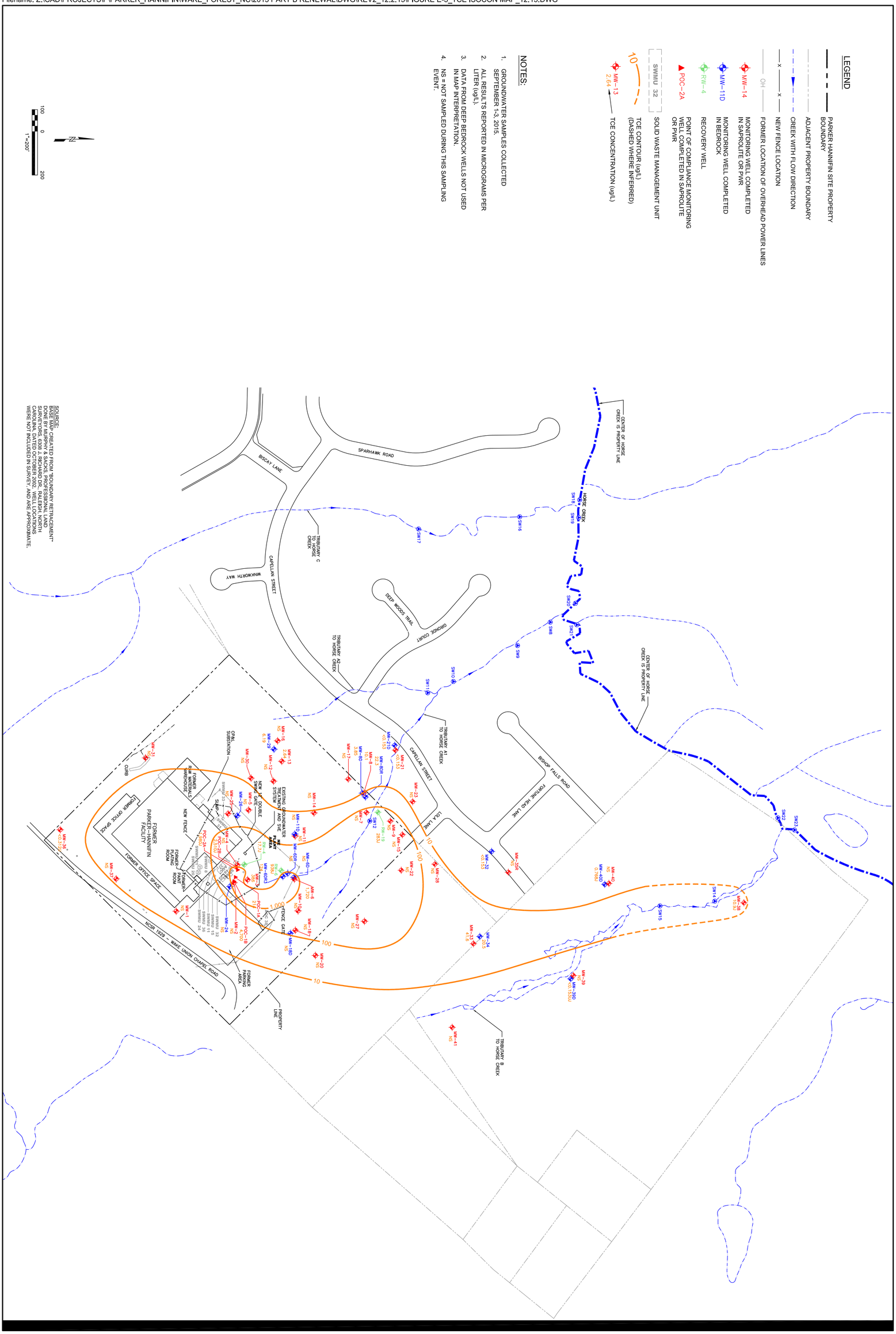
CROSS SECTION B - B'
SEPTEMBER 2015

PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 12/2/2015

Last saved by: CAMPBELLC (2015-12-02 Last Plotted: 2015-12-02
File name: Z:\CAD\PROJECTS\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\REV2_12.2.15\FIGURE E-4_CROSS SECTION B-B'_12.15.DWG

Project Management Initials: Designer: SP Checked:EM Approved:MA ANSI B 11" x 17"

Last saved by: PIRESS(2016-02-01) Last Plotted: 2016-02-01
Filename: Z:\CAD\PROJECTS\P\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\REV2_12.2.15\FIGURE E-5_TCE ISOCON MAP_12.15.DWG
Project Management Initials: Designer: SP Checked: EM Approved: MA ANSI D 22" x 34"



PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 2/1/2016

TCE ISOCONCENTRATION MAP
SEPTEMBER 2015

AECOM

Figure: E-5

HISTORICAL GROUNDWATER 1,4-DIOXANE ANALYTICAL RESULTS

PARKER HANNIFIN CORPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 2/1/2016

LEGEND

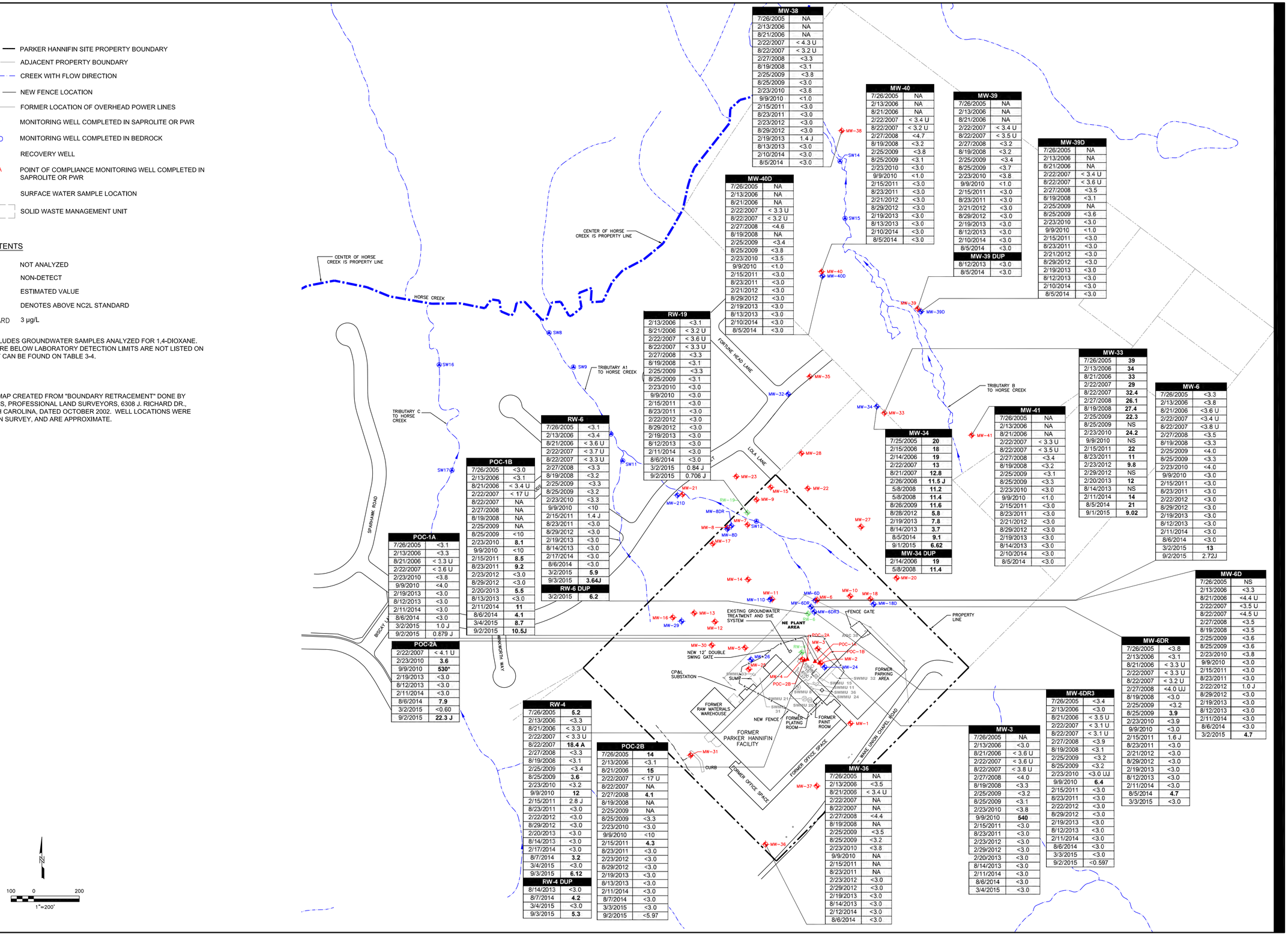
- PARKER HANNIFIN SITE PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- CREEK WITH FLOW DIRECTION
- NEW FENCE LOCATION
- FORMER LOCATION OF OVERHEAD POWER LINES
- MW-14 — MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- MW-11D — MONITORING WELL COMPLETED IN BEDROCK
- RW-4 — RECOVERY WELL
- POC-2A — POINT OF COMPLIANCE MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- SW9 — SURFACE WATER SAMPLE LOCATION
- SWMU 32 — SOLID WASTE MANAGEMENT UNIT

TABLE CONTENTS

NA	NOT ANALYZED
U	NON-DETECT
J	ESTIMATED VALUE
BOLD	DENOTES ABOVE NC2L STANDARD
NC2L STANDARD	3 µg/L

NOTE: ONLY INCLUDES GROUNDWATER SAMPLES ANALYZED FOR 1,4-DIOXANE. WELLS THAT WERE BELOW LABORATORY DETECTION LIMITS ARE NOT LISTED ON THE FIGURE BUT CAN BE FOUND ON TABLE 3-4.

SOURCE: BASE MAP CREATED FROM "BOUNDARY RETRACEMENT" DONE BY MURPHY & SACKS, PROFESSIONAL LAND SURVEYORS, 6308 J. RICHARD DR., RALEIGH, NORTH CAROLINA, DATED OCTOBER 2002. WELL LOCATIONS WERE NOT INCLUDED IN SURVEY, AND ARE APPROXIMATE.



MW-38

7/26/2005	NA
2/13/2006	NA
8/21/2006	NA
2/22/2007	< 4.3 U
8/22/2007	< 3.2 U
2/27/2008	<3.3
8/19/2008	<3.1
2/25/2009	<3.8
8/25/2009	<3.0
2/23/2010	<3.8
9/9/2010	<1.0
2/15/2011	<3.0
8/23/2011	<3.0
2/23/2012	<3.0
8/29/2012	<3.0
2/19/2013	1.4 J
8/13/2013	<3.0
2/10/2014	<3.0
8/5/2014	<3.0

MW-40

7/26/2005	NA
2/13/2006	NA
8/21/2006	NA
2/22/2007	< 3.4 U
8/22/2007	< 3.2 U
2/27/2008	<4.7
8/19/2008	<3.2
2/25/2009	<3.8
8/25/2009	<3.1
2/23/2010	<3.0
9/9/2010	<1.0
2/15/2011	<3.0
8/23/2011	<3.0
2/21/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/13/2013	<3.0
2/10/2014	<3.0
8/5/2014	<3.0

MW-39

7/26/2005	NA
2/13/2006	NA
8/21/2006	NA
2/22/2007	< 3.4 U
8/22/2007	< 3.5 U
2/27/2008	<3.2
8/19/2008	<3.2
2/25/2009	<3.4
8/25/2009	<3.7
2/23/2010	<3.8
9/9/2010	<1.0
2/15/2011	<3.0
8/23/2011	<3.0
2/21/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/12/2013	<3.0
2/10/2014	<3.0
8/5/2014	<3.0

MW-39 DUP

8/12/2013	<3.0
8/5/2014	<3.0

MW-39D

7/26/2005	NA
2/13/2006	NA
8/21/2006	NA
2/22/2007	< 3.4 U
8/22/2007	< 3.6 U
2/27/2008	<3.5
8/19/2008	<3.1
2/25/2009	NA
8/25/2009	<3.6
2/23/2010	<3.0
9/9/2010	<1.0
2/15/2011	<3.0
8/23/2011	<3.0
2/21/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/12/2013	<3.0
2/10/2014	<3.0
8/5/2014	<3.0

MW-40D

7/26/2005	NA
2/13/2006	NA
8/21/2006	NA
2/22/2007	< 3.3 U
8/22/2007	< 3.2 U
2/27/2008	<4.6
8/19/2008	NA
2/25/2009	<3.4
8/25/2009	<3.8
2/23/2010	<3.5
9/9/2010	<1.0
2/15/2011	<3.0
8/23/2011	<3.0
2/21/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/13/2013	<3.0
2/10/2014	<3.0
8/5/2014	<3.0

RW-19

2/13/2006	<3.1
8/21/2006	< 3.2 U
2/22/2007	< 3.6 U
8/22/2007	< 3.3 U
2/27/2008	<3.3
8/19/2008	<3.1
2/25/2009	<3.3
8/25/2009	<3.1
2/23/2010	<3.0
9/9/2010	<3.0
2/15/2011	<3.0
8/23/2011	<3.0
2/22/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/12/2013	<3.0
2/11/2014	<3.0
8/6/2014	<3.0
3/2/2015	0.84 J
9/2/2015	0.706 J

RW-6

7/26/2005	<3.1
2/13/2006	<3.4
8/21/2006	< 3.6 U
2/22/2007	< 3.7 U
8/22/2007	< 3.3 U
2/27/2008	<3.3
8/19/2008	<3.2
2/25/2009	<3.3
8/25/2009	<3.2
2/23/2010	<3.3
9/9/2010	<10
2/15/2011	1.4 J
8/23/2011	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/14/2013	<3.0
2/17/2014	<3.0
8/6/2014	<3.0
3/2/2015	**5.9**
9/3/2015	**3.64J**

RW-6 DUP

3/2/2015	**6.2**

POC-1B

7/26/2005	<3.0
2/13/2006	<3.1
8/21/2006	< 3.4 U
2/22/2007	< 17 U
8/22/2007	NA
2/27/2008	NA
8/19/2008	NA
2/25/2009	NA
8/25/2009	<10
2/23/2010	**8.1**
9/9/2010	<10
2/15/2011	**8.5**
8/23/2011	**9.2**
2/23/2012	<3.0
8/29/2012	<3.0
2/20/2013	**5.5**
8/13/2013	<3.0
2/11/2014	**11**
8/6/2014	**4.1**
3/4/2015	**8.7**
9/2/2015	**10.5J**

POC-1A

7/26/2005	<3.1
2/13/2006	<3.3
8/21/2006	< 3.3 U
2/22/2007	< 3.6 U
2/23/2010	<3.8
9/9/2010	<4.0
2/19/2013	<3.0
8/12/2013	<3.0
2/11/2014	<3.0
8/6/2014	<3.0
3/2/2015	1.0 J
9/2/2015	0.879 J

POC-2A

2/22/2007	< 4.1 U
2/23/2010	**3.6**
9/9/2010	**530***
2/19/2013	<3.0
8/12/2013	<3.0
2/11/2014	<3.0
8/6/2014	**7.9**
3/2/2015	<0.60
9/2/2015	**22.3 J**

RW-4

7/26/2005	**5.2**
2/13/2006	<3.3
8/21/2006	< 3.3 U
2/22/2007	< 3.3 U
8/22/2007	**18.4 A**
2/27/2008	<3.3
8/19/2008	<3.1
2/25/2009	<3.4
8/25/2009	**3.6**
2/23/2010	<3.2
9/9/2010	**12**
2/15/2011	2.8 J
8/23/2011	<3.0
2/22/2012	<3.0
8/29/2012	<3.0
2/20/2013	<3.0
8/14/2013	<3.0
2/17/2014	<3.0
8/7/2014	**3.2**
3/4/2015	<3.0
9/3/2015	**6.12**

RW-4 DUP

8/14/2013	<3.0
8/7/2014	**4.2**
3/4/2015	<3.0
9/3/2015	**5.3**

POC-2B

7/26/2005	**14**
2/13/2006	<3.1
8/21/2006	**15**
2/22/2007	< 17 U
8/22/2007	NA
2/27/2008	**4.1**
8/19/2008	NA
2/25/2009	NA
8/25/2009	<3.3
2/23/2010	<3.0
9/9/2010	<10
2/15/2011	**4.3**
8/23/2011	<3.0
2/23/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/13/2013	<3.0
2/11/2014	<3.0
8/7/2014	<3.0
3/3/2015	<3.0
9/2/2015	<5.97

MW-36

7/26/2005	NA
2/13/2006	<3.5
8/21/2006	< 3.4 U
2/22/2007	NA
8/22/2007	NA
2/27/2008	<4.4
8/19/2008	NA
2/25/2009	<3.5
8/25/2009	<3.2
2/23/2010	<3.8
9/9/2010	NA
2/15/2011	NA
8/23/2011	NA
2/23/2012	<3.0
2/29/2012	<3.0
2/19/2013	<3.0
8/14/2013	<3.0
2/12/2014	<3.0
8/6/2014	<3.0

MW-34

7/25/2005	**20**
2/15/2006	**18**
2/14/2006	**19**
2/22/2007	**13**
8/21/2007	**12.8**
2/26/2008	**11.5 J**
5/8/2008	**11.2**
5/8/2008	**11.4**
8/26/2009	**11.6**
8/28/2012	**5.8**
2/19/2013	**7.8**
8/14/2013	**3.7**
8/5/2014	**9.1**
9/1/2015	**6.62**

MW-34 DUP

2/14/2006	**19**
5/8/2008	**11.4**

MW-33

7/26/2005	**39**
2/13/2006	**34**
8/21/2006	**33**
2/22/2007	**29**
8/22/2007	**32.4**
2/27/2008	**26.1**
8/19/2008	**27.4**
2/25/2009	**22.3**
8/25/2009	NS
2/23/2010	**24.2**
9/9/2010	NS
2/15/2011	**22**
8/23/2011	**11**
2/23/2012	**9.8**
2/29/2012	NS
2/20/2013	**12**
8/14/2013	NS
2/11/2014	**14**
8/5/2014	**21**
9/1/2015	**9.02**

MW-41

7/26/2005	NA
2/13/2006	NA
8/21/2006	NA
2/22/2007	< 3.3 U
8/22/2007	< 3.5 U
2/27/2008	<3.4
8/19/2008	<3.2
2/25/2009	<3.1
8/25/2009	<3.3
2/23/2010	<3.0
9/9/2010	<1.0
2/15/2011	<3.0
8/23/2011	<3.0
2/21/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/14/2013	<3.0
2/10/2014	<3.0
8/5/2014	<3.0

MW-6

7/26/2005	<3.3
2/13/2006	<3.8
8/21/2006	<3.6 U
2/22/2007	<3.4 U
8/22/2007	<3.8 U
2/27/2008	<3.5
8/19/2008	<3.3
2/25/2009	<4.0
8/25/2009	<3.3
2/23/2010	<4.0
9/9/2010	<3.0
2/15/2011	<3.0
8/23/2011	<3.0
2/22/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/12/2013	<3.0
2/11/2014	<3.0
8/6/2014	<3.0
3/2/2015	**13**
9/2/2015	2.72J

MW-6D

7/26/2005	NS
2/13/2006	<3.3
8/21/2006	<4.4 U
2/22/2007	<3.5 U
8/22/2007	<4.5 U
2/27/2008	<3.5
8/19/2008	<3.5
2/25/2009	<3.6
8/25/2009	<3.6
2/23/2010	<3.8
9/9/2010	<3.0
2/15/2011	<3.0
8/23/2011	<3.0
2/22/2012	1.0 J
8/29/2012	<3.0
2/19/2013	<3.0
8/12/2013	<3.0
2/11/2014	<3.0
8/6/2014	<3.0
3/2/2015	**4.7**

MW-6DR

7/26/2005	<3.8
2/13/2006	<3.1
8/21/2006	< 3.3 U
2/22/2007	< 3.3 U
8/22/2007	< 3.2 U
2/27/2008	<4.0 UJ
8/19/2008	<3.0
2/25/2009	<3.2
8/25/2009	**3.9**
2/23/2010	<3.9
9/9/2010	<3.0
2/15/2011	1.6 J
8/23/2011	<3.0
2/21/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/12/2013	<3.0
2/11/2014	<3.0
8/5/2014	**4.7**
3/3/2015	<3.0

MW-6DR3

7/26/2005	<3.4
2/13/2006	<3.0
8/21/2006	< 3.5 U
2/22/2007	< 3.1 U
8/22/2007	< 3.1 U
2/27/2008	<3.9
8/19/2008	<3.1
2/25/2009	<3.2
8/25/2009	<3.2
2/23/2010	<3.0 UJ
9/9/2010	**6.4**
2/15/2011	<3.0
8/23/2011	<3.0
2/22/2012	<3.0
8/29/2012	<3.0
2/19/2013	<3.0
8/12/2013	<3.0
2/11/2014	<3.0
8/6/2014	<3.0
3/3/2015	<3.0
9/2/2015	<0.597

MW-3

7/26/2005	NA
2/13/2006	<3.0
8/21/2006	< 3.6 U
2/22/2007	< 3.6 U
8/22/2007	< 3.8 U
2/27/2008	<4.0
8/19/2008	<3.3
2/25/2009	<3.2
8/25/2009	<3.1
2/23/2010	<3.8
9/9/2010	**540**
2/15/2011	<3.0
8/23/2011	<3.0
2/23/2012	<3.0
2/29/2012	<3.0
2/20/2013	<3.0
8/14/2013	<3.0
2/11/2014	<3.0
8/6/2014	<3.0
3/4/2015	<3.0

Last saved by: PIRESS (2016-02-01) Last Plotted: 2016-02-01
Filename: Z:\CAD\PROJECTS\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\REV2_12.2.15\FIGURE E-6_GW HIST 1,4 DIOXANE_12.15.DWG
Project Management Initials: Designer: SP Checked:EM Approved:MA ANSI D 22" x 34"

Appendix A.
Regulatory Completeness Checklists for Hazardous Waste Storage, Treatment and Disposal Facilities

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name	Former Parker Hannifin Facility	Permit Review Team	
EPA ID Number	NCD002591014		
Address	12415 Capital Boulevard		
	Wake Forest, NC 27587		
Contact Name	Jim Schenker	Date Application Received	
Contact Telephone No.	216-896-2052	Date Review Completed	

Guidance Documents for Part A

(1) RCRA Part A Permit Application Form, November 2009.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART A – APPLICATION RCRA Subtitle C Site Identification Form {270.10, 270.11 and 270.13} 1. Reason for Submittal (Check one of the following) [Guidance(1) - pages 13 and 14] - As a component of a First RCRA Hazardous Waste Part A Permit Application. - As a component of a Revised RCRA Hazardous Waste Part A Permit Application (provide amendment number).	Appendix B
2. EPA ID Number {270.13(g)} [Guidance(1) - page 14]	Appendix B
3. Site Name {270.13(b)} [Guidance(1) - page 14]	Appendix B
4. Site Location {270.13(b)} [Guidance(1) - pages 14] - Street Address	Appendix B
- City, Town, or Village	Appendix B
- County	Appendix B
- State	Appendix B
- Country Name	Appendix B
- Zip Code	Appendix B
5. Site Land Type (Check one of the following) {270.13(b)} [Guidance(1) - page 14] - Private - County - District - Federal - Indian - Municipal - State - Other	Appendix B Private
6. NAICS Code (can be found at www.census.gov/epcd/naics/naicscod.txt)	Appendix B

Subject Requirement and 40 CFR Reference	Location in Application and Comments
[Guidance(1) - page 14]	
7. Site Mailing Address {270.13(b)} [Guidance(1) - page 15] - Street or P.O. Box	Appendix B
- City, Town, or Village	
- State	
- County Name	
- Zip Code	
8. Site Contact Person [Guidance(1) - page 16] (The facility contact should be someone located at the facility.) - First Name	Appendix B
- Middle Initial	
- Last Name	
- Title	
- Street or P.O. Box	
- City, Town, or Village	
- State	
- Country	
- Zip Code	
- Email	
- Telephone number	
- Telephone Extension	
- Fax Number	
9. A. Legal Owner and Operator of Site {270.13(d)} [Guidance(1) - pages 16 and 17] - Name of Site's Legal Owner	Appendix B
- Date Became Owner	
- Owner Type (Check one of the following) {270.13(b)} [Guidance(1) - page 16] · Private · County · District · Federal · Indian · Municipal · State · Other	
- Street or P.O. Box	
- City, Town, or Village	
- Telephone Number	
- State	
- Country	
- Zip Code	
B. Legal Owner and Operator of Site {270.13(d)} [Guidance(1) - pages 16 and 17] - Name of Site's Operator	Appendix B

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Date Became Operator	
- Operator Type (Check one of the following) {270.13(b)} [Guidance(1) - page 26] · Private · County · District · Federal · Indian · Municipal · State · Other	
10. Type of Regulated Waste Activity [Guidance(1) - pages 19 to 24] a) Hazardous Waste Activities 1) Generator of Hazardous Waste (Check one of the following three) a) LQG b) SQG c) CESQG (Check all that apply) d) Short Term Generator (If yes, provide an explanation in the Comments section.) e) US Importer of Hazardous Waste f) Mixed Waste Generator	Appendix B
(For items 2 through 6, check all that apply) 2) Transporter of Hazardous Waste a) Transporter b) Transfer Facility (at your site) 3) Treater, Storer or Disposer of Hazardous Waste 4) Recycler of Hazardous Waste 5) Exempt BIF a) Small Quantity On-Site Burner Exemption b) Smelting, Melting, and Refining Furnace Exemption 6) Underground Injection Control 7) Receives Hazardous Waste From Off-Site	Appendix B
b) Universal Waste Activities (Check all that apply) 1) Large Quantity Handler of Hazardous Waste a) Batteries b) Pesticides c) Mercury containing Equipment d) Lamps e) Other (Specify) f) Other (Specify) g) Other (Specify) 2) Destination Facility for Universal Waste	Appendix B
c) Used Oil Activities (Check all that apply) 1) Used Oil Transporter c) Transporter d) Transfer Facility (at your site) 2) Used Oil Processor and/or Refiner a) Processor b) Re-refiner	Appendix B

Subject Requirement and 40 CFR Reference	Location in Application and Comments
3) Off-Specification Used Oil Burner 4) Used Oil Marketer a) Directs Shipment b) First Claims meets Used Oil Specifications	
d) Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K 5) Opting into or currently operating under 40 CFR 262 Subpart K a) College or University b) Teaching Hospital c) Non-profit Institute d) Withdrawing from 40 CFR 262 Subpart K	Appendix B
11. Description of Hazardous Waste [Guidance(1) - pages 24 and 25]	Appendix B
12. Notification of Hazardous Secondary Material Activity [Guidance(1) - page 25]	Appendix B
13. Comments [Guidance(1) - page 25]	Appendix B
14. Certifications {270.11(a), 270.11(b), 270.11(d)} [Guidance(1) - page 26] - Owner Certification (Signature, Name and Official Title, Date)	Appendix B
- Operator Certification (Signature, Name and Official Title, Date)	Appendix B

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART A – APPLICATION Hazardous Waste Permit Information Form {270.10, 270.11 and 270.13} 1. Facility Permit Contact [Guidance(1) - page 33] (The facility contact should be someone located at the facility.) - First Name	Appendix B
- Middle Initial	
- Last Name	
- Telephone number	
- Telephone Extension	
- Fax Number	
2. Facility Permit Contact Mailing Address {270.13(b)} [Guidance(1) - page 33] - Street or P.O. Box	Appendix B
- City, Town, or Village	
- State	
- Country	
- Zip Code	
3. Operator Mailing Address {270.13(b)} [Guidance(1) - page 33] - Street or P.O. Box	Appendix B
- City, Town, or Village	
- State	
- Phone Number	
- Country	
- Zip Code	
4. Facility Existence Date {270.13(b)} [Guidance(1) - page 33]	Appendix B
5. Other Environmental Permits {270.13(k)} [Guidance(1) - pages 33 and 34] - Permit type (N, P, R, U, F or E)	Appendix B
- Permit number	
- Description	
6. Nature of the Business {270.13(m)} [Guidance(1) - page 34]	Appendix B
7. Process - Codes and Design Capacities {270.13(a), 270.13(i)} [Guidance(1) - page 34] - Process codes	Appendix B
- Amount	
- Unit of measure (See table at end of checklist)	
- Process total number of units	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
8. Other Processes {270.13(a), 270.13(i)} [Guidance(1) - page 34] - Line Number	Appendix B
- Process Code	
- Amount	
- Unit of measure (See table at end of checklist)	
- Process total number of units	
9. Description of Hazardous Wastes {270.13(j), 270.13(n)} [Guidance(1) – pages 34 and 35] - EPA hazardous waste number	Appendix B
- Estimated annual quantity	
- Unit of measure (P, T, K or M)	
- Process code	
- Process description	
10. Map {270.13(l)} [Guidance(1) - pages 35] - Topographic map	Figure B-2
- One mile beyond property line	Figure B-2
- Legal boundaries of facility	Figure B-2
- Location and serial number of each existing and proposed intake and discharge structures	Not applicable
- Hazardous waste treatment, storage, and disposal units listed in Items XII and XIII identified by process code	Figure B-2
- Each underground injection well	Figure B-2
- Wells, springs, rivers, and other surface water bodies	Figure B-2
- Drinking water wells within 1/4 mile of the facility property boundary.	Figure B-6
11. Facility Drawing {270.13(h)(1)} [Guidance(1) - page 36] - Property boundaries of the facility	Figure B-2
- Areas occupied by all storage, treatment, or disposal operations	Figure B-2
- The name of each operation	Figure B-2
- Areas of past storage, treatment, or disposal operations	Figure B-2
- Areas of future storage, treatment, or disposal operations	Not applicable
- The approximate dimensions of the property boundaries and all storage, treatment, and disposal areas	Figure B-2
12. Photographs {270.13(h)(2)} [Guidance(1) - page 36] Photographs should clearly delineate: - all existing structures - all existing areas for storing, treating, or disposing of hazardous waste - all known sites of future storage, treatment, or disposal operations	
Process codes should be used to indicate the location of all	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
storage, treatment, or disposal areas	
The date each photograph was taken should be provided	
13. Comments [Guidance(1) - page 36]	

PROCESS CODES AND ACCEPTABLE UNITS OF MEASURE

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity
	Disposal:	
D79	Underground Injection Well-Disposal	G, L, U, V
D80	Landfill	Y, C, B, A, Q, F
D81	Land Application	B, Q
D82	Ocean Disposal	U, or V
D83	Surface Impoundment-Disposal	G, L, Y, C
D99	Other Disposal	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X
	Storage:	
S01	Container	G, L, Y, C
S02	Tank-Storage	G, L, Y, C
S03	Waste Pile	Y, C
S04	Surface Impoundment-Storage	G, L, Y, C
S05	Drip Pad	G, L, Y, C, B, Q
S06	Containment Building-Storage	Y, C
S99	Other Storage	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X
	Treatment:	
T01	Tank-Treatment	E, U, H, V, D, W, N, S, J, R
T02	Surface Impoundment-Treatment	
T03	Incinerator	E, U, H, V, D, W, N, S, J, R
T04	Other Treatment	
T80	Boiler	G, E, L, H, I, X
T81	Cement Kiln	E, U, H, V, D, W, N, S, J, R, I, X
T82	Lime Kiln	
T83	Aggregate Kiln	
T84	Phosphate Kiln	
T85	Coke Oven	
T86	Blast Furnace	
T87	Smelting, Melting or Refining Furnace	
T88	Titanium Dioxide Chloride Process Oxidation Reactor	
T89	Methane Forming Furnace	
T90	Pulping Liquor Recovery Furnace	
T91	Combustion Device Used in Recovery of Sulfur Values from Spent Sulfuric Acid	
T92	Halogen Acid Furnace	
T93	Other Industrial Furnaces	
T94	Containment Building-Treatment	E, U, H, V, D, W, N, S, J, R, Y, C
	Miscellaneous (Subpart X):	
X01	Open Burning/Open Detonation	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X
X02	Mechanical Processing	E, U, H, V, D, W, N, S, J, R
X03	Thermal Unit	U, V, J, D, R, W, S, N, I, X
X04	Geologic Repository	G, L, Y, C, A, F
X99	Other Subpart X	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X

h:\chklists\tsd-word\part-a.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team: _____

Date Review Completed: _____

Guidance Documents for Part B

(2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART B - FACILITY DESCRIPTION B-1 General Description A general description of the facility. This description should include: {270.14 (b)(1) and 15A NCAC 13A .0113(c)(6)} [Guidance(2) - page 5-3] - Facility Name;	Section B-1
- Name of owner;	Section B-1
- Location/address;	Section B-1
- New or existing;	Section B-1
- Size (acres, number of units);	Section B-1
- Type of facility (on-site, off-site; storage, treatment, disposal);	Section B-1
- Nature of the business;	Section B-1
- Waste types and quantities stored, treated, and/or disposed; and	Section B-1
- For off-site facilities, the types of industry served;	Section B-1
- For on-site facilities, a description of the process(es) involved in the generation of hazardous waste.	Section B-1
B-2 Topographic Map B-2a General Requirements A topographic map showing the facility and a distance of 1000 feet around it. The following information is required: {270.14(b)(19) and 15A NCAC 13A .0113(c)(6)} - Scale 1 in = 200 ft; {270.14(b)(19)}	Figure B-1 and B-2
- Contours sufficient to show surface water flow; {270.14(b)(19)}	Figure B-2
- Extend 1000 ft. beyond property; {270.14(b)(19)}	Figure B-2
- Map scale; {270.14(b)(19)(i)}	All relevant figures
- Map date; {270.14(b)(19)(i)}	All relevant figures
- 100-yr floodplain; {270.14(b)(19)(ii)}	Figure B-3

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Surface waters (including intermittent streams); {270.14(b)(19)(iii)}	Figure B-1 and B-2
- Surrounding land uses; {270.14(b)(19)(iv) and 15A NCAC 13A .0113(c)(4)}	Figure B-3
- Wind rose; {270.14(b)(19)(v)}	Figure B-4
- Map orientation; {270.14(b)(19)(vi)}	All relevant figures
- Legal boundaries; {270.14(b)(19)(vii)}	Figure B-2
- Location of access control; {270.14(b)(19)(viii)}	Figure B-5
- Injection and withdrawal wells both on-site and off-site; {270.14(b)(19)(ix)}	Figure B-2 and B-6
- Buildings and structures; {270.14(b)(19)(x)}	Figure B-2 and B-5
- Storm, sanitary and process sewers; {270.14(b)(19)(x)}	Figure B-2
- Loading and unloading areas; {270.14(b)(19)(x)}	Not applicable
- Fire control facilities; {270.14(b)(19)(x)}	Not applicable
- Flood control or drainage barriers; {270.14(b)(19)(xi)}	Not applicable
- Run-off control systems; {270.14(b)(19)(x)}	Not applicable
- Location of hazardous waste units; {270.14(b)(19)(xii)}	Figure B-2
- Location of solid waste management units; and {270.14(d)(1)(i)}	Figure B-2
- Access and internal roads. {270.14(b)(19)(x)}	Figure B-5
For large facilities, the use of other scales may be acceptable on a case-by-case basis. {Note following 270.14(b)(19)}	
B-2b <u>Additional Topographic Requirements for Land Storage, Treatment and Disposal Facilities</u> (See Checklist Module E for Topographic Map Requirements.) {270.14(c)(3), and (c)(4)(i), 264.95, and 264.97}	Section 2b
B-3 <u>Traffic Information</u> A description of the means of transporting hazardous wastes. All facilities should describe movement of waste on the facility. Description must include: {270.14(b)(10)} - Estimated volume	Section B-3
- Traffic pattern	
- Traffic control	
- Access road(s) surfacing and load-bearing capacity.	
Off-site facilities should also describe movement of waste to the facility from the point to where it leaves the nearest major highway. {15A NCAC 13A .0113(c)(5)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
[Guidance(2) - page 5-136]	
B-4 Location Information B-4a Seismic Considerations For new facilities only, the applicant must identify the political jurisdiction (county, township, or election district) in which the facility will be located. If the facility is proposed to be located in any of the political jurisdictions specified in Part 264 Appendix VI, the applicant must prove that the facility is located at least 3000 ft from any fault where movement has taken place in Holocene time or that no such faults pass within 200 ft of the portions of the facility used for treatment, storage, or disposal of hazardous waste. Proof may come from geologic studies, aerial photographs, field observations, or subsurface investigations. All information gathered must be acceptable by a geologist experienced in evaluating seismic activity. {270.14(b)(11)(i) and (ii), 264.18(a), and 264 Appendix VI} [Guidance(2) pages 5-144 and 145]	Section B-4
B-4b Floodplain Standard Documentation of whether or not the facility is located within a 100-yr floodplain including the source of data (Federal Insurance Administration Map or other maps and calculations). If a map other than a FIA map is used, demonstration of equivalent mapping technique should be provided. If located in a 100-yr floodplain include: {270.14(b)(11)(iii) and Comment following 270.14(b)(11)(iii)} - 100-yr floodplain level, {270.14(b)(11)(iii)}	Appendix C
- Other special flooding factors (e.g., wave action) that must be considered to withstand washout. {270.14(b)(11)(iii)}	Not applicable
B-4b(1) Demonstration of Compliance For facilities located within the 100-yr floodplain, a description of how the facility is designed, constructed, operated, and maintained to prevent washout of any hazardous waste during a flood. Either of the following may be used: {270.14(b)(11)(iv) and 264.18(b)}	Not applicable
B-4b(1)(a) Flood Proofing and Flood Protection A structural or other engineering study showing how design of the tanks, containers, or waste piles and the flood proofing and protection devices at the facility will prevent washout including: {270.14(b)(11)(iv)} - Engineering analysis of hydrodynamic and hydrostatic forces, {270.14(b)(11)(iv)(A)}	Not applicable
- Structural or other engineering studies of hazardous waste units and flood protection devices. {270.14(b)(11)(iv)(B)}	Not applicable
B-4b(1)(b) Flood Plan Description of the procedures to be followed to remove	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
hazardous waste to safety before the facility is flooded. The plan must address the following: {270.14(b)(11)(iv)(C)} - Timing of waste movement related to flood levels; {270.14(b)(11)(iv)(C)(1)}	
- Estimated time to move the waste; {270.14(b)(11)(iv)(C)(1)}	Not applicable
- Description of the location to which the waste will be moved and proof of the receiving facility's eligibility to receive hazardous waste; {270.14(b)(11)(iv)(C)(2)}	Not applicable
- Procedures, equipment, and personnel to be used and the means to ensure that these resources will be available; {270.14(b)(11)(iv)(C)(3)}	Not applicable
- Potential for accidental discharge of waste during movement of waste. {270.14(b)(11)(iv)(C)(4)}	Not applicable
B-4b(2) Plan for Future Compliance with Floodplain Standard For facilities located within the 100-yr floodplain that do not comply with the floodplain standard, a plan showing how and when the facility will be brought into compliance. A compliance schedule must be included. {270.14(b)(11)(v)}	Not applicable
B-4b(3) Waiver for Land Storage and Disposal Facilities (Existing Facilities Only) If a waiver from the Floodplain Standard is requested, the owner or operator must demonstrate that there will be no adverse effects on human health or the environment if washout occurs. The following factors must be considered in this demonstration: {264.18(b)(1)(ii)} - Volume and physical and chemical characteristics of the waste; {264.18(b)(1)(ii)(A)}	Not applicable
- Concentration of hazardous constituents that would potentially affect surface waters; {264.18(b)(1)(ii)(B)}	Not applicable
- Impact of such concentration on the current or potential uses of and water quality standard established for the affected surface waters; and {264.18(b)(1)(ii)(C)}	Not applicable
- Impact of hazardous constituents on the sediments of affected surface waters or the soils or the 100-yr floodplain. {264.18(b)(1)(ii)(D)}	Not applicable
B-4c Additional North Carolina Location Standards The following minimum separation distances shall be required of all hazardous waste management facilities except that existing facilities shall be required to meet these distances to the maximum extent feasible. {15A NCAC 13A .0109(r)(2), .0113(c)(3) and .0113(c)(5)} - Hazardous waste management facilities shall be located at	Section B-5

Subject Requirement and 40 CFR Reference	Location in Application and Comments
least 0.25 miles from institutions such as schools, hospitals, prisons, etc. {15A NCAC 13A .0109(r)(2)(A) and .0113(c)(5)}	
- Hazardous waste treatment and storage facilities shall: · store and/or treat all hazardous waste a minimum of 50 feet from the property line of the facility; and	Section B-5
· store and/or treat all ignitable, incompatible, or reactive wastes a minimum of 200 feet from the facility property line if the area adjacent to the facility is zoned for any use other than industrial or is not zoned. {15A NCAC 13A .0109(r)(2)(B)}	Section B-5
- Hazardous waste landfills, long-term storage facilities, land treatment facilities, and surface impoundments shall be located 200 feet from the facility property line. {15A NCAC 13A .0109(r)(2)(C)(i)}	Section B-5
- Hazardous waste landfills, long-term storage facilities, and surface impoundments shall be constructed so that the bottom of the facility is 10 feet or more above the historical high ground water level. {15A NCAC 13A .0109(r)(2)(C)(ii)}	Section B-5
- Hazardous waste landfills, long-term storage facilities, land treatment facilities, and surface impoundments shall be located at least 1,000 feet from the zone of influence of any existing off-site ground water well used for drinking water. {15A NCAC 13A .0109(r)(2)(C)(iii)}	Section B-5
- Hazardous waste landfills, long-term storage facilities, land treatment facilities, and surface impoundments shall be located outside the zone of influence of any existing or planned on-site drinking water well. {15A NCAC 13A .0109(r)(2)(C)(iii)}	Section B-5
- Hazardous waste treatment and storage facilities for liquid waste that is TC toxic, toxic, or acutely toxic and is stored in tanks or containers shall not be located: · in the recharge area of an aquifer which is designated as an existing sole drinking water source unless an adequate secondary containment system is constructed and the facility can demonstrate no unreasonable risk to public health; {15A NCAC 13A .0109(r)(2)(D)(i)}	Section B-5
· Within 200 feet of surface water impoundments or surface water streams with continuous flow; {15A NCAC 13A .0109(r)(2)(D)(ii)}	Section B-5
· In an area that will allow direct surface or subsurface discharge to WS-I, WS-II, or SA waters or a Class III Reservoir as defined in 15A NCAC 2B .0200 and 15A NCAC 18C .0102; {15A NCAC 13A .0109(r)(2)(D)(iii)}	Section B-5
· In an area that will allow direct surface or subsurface discharge to the watershed for a Class I or Class II Reservoir as defined in 15A NCAC 18C .0102; {15A NCAC 13A .0109(r)(2)(D)(iv)}	Section B-5
· Within 200 feet horizontally of a 100-year floodplain elevation; {15A NCAC 13A .0109(r)(2)(D)(v)}	Section B-5
· Within 200 feet of a seismically active area; and {15A NCAC 13A .0109(r)(2)(D)(vi)}	Section B-5

Subject Requirement and 40 CFR Reference	Location in Application and Comments
· Within 200 feet of a mine cave or cavernous bedrock. {15A NCAC 13A .0109(r)(2)(D)(vii) and .0113(c)(3)}	Section B-5
- A hazardous waste landfill, long-term storage, or a surface impoundment facility shall not be located: · In the recharge area of an aquifer which is an existing sole drinking water source; {15A NCAC 13A .0109(r)(4)(A)(i)}	Section B-5
· Within 200 feet of a surface water stream with continuous flow as defined by the United States Geological Survey; {15A NCAC 13A .0109(r)(4)(A)(ii)}	Section B-5
· In an area that will allow direct surface or subsurface discharge to WS-I, WS-II or SA waters or a Class III Reservoir as defined in 15A NCAC 2B .0200 and 15A NCAC 18C .0102; {15A NCAC 13A .0109(r)(4)(A)(iii)}	Section B-5
· In an area that will allow direct surface or subsurface discharge to a watershed for a Class I or II Reservoir as defined in 15A NCAC 18C .0102; {15A NCAC 13A .0109(r)(4)(A)(iv)}	Section B-5
· Within 200 feet horizontally of a 100-year flood hazard elevation; {15A NCAC 13A .0109(r)(4)(A)(v)}	Section B-5
· Within 200 feet of a seismically active area as defined in (c) of this Rule; and {15A NCAC 13A .0109(r)(4)(A)(vi)}	Section B-5
· Within 200 feet of a mine, cave or cavernous bedrock. {15A NCAC 13A .0109(r)(4)(A)(vii)}	Section B-5
B-5 Additional North Carolina Requirements B-5a Monitoring Wells for New Facilities The owners and operators of all new hazardous waste management facilities shall construct and maintain a minimum of two observation wells, one upgradient and one downgradient of the proposed facility; and shall establish background groundwater concentrations and monitor annually for all hazardous wastes that the owner or operator proposes to store, treat, or dispose at the facility. {15A NCAC 13A .0109(r)(6)}	Section B-5
B-5b Public Participation for New Facilities The owners and operators of all new hazardous waste facilities shall demonstrate that the community has had an opportunity to participate in the siting process by complying with 15A NCAC 13A .0109(r)(7) and providing the following with the permit application: {15A NCAC 13A .0109(r)(7) and .0113(c)(1)} - Copies of the public notices for the two public meetings. {15A NCAC 13A .0109(r)(7)(A) and (C)}	Section B-5
- Copies of the transcripts from both of the public meetings. {15A NCAC 13A .0109(r)(7)(A) and (C)}	Section B-5
- Copies of all other relevant written material distributed or used at the meeting.	Section B-5

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{15A NCAC 13A .0109(r)(7)(C)}	

h:\chklists\tsd-word\part-b.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name Former Parker Hannifin Facility
EPA ID Number
Permit Review Team

Date Review Completed

The regulatory checklists are currently undergoing revision. While this checklist has been reformatted, it has not been reviewed for technical content.

Air Emission Standards for Process Vents - Module BB

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART BB - AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS BB-1 Applicability Except as otherwise specified, equipment leaks are associated with operations that manage hazardous waste with organic concentrations of at least 10 parts per million by weight (ppmw). This includes: {264.1050(b)} - Units that are subject to the permitting requirements of 40 CFR part 270, or {264.1050(b)(1)}	Section BB-1
- Units (including a hazardous waste recycling unit) that are not exempt from permitting under the provisions of 40 CFR 262.34(a), or {264.1050(b)(2)}	Section BB-1
- Units (including hazardous waste recycling units) that are exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a "90-day" tank or container). {264.1050(b)(3)} Each piece of equipment must be marked such that it can be readily distinguished from other pieces of equipment. {264.1050(b)}	Section BB-1
BB-2 Exclusions The following equipment is excluded from the requirements of 40 CFR 264.1052 to 1060 provided the equipment is identified in a log in the facility's operating record: {264.1050(e) and (f)} - Equipment in a vacuum or {264.1050(e)}	Section B-1b
- Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per calendar year {264.1050(f)}	Section B-1b
BB-3 Equipment Standards	Section BB-2

Subject Requirement and 40 CFR Reference	Location in Application and Comments
BB-3a Pumps in Light Liquid Service The owner/operator must meet the following standards for pumps in light liquid service: - Pumps must monitored monthly for leaks. {264.1052(a)(1) and 270.25(d)}	
- Visual inspection for pump seal leakage must be conducted on a weekly basis. {264.1052(a)(2) and 270.25(d)}	
- Leak detection occurs if: · A leak detection instrument reads 10,000 parts per million (ppm) or greater, or · There are indications of liquids dripping from the pump seal. {264.1052(b),264.1063, and 270.25(d)}	
- Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. {264.1052(c),264.1059, and 270.25(d)}	
Specific exceptions to these standards are dual mechanical seal systems or no detectable emissions.. {264.1052(d) and (e) and 270.25(d)}	
BB-3b Compressors The owner/operator must meet the following standards for compressors: - Barrier fluid pressure must be greater than the compressor stuffing box pressure, or {264.1053(b)(1) and 270.25(d)}	Section BB-3
- Barrier fluid system connected by a closed-vent system to a control device as described in Subpart AA, or {264.1053.(b)(2) and 270.25(d)}	
- No detectable atmospheric emissions of hazardous contaminants from the barrier system. {264.1053(b)(3) and 270.25(d)}	
- Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Sensors must be checked daily or an audible alarm checked monthly. {264.1053(d) and (e) and 270.25(d)}	
- Leak detection occurs if sensor indicates a failure of: · The seal system, or · The barrier fluid system. {264.1053(f) and 270.25(d)}	
- Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. Repair extensions are allowed under conditions specified in 40 CFR 264.1059. {264.1053(g)(1), 264.1059, and 270.25(d)}	
Specific exceptions to these standards are certain closed vent systems or no detectable emissions. {264.1053(h) and (i) and 270.25)(d)}	
BB-3c Pressure Relief Devices in Gas\Vapor Service	Section BB-4

Subject Requirement and 40 CFR Reference	Location in Application and Comments
The owner/operator must meet the following standards for pressure relief devices: - Except during pressure releases, no pressure relief device shall release detectable emissions. {264.1054(a) and 270.25(d)}	
- Within 5 calendar days after a pressure release, no detectable emissions shall emanate from pressure release device. {264.1054(b) and 270.25(d)}	
- Specific exceptions to these standards are certain closed vent system. {264.1054(c) and 270.25(d)}	
BB-3(d) <u>Sampling Connecting Systems</u> Each sampling connecting system shall be equipped with a closed-purge, close-loop, or closed-vent system. Closed-vent systems and control of devices are also subject to 40 CFR 264.1033. Each closed-purge, closed-loop, or closed-vent system shall either: {264.1055(a) and (b) and 264.1060} - Return the purged process fluid directly to the process line, {264.1055(b)(1)}	Section BB-5
- Collect and recycle the purged process liquid, or {264.1055(b)(2)}	
- Be designed and operated to capture and transport all the purged process fluid to a waste management unit or control device that satisfies applicable requriements. {264.1055(b)(3)}	
In-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR 264.1055(a) and (b). {264.1055(c)}	
BB-3e Valves - Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve that seals the open end at all times except during operations. A double check and bleed system will follow the same operating procedures except when operations require venting the line between block valves. {264.1056(a), (b) and (c) and 270.25(d)}	Section BB-6
- A second valve shall be operated such that the primary valve shall be closed before the second valve is opened. {264.1056(b) and 270.25(d)}	
BB-3f Valves in Gas/Vapor Service or in Light Liquid Service The owner/operator must meet the following standards for valves in gas/vapor service or in light liquid service: {264.1057(a) through (e) and 270.25(d)} - Each valve in gas/vapor or light liquid service shall be monitored monthly. {264.1057(a)}	Section BB-7
- If an instrument reading of 10,000 ppm or greater is	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
measured, a leak is detected. {264.1057(b)}	
- Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected. However, if a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months. {264.1057(c)}	
- Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. {264.1057(d)}	
- First attempts at repair include, but are not limited to, the following best practices where practicable: · Tightening of bonnet bolts, · Replacement of bonnet bolts, · Tightening of packing gland nuts, and · Injection of lubricant into lubricated packing. {264.1057(e)}	
Specific exceptions to the monitoring schedule include unsafe-to-monitor valves, no detectable emissions, and difficult-to-monitor valves. {264.1057(f), (g) and (h), 264.1061, 264.1062, and 270.25(d)}	
BB-3g <u>Pumps and Valves in Heavy Liquid Service, Pressure Relief Device in Light Service, and Flanges and Other Connectors</u> The owner/operator must meet the following standards for pumps and valves in heavy liquid service, pressure relief device in light service, and flanges and other connectors: {264.1058,264.1063(b), and 270.25(d)} - Monitoring is required within 5 days after a leak is found by sight, sound, smell, or other detection method. {264.1058(a)}	Section BB-8
- A leak is detected if a leak detection instrument reads 10,000 ppm or greater. {264.1058(b)}	
- Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. {264.1058(c) and 264.1059}	
Any connector that is inaccessible or is ceramic or ceramic-lined is exempt from the monitoring requirements of 40 CFR 264.1058(a) and 264.1064. {264.1058(e)}	
BB-4 <u>Testing</u> The owner/operator shall use Reference Method 21 for compliance testing. {264.1063}	Section BB-9
BB-5 <u>Record Keeping and Reporting Requiements</u> - The owner/operator must comply with record keeping requirements.	Section BB-10

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.1064}	
- The semiannual report shall be submitted according to requirements. {264.1065}	

h:\chklists\tsd\part-bb.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team:

Date Review Completed:

Guidance Document for Part C

(3) 'Waste Analysis At Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes'; A Guidance Manual. US EPA; Solid Waste and Emergency Response (OS-520); PB94-963603; OSWER 9938.4-03; April 1994.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART C - WASTE ANALYSIS PLAN The Waste Analysis Plan (WAP) should describe the chemical and physical properties of the wastes managed and the procedures implemented to obtain detailed chemical and physical data on the wastes in order to insure proper storage, treatment, and disposal as well as compliance with the land disposal restriction (LDR) program. Requirements of the WAP include: {270.14(b)(2)&(3), 264.13, 268.7}	Section C
C-1 Waste Management and Identification Provide a general description of the waste management activities and a description of the wastes managed at the facility. Include sufficient, yet succinct information on the following: {264.13(a)} [Guidance(3) - Section 2.1 & Appendix A]	Section C-1
C-1a Waste Management Processes and Activities Provide a brief description of the processes and activities that are used to manage wastes. This information may include facility diagrams, narrative process descriptions, and other data relevant to the waste management processes subject to waste analysis; or reference applicable sections of the application. For off-site TSDFs, the WAP should include a brief description of each generator's process contributing wastes to the facility. A statement that a brief description will be obtained, updated, and kept on file as part of the operating record may be provided along with a brief description of the generator's processes for the categories of wastes managed at the facility. (see C-5a) {264.13(a) & (b)(5)} [Guidance(3) - Section 2.1.1]	Section C-1a
C-1b Waste Identification/Classification A detailed chemical and physical analysis of a representative sample of each waste managed at the facility must be obtained. At a minimum, the analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with Part 264 and Part 268 requirements; or conditions of the permit issued under Part 270. A laboratory report of the results of the analysis should be provided. Clearly identify and describe the following:	Section C-1b

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{270.14(b)(2), 264.13(a)(1)} [Guidance(3) - Section 2.1.2] - Each hazardous waste managed,	
- Each process generating these wastes,	
- Rationale for identifying each waste as hazardous,	
- Appropriate EPA waste classifications including EPA waste code and classification under LDR regulations as wastewater or non- waste water,	
- If necessary, any wastes or waste properties that will not be managed by the facility (i.e. inappropriate waste). (For facilities which manage a large number of waste streams, sufficient information must be provided for each waste type/category in order to treat, store, or dispose of the wastes properly.)	
For new facilities, existing published or documented data on the hazardous waste or on hazardous waste from a similar process may be provided. {264.13(a)(2)}	
C-1c Description of Hazardous Waste Management Units (HWMU) In order to adequately identify all appropriate waste analysis parameters (see C-2) for each waste, a brief description of the specific operating conditions and process constraints for each HWMU may be required. The following information should be evaluated and included in the WAP as necessary: {264.13(a)(1)} [Guidance(3) - Section 2.1.3 & Appendix E] - A physical description of each HWMU, the waste types managed in each unit, and the management methods for each waste or unit,	Section C-1c
- Ignitable, reactive, or incompatible wastes managed,	
- Process/design considerations and limitations necessary to ensure that waste management units are operated in a safe manner and meet applicable performance standards,	
- Prohibitions that apply to the facility (e.g. PCB's in incinerator feed, storage of corrosive basic waste, unpermitted RCRA hazardous waste codes).	
C-1c(1) Containers Provide the following specific information for wastes managed in container management units: - Describe the compatibility of the hazardous wastes to be managed with respect to the containers used. {264.172}	Not applicable
- For each waste to be managed, identify ignitable, reactive, and incompatible wastes. {264.13(a)(1), 264.176, 264.177}	
- For storage areas that store containers holding wastes that do not contain free liquids, describe test procedures and results or provide other documentation or information which show that wastes do not contain free liquids. The test for free	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
liquids is the Paint Filter Liquids, Test Method 9095 in SW-846. {270.15(b)(1)}	
C-1c(2) Tanks Provide the following specific information for wastes managed in tanks: - Specify the specific gravity of the wastes to be managed in each tank system. {264.191(a)&(b), 264.192(a)}	Not applicable
- For each waste to be managed, identify ignitable, reactive, and incompatible wastes. {264.13(a)(1), 264.198, 264.199}	
C-1c(3) Waste Piles For waste piles that are inside or under a structure when an exemption from 264.251 is requested, the following must be provided: - Test procedures and results, or other documentation or information, which shows that the wastes do not contain free liquids when placed on the pile. The test for free liquids is the Paint Filter Liquids Test, Method 9095 in SW-846. {264.250(c)(1)}	Not applicable
- Demonstration that the wastes will not generate leachate through decomposition or other reactions while being stored. {264.250(c)(4)}	
C-1c(4) Surface Impoundments Provide the following specific information for wastes managed in surface impoundments: - Describe the compatibility of the hazardous wastes to be managed with respect to the liner. {264.221(a)(1)}	Section C-1c(4)
- If applicable, provide test data to verify that wastes are exempt from the land disposal restrictions under Section 268.4(a). {264.13(b)(7)}	
C-1c(5) Landfills Provide the following specific information for wastes managed in landfills: - Results of the Paint Filter Liquids Test, Method 9095 in SW-846, showing that containerized or bulk wastes do not contain free liquids. {264.314(c)}	Not applicable
- Describe the compatibility of the hazardous wastes to be managed with respect to the liner. {264.301(a)(1)(i)}	
C-1c(6) Land Treatment Provide the following specific information for wastes managed in land treatment units:	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- For each waste that will be applied to the treatment zone, provide a demonstration that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone. {264.272(a)}	
- Concentration of Appendix VIII constituents. {264.272(c)(1)(i)}	
- Cadmium concentration when foodchain crops are grown in the treatment zone. {264.276(b)}	
- The following additional information should be provided: · percent moisture · specific gravity or bulk density · conductivity · acidity or alkalinity · TOC · concentration and identification of VOCs [Guidance(3) - Section 2.2.4]	
C-1c(7) Drip Pads Provide the following specific information for wastes managed on drip pads: - Describe the compatibility of the hazardous wastes to be managed with respect to the liner. {264.573(b)(1)(i)&(2)(i)}	Not applicable
C-1c(8) Containment Buildings Provide the following specific information for wastes managed in containment buildings: - If applicable, provide results of the Paint Filter Liquids Test, Method 9095 in SW-846, showing that wastes do not contain free liquids. {264.1101(b)}	Not applicable
- Describe the compatibility of the hazardous wastes to be managed with respect to the materials of construction. {264.1101(b)(3)(iii)}	
C-1c(9) Incinerators For each waste or mixture of wastes to be burned, the following must be provided as applicable: - Identification and quantification of Appendix VIII constituents which are reasonably expected to be in the waste. The constituents excluded from analysis must be identified and the basis for exclusion stated.	Not applicable
- heat content	
- viscosity or physical form	
- chlorine content	
- ash content	
- percent moisture	
- pH	
- total metals {264.341(a), 270.62(b)(2)(i)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
C-1c(10) Boilers and Industrial Furnaces For each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks as fired, the following must be provided as applicable: - Identification and quantification of Appendix VIII constituents which are reasonably expected to be in the waste. The constituents excluded from analysis must be identified and the basis for exclusion stated.	Not applicable
- heat content	
- viscosity or physical form	
- chlorine content	
- ash content	
- percent moisture	
- pH	
- total metals(antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, in addition to nickel and selenium) {266.102(b)(1), 270.66(c)(1)&(c)(2)(i)&(ii)}	
- If blending is to occur prior to firing, provide a detailed analysis of the hazardous waste prior to blending and of the material with which it is blended, the blending ratios, and a description of blending procedures. {270.66(c)(2)(iii)}	
C-1d Waste Re-Evaluation Frequencies Specify the frequency with which the initial analysis (see C-1b) will be reviewed or repeated which is sufficient to ensure that the waste analysis information is accurate and up-to-date. At a minimum, each type of waste must be analyzed on at least an annual basis. In addition, the analysis must be repeated: {264.13(a)(3), 264.13(b)(4)} [Guidance(3) - Section 2.5] - When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed, and {264.13(a)(3)(i)}	Section C-1d
- For off-site facilities, when the results of an inspection indicate that the waste does not match the waste on the accompanying manifest or shipping paper. {264.13(a)(3)(ii)}	
C-2 Parameter Selection and Rationale The WAP must include procedures for initial and annual waste analysis, as well as procedures for fingerprint analysis to be implemented when wastes are received from off-site. (see C-5) Provide a list of parameters chosen for initial, annual and fingerprint analysis and an explanation of how these parameters will provide sufficient information on the chemical and physical properties of the waste to ensure safe and effective waste management. The chosen parameters must provide sufficient information in the following categories: {264.13(b)(1), 268.7} [Guidance(3) - Section 2.2]	Section C-2

Subject Requirement and 40 CFR Reference	Location in Application and Comments
C-2a Waste Identification Specify parameters necessary to ensure that wastes generated and/or accepted are accurately identified. Include provisions to ensure applicable LDR requirements are fulfilled. {264.13(b)(1)} [Guidance(3) - Section 2.2.1]	Appendix E
C-2b Identification of Incompatible and Inappropriate Wastes Specify parameters to identify ignitable, reactive, or incompatible wastes or wastes that are inappropriate given the type of management practices used by the facility. {264.13(b)(1)} [Guidance(3) - Section 2.2.1 & 2.6.2]	Not applicable
C-2c Process and Design Considerations Specify parameters to ensure that wastes accepted for management will not exceed process and design operating limitations and that process performance standards can be met. {264.13(b)(1)} [Guidance(3) - Section 2.2.1]	Not applicable
C-2d TSDF Process Vents and Equipment Wastes must be analyzed in accordance with methods specified (SW-846 Methods 9060 or 8240) in order to identify and verify the total organic concentration of wastes managed in units subject to 264, Subpart AA. Wastes with a total organic concentration equal to or greater than 10 ppmw and which are managed in specific units are subject to Subpart AA. Wastes with a total organic concentration equal to or greater than 10% by weight are subject to Subpart BB. {264.1034(d); 264.1063(d)}	Not applicable
C-2e Exemption from Subpart CC For facilities seeking an exemption to the air emission standards of Subpart CC, provide the following: {264.13(b)(8)} - The procedures and schedules for waste sampling and analysis, and the analysis of test data to verify the exemption. {264.13(b)(8)(i)}	Not applicable
- Each generator's notice and certification of the volatile organic concentration in the waste if the waste is received from off-site. {264.13(b)(8)(ii)}	
C-2f Unit Specific Parameters Examples of parameters for complying with waste management requirements for specific hazardous waste management units are: {264.13(b)(1)&(6)} [Guidance(3) - Table 2-5]	Appendix E
- Containers · PH · Flash Point · Total and Amenable Cyanide/Sulfide · Appropriate Hazardous Constituents	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Tanks · Specific gravity · pH · Flash Point · Halogens · Total and Amenable Cyanide/Sulfide · Oxidizing Potential · Appropriate Hazardous Constituents	Not applicable
- Waste Piles · PH · Total and Amenable Cyanide/Sulfide · Oxidizing Potential · Ketones · Total Chlorine · Liner Compatibility Tests · Appropriate Hazardous Constituents	Not applicable
- Surface Impoundments · pH · Total Suspended Solids(TSS) · Flash Point · Total and Amenable Cyanide/Sulfide · Oxidizing Potential · Total Chlorine · Liner Compatibility Tests · Total Petroleum Hydrocarbons · Appropriate Hazardous Constituents	Not applicable
- Landfills · Free Liquid Content · pH · Total Chlorine · Total Nitrogen · Liner Compatibility Tests · Total and Amenable Cyanide/Sulfide · Chemical Compatibility Evaluations · Appropriate Hazardous Constituents	Not applicable
- Land Treatment · pH · Total Metals · Total and Amenable Cyanide/Sulfide · Electrical Conductivity · Appropriate Hazardous Constituents	Not applicable
- Incinerators Throughout normal operation, sufficient waste analysis must be conducted to verify that the waste feed to the combustion unit is within the physical and chemical limits to be specified in the permit based on the results of the Trial Burn. The following analysis must be conducted as applicable: · Appendix VIII constituents · heat content · viscosity or physical form · chlorine content · ash content · percent moisture · pH · total metals {264.341(b)} [Guidance(3) - Section 2.6.1.1]	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Boilers and Industrial Furnaces Throughout normal operation, sufficient waste analysis must be conducted to verify that the waste feed to the combustion unit is within the physical and chemical limits to be specified in the permit based on the results of the Trial Burn. For each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks as fired, the following analysis must be conducted as applicable: · Appendix VIII constituents · heat content · viscosity or physical form · chlorine content · ash content · percent moisture · pH · total metals(Ag, As, Ba, Be, Cd, Cr, Pb, Hg, Sb, Ti, Se, Ni) {266.102(b)(2)} [Guidance(3) - Section 2.6.1.1]	Not applicable
C-3 <u>Sampling Procedures</u> Specify the sampling method which will be used to obtain a representative sample of each waste or waste type to be analyzed. A representative sample may be obtained using either one of the sampling methods described in Appendix I of Part 261 or an equivalent method. Required information includes: {264.13(b)(3)} [Guidance(3) - Section 2.3]	Appendix E
C-3a Sampling Methods and Equipment - Identify the sampling procedures and techniques (e.g. grab, composite) that will be used to obtain a representative sample of each type of waste to be analyzed. Specify the method number. Provide a description of and justification for any modified or non-standard procedures which are proposed. {264.13(b)(3) & 260.21} [Guidance(3) - Section 2.3.1]	Appendix E
- Identify all sampling equipment and discuss applicability of equipment considering the chemical and physical characteristics of the wastes, as applicable. {264.13(b)(3)} [Guidance(3) - Section 2.3.2]	
- Identify procedures for maintenance and decontamination of all sampling equipment. {264.13(b)(3)} [Guidance(3) - Section 2.3.3]	
C-3b <u>Sampling Preservation and Storage</u> Specify sample containers, preservation methods(if applicable), and maximum holding times. Specify procedures for proper packing and shipping, if applicable. {264.13(b)(3)} [Guidance(3) - Section 2.3.4]	Appendix E
C-3c <u>Sampling QA/QC Procedures</u> Describe the QA/QC procedures implemented to insure that	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
technically valid data are obtained, including collecting blanks and duplicates, and chain-of-custody procedures. {264.13(b)(3)} [Guidance(3) - Section 2.3.5]	
C-3d Health and Safety Protocols Specify procedures implemented for the protection of sampling personnel. OSHA requirements specified in 29 CFR 1910.120 should be followed. (Inclusion of health and safety procedures in the WAP enhances its use as a hands-on operating manual.) [Guidance(3) - Section 2.3.6]	
C-4 Laboratory Testing and Analytical Methods Specify the test methods which will be used to test for each parameter for each waste type managed at the facility. Provide a description of and justification for any modified or non-standard methods. {264.13(b)(2) & 260.21} [Guidance(3) - Sections 2.4 & 2.4.2]	Section C-4
C-4a On-site Laboratory Procedures Describe the procedures implemented to ensure that technically valid data are obtained. Facilities with on-site laboratories must provide a description of their Standard Operating Procedures and QA/QC program. {264.13(b)(2)} [Guidance(3) - Section 2.4.1]	
C-4b Off-site Laboratory Selection For facilities that use an off-site laboratory, provide information that the laboratory selected has comprehensive QA/QC programs, technical analytical expertise, and an effective information management system. At a minimum, state that appropriate SW-846 procedures are followed by the lab and that analytical results will include appropriate QA/QC information. {264.13(b)(2)} [Guidance(3) - Section 2.4.1]	
C-5 Additional Requirements for Facilities Receiving Waste Generated Off-site C-5a Waste Information for Facilities Receiving Waste Generated Off-site For off-site facilities, specify the waste analysis information that generators will supply. Waste information should be provided on a "Waste Profile Sheet" for each waste accepted. A discussion of the following should be provided: {264.13(b)(5)} [Guidance(3) - Sections 2.5 & 2.6.1, Figure 2-11, and Table 2-11] - Specify how information provided by the generator is confirmed;	Not applicable
- Specify sampling procedures for acceptance of a shipment of waste(i.e. the percentage of containers sampled per shipment);	
- Provide specific criteria for the acceptance and rejection of wastes received from off-site generators;	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Describe acceptance and rejection procedures.	
C-5b Procedures for Receiving Waste Generated Off-site For off-site facilities, the WAP must specify procedures used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that the waste matches the identity of the waste on the accompanying manifest or shipping paper. At a minimum, the plan must describe: {264.13(a)(4)&(c)} [Guidance(3) - Section 2.6.1] - The procedures which will be used to determine the identity of each movement of waste; {264.13(c)(1)}	Not applicable
- The sampling method which will be used to obtain a representative of the waste; and {264.13(c)(2)}	
- The procedures an off-site landfill receiving containerized hazardous waste will use to determine whether a biodegradable sorbant has been added. {264.13(c)(3)}	
C-6 Provisions for Complying with LDR Requirements Generators and TSDFs must conduct waste analysis to determine the regulatory status of wastes with respect to the treatment standards in Part 268, Subpart D. Supporting documentation must be submitted and maintained in the operating record. {268.7, 264.13(a)(1), 264.13(b)(6), 268 Subpart C-Prohibitions on Land Disposal} [Guidance(3) - Section 2.6.3] - All wastes restricted under the LDRs should be identified.	Section C-6
- Procedures to ensure that wastes meet applicable LDR treatment standards prior to land disposal should be in place.	

h:\chklists\tsd-word\part-c.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team:
Date Review Completed:

The regulatory checklists are currently undergoing revision. While this checklist has been reformatted, it has not been reviewed for technical content.

Groundwater Monitoring - Module E

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART E - GROUNDWATER MONITORING E-1 Interim Status monitoring Data Summary of groundwater monitoring data obtained during interim status period. {270.14(c)(1) and 265.90-265.94}	Section E and Appendix G
E-1a Description of Wells {265.91} - Number of wells;	Section E-1a
- Locations;	
- Depths and screened intervals;	
- Casing description;	
- Other well construction details;	
- Identifications of upgradient wells and downgradient wells; and	
- Water levels at time of drilling and any changes within 24 hours.	
E-1b Description of Sampling/Analysis Procedures {265.92} - Sample Collection;	Section E-1b
- Sample preservation and shipment;	
- Analytical procedures; and	
- Chain-of-custody control.	
E-1c Monitoring Data All interim status monitoring results must be provided, including the following: {265.92} - Copies of each quarterly (from first year) analytical results for each well; {265.92(c)(1)}	Section E-1c and Appendix G
- Copies of subsequent (annual or semi-annual) analytical results for each well; {265.92(d)}	
- Results of groundwater surface elevation measurements for	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
each sampling event; and {265.92(e)}	
- Initial background arithmetic mean and variance for each indicator parameter based on replicate measurements form upgradient wells during first year. {265.92(c)}	
E-1d Statistical Procedures {265.93} - Description of the statistical procedures employed to make the required statistical comparisons; and	Section E-1d
- Results of statistical comparisons between upgradient and downgradient well sampling results and first year background values for each indicator parameter.	
E-1e Groundwater Assessment Plan If required, based on statistical comparison results, the specific plan for a groundwater quality assessment program, along with the results obtained from implementation of the plan. include results of the following determinations, considering (at a minimum) the hazardous constituents listed in Appendix VIII to 40 CFR Part 261. {265.93(d)(2)} - Whether hazardous waste or hazardous constituents have entered the groundwater;	Section E-1e
- The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater; and	
- Concentrations of hazardous waters or hazardous waste constituents in the groundwater.	
E-2 General Hydrogeologic Information Identification of uppermost aquifer and aquifers hydraulically interconnected beneath facility, including: {270.14(c)(2)} - Groundwater flow direction and rate; and	Section E-2
- Basis for identification.	
E-3 Topographic Map Requirements Unless exempt from groundwater monitoring requirements, surface impoundments, waste piles, land treatment, and landfill facilities must include the following information on the topographic map: {270.14(c)(2),(3),(4),(i)} - Groundwater flow direction and rate (isometric graph);	Section E-3 and Figure E-1
- Point of compliance;	Figure B-2 and E-1
- Groundwater monitoring wells;	Figure B-2
- The extent of any plume (horizontal and vertical);	Figures E-5 and E-6
- Hazardous waste management area; and	Figures B-2 and E-1
- Property boundary.	Figure B-2, B-6 and E-1
The following required information may be incorporated into the topographic map if possible, or at least should be discussed in the text:	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Groundwater flow rate;	
- Boundaries of uppermost aquifer;	
- Underlying interconnection between uppermost aquifer and lower aquifer;	Figure E-1, E-3 and E-4
- Hydraulic downgradient;	Figure E-1
- Waste management area; and	Figure B-2
- Uppermost aquifer.	Figure E-1
(Although many of these items can be shown on a single map, it is allowable to use additional maps to display some of the information. Presentation of all of this information on a single map may sacrifice clarity.)	
E-4 Contaminant Plume Description Description of any plume of contamination that has already entered groundwater from a regulated unit: {270.14(c)(4) and 261, Appendix VIII} - Delineation of extent of the plume on the topographic map;	Section E-4
- Identification and concentrations of Appendix VIII constituents throughout the plume or maximum concentrations of these constituents in the plume; and	Appendix J
- Delineation of the vertical extent of the plume in a cross-section. {270.14(c)(2) and 270.14(c)(7)(ii)}	Figure E-3 and E-4
E-5 General Monitoring Program Requirements Waiver request - applicant must certify that there will be no migration of liquid to uppermost aquifer during active life and postclosure. If waiver is not requested, applicant must provide detailed plans and an engineering report describing proposed groundwater monitoring program to meet general groundwater monitoring requirements. The following information is required: {270.14(c)(5), 264.97 and 264.90(b)(4)}	Section E-5
E-5a Description of Wells {264.97(a),(b) and 264.97(c)} - Number of wells;	Section E-5a
- Locations;	Figure E-1
- Depths;	Table E-1
- Casing description;	Table E-1
- Assurance of unaffected background water measurement; and	Section E-5a
- Assurance of compliance point ground-water measurement.	Section E-5a
E-5b Description of Sampling/Analysis Procedures {264.97(d) and 264.97(e)} - Sample collection methods {264.97(f)}	Section E-5b, Table E-7 and Appendix K
- Sample preservation/shipment;	Section E-5b, Table E-7 and Appendix K
- Analytical procedures;	Section E-5b, Table E-7 and Appendix K
- Chain-of-custody control;	Section E-5b, Table E-7 and Appendix K
- Documentation of proper sampling and analysis procedures; and	Section E-5b, Table E-7 and Appendix K
- Procedure for determination of ground-water elevation with each sample.	Section E-5b, Table E-7 and Appendix K
E-5c Procedures for Establishing Background Quality	Section E-5c

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.97(a)(1) and 264. 97(g)} - Representative of background quality not affected by the unit;	
- Each hazardous constituent, or monitoring parameters and other constituents;	Table E-7
- May include wells not hydraulically upgradient of the waste management area where:	
1. upgradient cannot be determined due to hydrogeologic conditions, and	
2. other wells provide background groundwater quality that is representative or more representative of background than upgradient wells.	
E-5d <u>Statistical Procedures</u> Use one of following statistical methods (E-5d(1) - (5)) to evaluate groundwater monitoring data for each hazardous constituent, consistent with the following: {264.97(h), 264.97(i)(1),(5) and (6)} - Conduct test separately for each hazardous constituent in each well;	Section E-5d
- Appropriate for distribution of chemical parameters or hazardous constituents. More than one method necessary if distributions differ;	
- Account for data below the detection limit;	
- Any practical quantification limit (PQL) shall be lowest concentration level within levels of precision and accuracy for routine lab operations; and	
- Procedures to control or correct for seasonal and spatial variability and temporal correlation in data.	
E-5d(1) <u>Parametric Analysis of Variance (ANOVA):</u> ANOVA followed by multiple comparisons procedures: {264.97(h)(1) and 264.97(i)(2)} - Include estimation and testing of contrasts between each compliance well's mean and the background mean levels for each constituent.	Section E-5d(1)
- If using individual well comparison procedure, Type 1 error level of no less than 0.01 shall be maintained. If using multiple comparison procedure, Type 1 error level no less than 0.05 for each testing period must be used.	
E-5d(2) <u>Non-parametric ANOVA (Based on Ranks):</u> ANOVA based on Ranks followed by multiple comparisons procedures: {264.97(h)(2) and 264.97(i)(2)} - Estimation and testing of each compliance well's median and background median levels for each constituent.	Section E-5d(2)
- If using individual well comparison procedure, Type 1 error level of no less than 0.01 shall be maintained. If using multiple comparison procedure, Type 1 error level no less than 0.05 for each testing period must be used.	
E-5d(3) <u>Tolerance or Prediction Interval Procedure:</u>	Section E-5d(3)

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Establish interval for each constituent based on distribution of background data. {264.97(h)(3) and 264.97(i)(4)}	
- Compare level of each constituent in each compliance well to the upper tolerance or prediction limit.	
- Prepare levels of confidence and/or percentage of the population that the interval must contain considering number of samples in the background data base, data distribution, and range of concentration values for each constituent of concern.	
E-5d(4) Control Chart Approach: {264.97(h)(4) and 264.97(i)(3)} - Control limits for each constituent;	Section E-5d(4)
- Specify type of control chart and associated parameter values.	
E-5d(5) Alternative Approach: An alternative approach can be proposed which complies with all performance standards set in 264.97(i). {264.97(h)(5) and 264.97(i)(3)}	Section E-5d(5)
E-6 Description of Detection Monitoring Program for Facilities not Detecting the Presence of Hazardous Constituents, Including: {270.14(c)(6), 264.91(a)(4) and 264.98} E-6a List of Indicator Parameters, Waste Constituents, Reaction Products to be Monitored for, Including: {270.14(c)(6)(i), 264.93 and 264.98(a)} - Type, quantities, concentrations expected wastes;	Section E-6, Not applicable
- Mobility, stability, persistence in unsaturated zone;	
- Detectability in groundwater; and	
- Concentration or values and coefficients of variation of proposed parameters in the groundwater background.	
E-6b Description of Groundwater Monitoring System {270.14(c)(6)(ii), 264.98(b), 264.95, and 264.97} - Hydraulic downgradient limit;	Section E-6, Not applicable
- Waste management area; and {(a)(2),(b),(c)}	
- Uppermost aquifer.	
E-6c Background Groundwater Concentration Values for Proposed Parameters {270.14(c)(6)(iii), 264.98(c), 264.97(g)(1) and (2)} - Use of an appropriate groundwater monitoring system, to establish background per E-5d specifying number and type of samples for each hazardous constituent appropriate to form of statistical test employed;	Section E-6, Not applicable
- Sampling procedure shall be a sequence of at least four samples from each well in the entire system at an interval assuring an independent sample relative to the uppermost aquifer's effective porosity, hydraulic conductivity, hydraulic gradient and fate and transport characteristics of the potential	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
contaminants but at least semi-annually; or	
- Alternative sampling procedure to be approved.	
E-6d Description of proposed Sampling and Analysis Procedures {270.14(c)(6)(iv), 264.97(f), 264.98(f), and 264.98(d)} - Documentation of proper sampling and analysis procedures;	Section E-6, Not applicable
- Procedures for determining groundwater elevation; {264.98(e)}	
- Procedures for determining statistically significant increase for any monitored parameter;	
- At least four samples from each compliance and background well semi-annually	
- Procedure for annual determination of uppermost aquifer flow rate and direction. {264.98(e)}	
E-6e Procedure to be Implemented if a Statistically Significant Increase in Any Constituent or Parameter is Identified at Any Compliance Point Monitoring Well {270.14(c)(7) and 264.98(g)} - Notify RA within seven days;	Section E-6, Not applicable
- Sample all wells for Appendix IX list (Part 264) constituents;	
- Establish compliance monitoring program;	
- Submit engineering feasibility plan for a corrective action program or request RA approval to submit permit schedule for development of plan.	
- May demonstrate that a source other than the regulated unit caused the contamination.	
E-7 Compliance Monitoring Program for Facilities Which Have Detected Presence of Hazardous Constituents {270.14(c)(7) and 264.99}	Section E-7
E-7a Description of Monitoring Program	Section E-7a and E-5b
E-7a(1) Description of Wastes Previously Handled at Facility {270.14(c)(7)(i)}	Section E-7a(1)
E-7a(2) Characterization of Contaminated Groundwater {270.14(c)(7)(ii)} - Hazardous constituents identified;	Section E-7a(2), E-1(c), and E-4
- Hazardous constituents concentrations.	Section E-7a(2), E-1(c), and E-4
E-7a(3) List of Hazardous Constituents to be Monitored in Compliance Program May resample within one month and repeat analysis for compounds detected. Constituents identified in both analysis will form basis for compliance monitoring plan. {270.14(c)(7)(iii), 264.99(a)(1), and 264.98(g)(3)}	Section E-7a(3), Section E-5b and Table E-7
E-7a(4) Proposed Concentration Limits for Each Constituent {270.14(c)(7)(iv) and 264.99(a)(2)} - Justification for establishing alternative limits; {264.94}	Section E-7a(4) and Table E-8
- Conditions warranting special sampling procedures;	
- Importance of statistically significant values; and	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Procedures for establishing background concentration values for constituents that are based on: {264.99(c)(3), 264.97(g) and (h)} · use of any appropriate ground-water monitoring system; · data that is available prior to permit issuance; · data that accounts for measurement errors in sampling analysis; · data that accounts for seasonal groundwater quality fluctuations; and · data from a minimum of four samples per well collected at least semiannually.	
E-7a(5) Detailed Plans of an Engineering Report Describing Groundwater Monitoring System {270.14(c)(7)(v) and 264.99(b)} - Represent quality of groundwater passing point of compliance; {264.97(a)(2)}	Section E-7a(5) and Section E-5
- Proposed compliance point; {264.95}	
- Number of wells; {264.97(a)(2)}	
- Location and depths of wells; and {264.97(a)(2)}	
- Casing and construction of wells. {264.97(c)}	
E-7a(6) Description of Proposed Sampling and Statistical Analysis Procedures for Groundwater Data {270.14(c)(7)(vi), 264.99(c), (d), (e), (f) and (g)} - Compliance period	Section E-5b and E-5d
- Sample collection methods {264.97(d)}	
- Sample preservation/shipment {264.97(d)}	
- Analytical procedures {264.97(d)}	
- Chain-of-custody control {264.97(d)}	
- Documentation of proper sampling and analysis procedures {264.97(e)}	
- Procedures for determining ground-water elevation {264.97(f)}	
- Procedures for annual determination of uppermost aquifer flow rate and direction {264. 99(e)}	
- Annual testing procedures for Appendix IX constituents. {264.99(g)}	
Procedures for determining a statistically significant increase for any monitored parameters or hazardous constituent: {264.99(d) and (f)}	
- Comparing compliance point using the procedure in 264.97(h) to the concentration limit developed in accordance with 264.94.	
- At least four samples from each well (compliance and background) must be collected at least semi-annually.	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
E-7a(7) Procedures to be Implemented if Groundwater Protection Standard is Exceeded at Compliance Point Monitoring Well {264.99(i) and 264.99(h)} - Written notification to Regional Administrator	Section E-7a(4) and Section E-8
- An application for permit modification to establish a corrective action program, including details of the program to comply with groundwater protection standard and details of groundwater monitoring to demonstrate effectiveness of the corrective action program, or	
- Submit demonstration that concentration limits were exceeded due to source other than regulated unit, or due to statistical error.	
E-7b An Engineering Feasibility Plan for Corrective Action Program {270.14(c)(7), 270.14(c)(8)(v), and 264.98(g)(5)(ii)} - Engineering feasibility plan for a corrective action program to meet requirements of 264.100, or	Not applicable
- Request authorization from RA to submit schedule for a submittal plan.	
E-8 Corrective Action Program {270.14(c)(8)(i)} E-8a Characterization of Contamination - Identification of hazardous constituents detected in groundwater	Section E-8
- Concentrations of hazardous constituents.	
E-8b Concentration Limits {270.14(c)(8)(ii), 264.100(a), and 264.97(a)} E-8b(1) Concentration Limits Established Under 264.94(a)	Section E-8b(1) and Table E-8
E-8b(2) Alternate Concentration Limits {264.94(b)} - Proposed alternate concentration limits	Section E-8b(2)
- Justification for proposed alternate limits, including assessment of potential adverse effects on groundwater quality and on the quality of hydraulically connected surface waters, and assessment of the potential for health risks caused by human exposure to waste constituents.	
E-8c Corrective Action Plan A corrective action program must prevent hazardous constituents from exceeding their respective concentration limits at the compliance point, and between the compliance point and the downgradient facility property boundary. The corrective action plan must consist of detailed engineering plans and report, and must address the following: {270.14(c)(8)(iii) and 264.100} - Identification of compliance point	Section E-8c
- Plans for removing and handling of hazardous wastes (if proposed)	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Design and construction plans and specifications for any proposed features to contain groundwater or redirect its flow (e.g., drains, engineered barriers, wells)	
- A description of the treatment technologies to be employed to remove hazardous constituents from contaminated groundwater	
- Description of the operation and maintenance plans for the corrective action measures	
- Description of any additional hydrogeologic data collected for use in designing the corrective action measures	
- Schedule for implementation the corrective action measures.	
E-8d Groundwater Monitoring Program In conjunction with a corrective action program, a groundwater monitoring program must be implemented to determine compliance with the concentration limits established under 264.94, and to determine the effectiveness of the corrective action program. {270.14(c)(8) and 264.100(d)}	Section E-8d
E-8d(1) Description of Monitoring System {270.14(c)(8) and 270.14(c)(7)(v)} - Number of wells	Section E-8d(1)
- Locations	
- Depths and screened intervals	
- Casing descriptions	
- Other well construction details	
- Description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.	
E-8d(2) Description of Sampling and Analysis Procedures {270.14(c)(8) and 270.14(c)(7)(vi)} - Sampling frequency	Section E-8d(2)
- Sample collection	
- Sample preservation and shipment	
- Analytical procedures	
- Chain-of-custody control	
- Procedures for determining ground-water elevations	
- Procedures for annual determination of groundwater flow rate and direction.	
E-8d(3) Monitoring Data and Statistical Analysis Procedures {270.14(c)(8) and 270.14(c)(7)(vi)} - Procedure for establishing background concentration values	Section E-8d(3)
- Statistical procedures for comparing compliance point data to the concentration limits	
- Statistical procedures for evaluating effectiveness of the corrective action program between the compliance point and the property boundary.	
E-8d(4) Reporting Requirements - Semi-annual report to Regional Administrator evaluating the effectiveness of the corrective action program. {264.100(g)}	Section E-8d(4)

h:\chklists\tsd\part-e.doc

REGULATORY COMPLETENESS CHECKLIST FOR

HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team: _____
_____
_____
Date Review Completed: _____

Guidance Documents for Part F

(2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.

(7) Guidance on Setting Permit Conditions and Reporting Trial Burn Results - Volume II of the Hazardous Waste Incineration Guidance Series, EPA/625/6-89/019, January 1989.

(10) Hazardous Waste Incinerator Inspection Manual, OSWER Directive No. 9938.6, April 1989.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART F - PROCEDURES TO PREVENT HAZARDS F-1 Security F-1a Security Procedures and Equipment The Part B must include a description of the security procedures and equipment required by 264.14 as detailed below, unless a waiver is granted: (See section F-1b of this checklist for waiver requirements) {264.14(a) and 270.14(b)(4)}	Section F-1
F-1a(1) 24-Hour Surveillance System A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) that continuously monitors and controls entry onto the active portion of the facility: {264.14(b)(1)} - Procedures and personnel to be used [Guidance(2) - pg 5-67]	Section F-1a(1)
- Location and description of equipment. [Guidance(2) - pg 5-67]	
F-1a(2) Barrier and Means to Control Entry In lieu of a 24-hour surveillance system, the applicant may elect to use a barrier and other means to control entry. {264.14(b)(2)}	Section F-1a(2)
F-1a(2)(a) Barrier An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff) that completely surrounds the active portion of the facility. Description should include: {264.14(b)(2)(i)} [Guidance(2) - pg 5-68] - Height, and - Material of construction.	Section F-1a(2)(a)

Subject Requirement and 40 CFR Reference	Location in Application and Comments

F-1a(2)(b) Means to Control Entry
 	
A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).
{264.14(b)(2)(ii)}
[Guidance(2) - pg 5-68]
 	
- Description should include:
  · Procedure and personnel to be used, and
  · Location and description of equipment.
	Section F-1a(2)(b)

- The requirements of sections F-1a(1) and F-1a(2) of this checklist are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and means to control entry, which complies with the requirements of 264.14(b)(1) or 264.14(b)(2). {Comment following 264.14(b)(2)(ii)}	
F-1a(3) Warning Signs The facility must have a sign with the legend, "Danger - Unauthorized Personnel Keep Out," which must: - Be posted at each entrance to the active portion of the facility {264.14(c)}	Section F-1a(2)(c)
- Be in sufficient numbers to be seen from any approach to the active portion of the facility {264.14(c)}	
- Be in English and any other language predominating in the area {264.14(c)}	
- Be legible from a distance of at least 25 feet. {264.14(c)} Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion and that entry onto the active portion can be dangerous. {264.14(c)}	
F-1b Waiver If a waiver of these requirements is requested, the owner or operator must demonstrate the following: {264.14(a)}	Section F-1b - Not applicable
F-1b(1) Injury to Intruder Physical contact with the waste, structure, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock that may enter the active portion of a facility; and {264.14(a)(1)}	Not applicable
F-1b(2) Violation Caused by Intruder Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active portion	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
of a facility will not cause a violation of the requirements of 40 CFR Part 264. {264.14(a)(2)} Note: To address F-1b(1) and F-1b(2), the applicant should include: - Nature and duration of hazard potential from wastes, [Guidance(2) - page 5-70]	
- Equipment and structures to minimize potential for an intruder to 1) cause a spill; 2) mix incompatible wastes; 3) ignite ignitable or reactive wastes; 4) damage containment or monitoring systems, [Guidance(2) - page 5-70]	
- Features that prevent contact with waste and prevent equipment and structures from unauthorized access and tampering. [Guidance(2) - page 5-70]	
F-2 Inspection Schedule A copy of the general inspection schedule required by 264.15(b) and as detailed below including, where applicable, specific requirements for - containers [264.174]; - tanks [264.193(h)(4)(i), 264.195]; - surface impoundments [264.226]; - waste piles [264.254]; - land treatment [264.273(g)]; - landfills [264.303]; - incinerators [264.347]; - drip pads [264.574]; - miscellaneous units [264.602]; - process vents [264.1033]; - equipment leaks [264.1052, 264.1053, 264.1057, 264.1058]; - air emission controls for tanks, surface impoundments, and containers [264.1101(c)(4)]; - boilers and industrial furnaces [266.102(e)(8), and 266.103(j)]. {270.14(b)(5) and 264.15}	Section F-2 and Appendix L
F-2a General Inspection Requirements A description of the facility inspection schedule (schedule must be kept at the facility) for the following equipment: {270.14(b)(5), 264.15(a), 264.15(b)(1), 264.15(b)(2), 264.15(b)(4) and 264.33} - Monitoring equipment; - Emergency and safety equipment; - Security devices; - Operating and structural equipment that are vital to prevent, detect, or respond to environmental or human health hazards; - Testing as necessary of communications or alarm systems, fire protection equipment, and decontamination equipment; - Containers; - Tank systems; - Waste piles; - Surface Impoundments;	Section F-2a

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Incinerators; - Landfills; - Land treatment units; - Miscellaneous Units; - Boilers and Industrial Furnaces; - Drip Pads; and - Containment buildings.	
F-2a(1) Types of Problems The schedule must identify the types of problems to look for during the inspection (e.g., leaks, deterioration, readings out of specified range, missing items or materials, inoperative equipment, etc.). {264.15(b)(3)}	Section F-2a(1) and Appendix L
F-2a(2) Frequency of Inspection A description of the inspection frequency must be provided for items on the schedule. The frequency of inspection should be based on the rate of possible deterioration of equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. {264.15(b)(4)}	Section F-2a(2)
F-2b Facility Inspection Requirements F-2b(1) Monitoring Equipment Examples of monitoring equipment to be inspected at TSD facilities may include, but are not limited to: [Guidance(2) - page 5-77] - Liquid level transmitters	Section F-2b Section F-2b(1)
- Conservation vents	
- Leak detection/collection system	
- Ground water monitoring system	
- Liquid flow meters	
- Scales	
- Hazardous gas detectors	
- pH monitors	
- Pressure sensors	
- Temperature gauges	

F-2b(2) Emergency Equipment
 	
Examples of emergency equipment to be inspected at TSD facilities are:
[Guidance(2) - page 5-77]
 	
- Fire detection/control equipment
  · Fire blankets
  · Fire extinguishers
  · Fire alarm system
  · Smoke detectors
  · Fire fighting wagon/hoses
  · Alarm system (other than fire)
	Section F-2b(2)

- Emergency backup equipment	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
▪ Generators ▪ Emergency lights	
- Spill control equipment ▪ Portable pumps/hoses ▪ Absorbants ▪ Containment booms ▪ Shovels ▪ Brooms ▪ Sump pumps	
- Emergency Personal Protective Equipment ▪ Face shields ▪ Protective glasses/goggles ▪ Protective clothing (overalls, boots) ▪ Gas masks ▪ Chemical respirators ▪ Self-contained breathing apparatus	
F-2b(3) Safety Equipment Examples of safety equipment to be inspected at TSD facilities are: [Guidance(2) - page 5-77] - Emergency shower/eyewash	Section F-2b(3)
- Decontamination equipment ▪ Detergents ▪ Cleaning solvents	
- Personal Protective Equipment ▪ Face shields ▪ Protective glasses/goggles ▪ Protective clothing (overalls, boots) ▪ Gas masks ▪ Chemical respirators	
- First aid/equipment supplies	
- Signs ▪ Warning ▪ No smoking	
- Communication equipment ▪ Telephones ▪ Radios ▪ Intercoms ▪ Public address system ▪ Television monitoring system ▪ Pagers ▪ Cellular telephones	
F-2b(4) Security Equipment Examples of security equipment to be inspected at TSD facilities are: [Guidance(2) - page 5-77] - Surveillance system ▪ Video cameras ▪ Television monitors ▪ Alarm systems	Section F-2b(4)
- Barrier ▪ Fences-facility/area	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
· Gates · Locks	
- Warning signs	
- Lighting	
F-2b(5) Operating and Structural Equipment Examples of operating and structural equipment to be inspected at TSD facilities are: [Guidance(2) - page 5-77] - Structural equipment · Dikes · Berms · Ramps · Tank supports · Bases/foundations · Roofs · Walls · Fire and explosion barriers · Ventilation equipment	Section F-2b(5)
- Operating equipment · Lifts (elevators)	
- Other areas (as applicable to hazardous waste management) · Loading/unloading areas · Storage areas · Main roadways · Gate areas · Periphery	
F-2b(6) Testing of Equipment Examples of equipment requiring testing at TSD facilities are: {264.33} [Guidance(2) - page 5-104] - Communication systems	Not applicable
- Alarm systems	
- Fire control equipment	
- Spill control equipment	
- Decontamination equipment	
- Emergency water supply system	
F-2c Specific Process Inspection Requirements At a minimum, the inspection schedule must include the terms and frequencies called for in 264.174, 264.195, 264.226, 264.254, 264.273(g), 264.303, 264.347 and 266.102, where applicable as detailed below. {270.14(b)(5) and 264.15(b)}	Section F-2c
F-2c(1) Container Inspection A description of the weekly inspection of containers and container storage areas for leaks in containers or deterioration of containers and the containment system caused by corrosion or other factors. {264.174}	Not applicable
F-2c(2) Tank System Inspection	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- A description of the inspection each operating day of overfilling control equipment, monitoring equipment and levels of waste. These may include: {264.195(a)} [Guidance(2) - Section 5.5.2.3] · Temperature gauges, · Pressure gauges, · Liquid level monitors, · Waste feed cut-off systems, · Overfill alarm systems.	
- A description of the daily inspection of aboveground portions of the tank system, if any, to detect corrosion or releases of waste. These may include: {264.195(b)(1)} [Guidance(2) - Section 5.5.2.3] · Ancillary equipment, · Seals at manholes, gauge locations, etc., · Inlet/outlet nozzles and flanges.	
- A schedule describing the inspection each operating day of data from monitoring and leak detection equipment (e.g., pressure and temperature gauges) where present to ensure that the tank is operated according to design specifications. These may include: {264.195(b)(2)} [Guidance(2) - Section 5.5.2.3] · Temperature, · Pressure, · Liquid level.	
- A description of the daily inspection of tank construction materials and the area surrounding the tank including secondary containment system (e.g., dikes) to detect erosion or signs of release. {264.195(b)(3)}	
- A schedule and procedure for assessing the condition of the tank, including detection of leaks, cracks, or wall thinning to less than minimum shell thickness. [Guidance(2) - page 5-82]	
- A procedure for emptying a tank to allow entry and inspection when necessary to detect corrosion or erosion of the tank sides and bottom. [Guidance(2) - page 5-82]	
- Confirm proper operation of cathodic protection system (if present) within six months after installation and at least annually thereafter. {264.195(c)(1)}	
- Schedule showing all sources of impressed current for cathodic protection system are inspected and/or tested at least bimonthly. {264.195(c)(2)}	
F-2c(3) <u>Waste Pile Inspection</u> Waste pile owners or operators must provide a description of procedures for:	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{270.18(d), and 264.254} - For new facilities, inspection of liners/covers during and immediately after installation {264.254(a)} · Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures and blisters, and {264.254(a)(1)} · Soil-based and admixed liners and covers must be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in permeability. {264.254(a)(2)}	
- Inspections should also include: [Guidance(2) - pages 5-86 and 5-92] · Raw materials prior to construction, · Construction equipment, · Construction procedures, · Post construction inspection.	
- Inspections weekly and after storms to detect: · deterioration, malfunctions, or improper operation of run-on and run-off control systems; {264.254(b)(1)} · proper functioning of wind dispersal control systems, where present; {264.254(b)(2)} · the presence of leachate in and proper functioning of leachate collection and removal systems, where present; and {264.254(b)(3)} · the presence of liquids in and proper functioning of leak detection systems, where installed. The amount of liquid removed must be recorded. {264.254(c)}	
F-2c(4) <u>Surface Impoundment Inspection</u> Surface impoundment owners or operators must provide a description of procedures for: {270.17(c) and 264.226(a)} - For new facilities, inspection of liners/covers during and immediately after installation {264.226(a)} · Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures and blisters, and {264.226(a)(1)} · Soil-based and admixed liners and covers must be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in permeability. {264.226(a)(2)} Inspections should also include: [Guidance(2) - page 5-86]	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
· Raw materials prior to construction, · Construction equipment, · Construction procedures, · Post construction inspection.	
- Inspections weekly and after storms for: {264.226(b)} · Deterioration, malfunctions, or improper operation of overtopping control systems; {264.226(b)(1)} · Sudden drops in the level of the impoundment's contents {264.226(b)(2)} · Severe erosion or other signs of deterioration in dikes or other containment devices. {264.226(b)(3)} · the presence of liquids in and proper functioning of leak detection systems, where installed. The amount of liquid removed must be recorded. {264.226(d)(1)}	
F-2c(5) Incinerator Inspection - Incinerator and associated equipment must be inspected visually at least daily for leaks, spills, fugitive emissions and signs of tampering. {264.347(b)}	Not applicable
- Emergency waste feed cut-off system and associated alarms must be tested weekly unless the applicant demonstrates that weekly inspection is unduly restrictive and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted monthly. {264.347(c)}	
- Specific operating and monitoring equipment which should be inspected include: [Guidance(7) - page 80] - Incinerator equipment - Waste/fuel feed systems · Liquid waste feed systems, including flow meters, pumps and mixing devices; · Solid waste feed systems, including conveyor system and waste feed measurement system (scales); · Fuel feed systems, including flow meters, pumps and mixing devices. [Guidance(10) - pages II-23 - II-26] - Monitoring equipment · Waste flow monitors and recorders · Temperature monitors · O2 and CO monitors · Combustion gas flow monitors · Pressure monitors · Flame sensors · Pressure differential indicators · Ammeters for measuring blower current draw. [Guidance(10) - pages II-57 - II-73] - Air Pollution Control Equipment · Wet scrubbers (venturi, packed bed, ionizing) · Dry scrubbers (rotary atomization, and dual-fluid	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
nozzle atomization) · Fabric filters APCE support systems and performance instrumentation should also be included in the inspection. [Guidance(10) - pages II-26 - II-57]	
F-2c(6) Landfill Inspection Landfill owners or operators must provide a description of procedures for: {270.21(d), 264.15(a), and 264.303} - For new facilities, inspection of liners/covers during and immediately after installation {264.303(a)} · Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures and blisters, and {264.303(a)(1)} · Soil-based and admixed liners and covers must be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in permeability. {264.303(a)(2)} Inspections should also include: [Guidance(2) - page 5-86] · Raw materials prior to construction, · Construction equipment, · Construction procedures, · Post construction inspection.	Not applicable
- Inspections weekly and after storms for: {264.303(b)} · Deterioration, malfunctions, or improper operation of run-on/run-off controls; {264.303(b)(1)} · Proper functioning of wind dispersal control systems, where present; {264.303(b)(2)} · Leachate in and proper operation of leachate collection/removal system; and {264.303(b)(3)} · Presence of liquids in and proper operation of leak detection system. The amount of liquid removed must be recorded. {264.303(c)(1)}	
F-2c(7) Land Treatment Inspection Provide a description of how the unit will be inspected weekly and after storms for: {270.20(c)(5) and 264.273(g)} - Deterioration, malfunctions, or improper operation of run-on and run-off control systems; {264.273(g)(1)}	Not applicable
- Improper functioning of wind dispersal control measures; and	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.273(g)(2)}	
- Wind breaks around unit for gaps or breakage. [Guidance(2) - page 5-96]	
F-2c(8) Miscellaneous Unit Inspections Provide an inspection program which ensures compliance with the standards specified in F-2b(1) through F-2b(5), where applicable. Check other similar units for equipment and inspection examples. {264.602}	Section F-2c(8)
F-2c(9) Boilers and Industrial Furnaces Inspections - The boiler or industrial furnace and associated equipment must be inspected visually at least daily for leaks, spills, fugitive emissions and signs of tampering. {266.102(e)(8)(iii)}	Not applicable
- The automatic hazardous waste feed cut-off system and associated alarms must be tested weekly when hazardous waste is burned unless the applicant demonstrates that weekly inspection is unduly restrictive and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted monthly. {266.102(e)(8)(iv)}	
- Specific operating and monitoring equipment which should be inspected include: [Guidance(7) - page 80] - Boiler and/or industrial furnace	
- Waste/fuel feed systems · Liquid waste feed systems, including flow meters, pumps and mixing devices; · Solid waste feed systems, including conveyor system and waste feed measurement system (scales); · Fuel feed systems, including flow meters, pumps and mixing devices · Raw material feed systems. [Guidance(10) - pages II-23 - II-26]	
- Monitoring equipment · Waste flow monitors and recorders · Temperature monitors · O2, CO and HC monitors · Combustion gas flow monitors · Pressure monitors · Flame sensors · Pressure differential indicators · Ammeters for measuring blower current draw. [Guidance(10) - pages II-57 - II-73]	
- Air Pollution Control Equipment · Wet scrubbers (venturi, packed bed, ionizing) · Dry scrubbers (rotary atomization, and dual-fluid nozzle atomization) · Fabric filters APCE support systems and performance instrumentation should also be included in the inspection.	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
[Guidance(10) - pages II-26 – II-57]	
F-2c(10) Drip Pad Inspections - Drip pad owners or operators of new facilities must provide a description of procedures for: {264.547(a)} · Inspection of liners/covers during installation for uniformity, damage and imperfections. · Inspection immediately after construction to certify that the drip pad was constructed in accordance with 264.573. · Inspection of liners and covers after installation to ensure tight seams and joints and the absence of tears, punctures and blisters.	Not applicable
- Inspections weekly and after storms for: · Deterioration, malfunctions, or improper operation of run-on and run-off control systems; {264.574(b)(1)} · Presence of leakage in or proper functioning of leak detection system; and {264.574(b)(2)} · Deterioration or cracking of the drip pad surface. {264.574(b)(3)}	
F-2c(11) Containment Building Inspections A description of the inspection procedures. Specifically the unit must be inspected at least once every seven days. The inspection must include; {264.1101(c)(4)} - data gathered from the monitoring equipment and leak detection equipment, and - the containment building and surrounding area for signs of release of hazardous waste.	Not applicable
F-2c(12) Subpart AA - Air Emission Standards for Process Vents The inspection requirements for these units will be covered under the Subpart AA checklist (Module AA).	Not applicable
F-2c(13) Subpart BB - Air Emission Standards for Equipment Leaks The inspection requirements for these units will be covered under the Subpart BB checklist (Module BB).	Section BB
F-2c(14) Subpart CC - Air Emission Standards for Tanks, Surface Impoundments, and Containers The inspection requirements for these units will be covered under the Subpart CC checklist (Module CC).	Not applicable
F-2d Remedial Action A description of procedures for taking remedial actions when inspections reveal problems or when problems are imminent. These may alternately be described in the contingency plan (see 264.194(c), 264.227, and 264.171). {264.15(c)}	Section E

Subject Requirement and 40 CFR Reference	Location in Application and Comments
F-2e Inspection Log A copy or description of the inspection log or summary form including the following: {264.73(b)(5) and 264.15(d)} - Dates and times of inspections, - Name(s) of the inspector(s), - Observations made, - Date and nature of repairs or remedial actions taken.	Section F-2e
F-3 Waiver of Preparedness and Prevention Requirements A justification of any request for a waiver of preparedness and prevention requirements of Part 264, Subpart C. {270.14(b)(6)}	Section F-3
F-3a Equipment Requirements Unless it can be demonstrated that none of the hazards posed by waste handled at the facility would require a particular kind of equipment specified below, the facility must have the following equipment: {264.32}	
F-3a(1) Internal Communications An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel. {264.32(a)}	
F-3a(2) External Communications A device such as telephone (immediately available at the scene of operations) or a handheld two-way radio, for summoning emergency assistance from local police departments, or state or local emergency response teams. {264.32(b)}	
F-3a(3) Emergency Equipment - Portable fire extinguishers {264.32(c)}	
- Fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals, and portable fire extinguishers) {264.32(c)}	
- Spill control equipment {264.32(c)}	
- Decontamination equipment. {264.32(c)}	
F-3a(4) Water for Fire Control One of the following: - Water at adequate volume and pressure to supply water hose streams, or {264.32(d)}	
- Foam-producing equipment, or {264.32(d)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Automatic sprinklers or water spray systems. {264.32(d)}	
F-3b Aisle Space Requirements Sufficient aisle space is needed to allow the unobstructed movement of personnel, fire protection equipment, or spill control equipment to any area of facility operation in an emergency. "Sufficient" aisle space is determined by storage area configuration and corresponding emergency response and inspection procedures. A good rule of thumb is three (3) feet, a minimum of two (2) feet, and four (4) feet between rows which are two pallets wide. However, each facility must be evaluated individually to determine the minimum aisle space necessary for that facility's operation. {264.35} Requests for a waiver of this requirement must be accompanied by a demonstration that the aisle space is not needed.	
F-4 Preventive Procedures, Structures, and Equipment A description of procedures, structures, or equipment used at the facility for the following must be included: {270.14(b)(8)}	Section F-4: Not applicable
F-4a Loading and Unloading Operations Prevention of hazards in unloading operations (e.g., use of ramps or special forklifts). {270.14(b)(8)(i)}	
F-4b Run-Off Prevention of runoff from hazardous waste handling areas to other areas of the facility or environment, or prevention of flooding (e.g., berms, dikes, trenches). {270.14(b)(8)(ii)}	
F-4c Water Supplies Prevention of contamination of water supplies. {270.14(b)(8)(iii)}	
F-4d Equipment and Power Failure Mitigation of effects of equipment failure and power outages. {270.14(b)(8)(iv)}	
F-4e Personal Protection Equipment Prevention of undue exposure of personnel to hazardous waste (e.g., protective clothing). {270.14(b)(8)(v)}	
F-4f Ventilation Equipment Prevention of release to atmosphere. {270.14(b)(8)(vi)}	
F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Wastes	Section F-5

Subject Requirement and 40 CFR Reference	Location in Application and Comments
A description of the precautions taken by a facility that handles ignitable, reactive, or incompatible waste to demonstrate compliance with 264.17 including documentation demonstrating compliance with 264.17(c). Precautions to prevent actual ignition, including separation from sources of ignition such as: {270.14(b)(9) and 264.17(a) and (c)} - Open flames - Smoking - Cutting and welding - Hot surfaces - Frictional heat - Sparks (static, electrical, or mechanical) - Spontaneous ignition (heat producing chemical reactions) - Radiant heat. {264.17(a)}	
Demonstrations that when ignitable or reactive waste is being handled, the owner or operator confines smoking and open flames to specially designated locations. "No Smoking" signs must be conspicuously placed wherever a hazard exists for ignitable or reactive waste. {264.17(a)}	
F-5b <u>General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste</u> A description of the precautions taken by a facility that treats, stores, or disposes of ignitable or reactive waste, or accidentally mixes incompatible waste or incompatible wastes or other materials, to prevent reactions which: {270.14(b)(9) and 264.17(b) and (c)} - generate extreme heat or pressure, fire or explosions, or violent reactions; {264.17(b)(1)}	
- produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; {264.17(b)(2)}	
- produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; {264.17(b)(3)}	
- damage the structural integrity of the device or facility; {264.17(b)(4)}	
- by similar means threaten human health or the environment. {264.17(b)(5)}	
Documentation to meet requirements of 264.17(a) or (b) may be based on references to published scientific or engineering literature, data from trial tests, waste analyses, or results of treatment of similar wastes by similar treatment processes and under similar operating conditions. {264.17(c)}	
F-5c Management of Ignitable or Reactive Wastes in Containers Sketches, drawings, or data demonstrating that containers of	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
ignitable or reactive waste are located at least 15 meters (50 feet) from the facility's property line or at least 60 meters (200 feet) from the property line if the area adjacent to the facility is not zoned for industrial use. {270.15(c), 264.176, and 15A NCAC 13A .0009(r)(2)(B)}	
F-5d Management of Incompatible Wastes in Containers A description of procedures to demonstrate compliance with 264.177(a) and (b) and 264.17(b) and (c): {270.15(d) and 264.177} - The procedures used to ensure that incompatible wastes and materials are not placed in the same container (unless 264.17(b) is complied with) or in an unwashed container that previously held an incompatible waste {264.177(a) and 264.177(b)}	
- Dikes, berms, walls, or other devices used to separate containers, holding wastes which are incompatible with wastes or materials stored nearby. {264.177(c)}	
F-5e Management of Ignitable or Reactive Wastes in Tanks A description of the procedures for handling incompatible, ignitable, or reactive wastes, including the use of buffer zones. {270.16(j)} - Waste must be treated, rendered, or mixed before or immediately after placement in the tank so that ▪ it is no longer considered ignitable and complies with 264.17(b); {264.198(a)(1)} ▪ or the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to react or ignite; {264.198(a)(2)} ▪ or the tank is used solely for emergencies. {264.198(a)(3)}	
- Facilities that treat or store ignitable or reactive waste in covered tanks must comply with the National Fire Protection Association's buffer zone requirements for tanks. {264.198(b)}	
F-5f Incompatible Wastes in Tanks A statement that incompatible wastes and materials are not stored in the same tank or in an unwashed tank that previously held an incompatible waste or material (unless 264.17(b) is complied with). {270.16(j) and 264.199}	
F-5g Ignitable or Reactive Wastes in Waste Piles The application must include a description of the procedures for handling ignitable or reactive wastes, including the use of buffer zones. {270.18(f)}	
- Waste must be treated, rendered, or mixed before or immediately after placement in the waste pile so that it is no longer considered ignitable or reactive and complies with	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
264.17(b); or {264.256(a)}	
- The waste is managed in such a way that it is protected from any material or conditions that may cause the waste to react or ignite. {264.256(b)}	
F-5h Incompatible Wastes in Waste Piles The applicant must include: {270.18(g)} - A statement that incompatible wastes or incompatible materials are not stored in the same waste pile unless 264.17(b) is complied with. {264.257(a)}	
- A description of the procedures (dikes, beams, walls, distances) utilized to separate a waste pile of hazardous waste that is incompatible with any waste or other material stored nearby. {264.257(b)}	
- A statement that hazardous wastes are not placed on the same base that previously held an incompatible waste or material unless 264.17(b) is complied with. {264.257(c)}	
F-5i Ignitable or Reactive Wastes in Surface Impoundments The application must include a description of the procedures for handling ignitable or reactive wastes, including the use of buffer zones. {270.17(g)}	
- Waste must be treated, rendered, or mixed before or immediately after placement in the surface impoundment so that it is no longer considered ignitable or reactive and complies with 264.17(b); or {264.229(a)}	
- The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to react or ignite; or {264.229(b)}	
- The impoundment is used only for emergencies. {264.229(c)}	
F-5j Incompatible Wastes in Surface Impoundments The application must include: - A statement that incompatible wastes and materials are not placed in the same surface impoundments or in the impoundments that previously held an incompatible waste or material unless 264.17(b) is complied with. {270.17(h) and 264.230}	
F-5k Ignitable or Reactive Wastes in Landfills The application must include a description of the procedures for handling ignitable or reactive wastes, including the use of buffer zones. {270.21(f)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Waste must not be placed in a landfill cell unless the resulting waste, mixture, or dissolution of material is no longer considered ignitable or reactive and complies with 264.17(b); or {264.312(a)}	
- A description of how ignitable and/or reactive waste will be landfilled in such a way that they are protected from any material which may cause them to ignite. As a minimum this should include placement in non-leaking containers, careful handling and placement to avoid any condition which might cause ignition, daily covering of containers with soil, and disposal in cells which do not contain other wastes which generate sufficient heat to cause ignition. {264.312(b)}	
F-5l Incompatible Wastes in Landfills Applicant must provide procedures for insuring that incompatible wastes will not be disposed of in the same landfill cell, unless 264.17(b) is complied with. {270.21(g) and 264.313}	
F-5m <u>Ignitable or Reactive Wastes in Land Treatment</u> A description of the management of ignitable or reactive wastes which will be placed in or on the treatment zone, if applicable, and an explanation of how the following requirements will be complied with: {270.20(g)} - The waste is immediately incorporated into the soil so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste and the requirements of 264.17(b) are complied with, or {264.281(a)}	
- The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react. {264.281(b)}	
F-5n <u>Incompatible Wastes in Land Treatment</u> A description of the management of incompatible wastes must be submitted if incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, including an explanation of how the requirements of 264.17(b) are complied with. {270.20(h) and 264.282}	

h:\chklists\tsd-word\part-f.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team: _____
_____
_____
Date Review Completed: _____

Guidance Document for Part G

(2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART G - CONTINGENCY PLAN A copy of the contingency plan required in Part 264, Subpart D. Include, where applicable, specific requirements in 246.196, 264.227, 264.253, and 264.304. {270.14(b)(7) and 264.50 through 264.56} Note that an existing spill prevention control plan can be amended to incorporate hazardous waste management provisions sufficient to comply with 264, Subpart D requirements. {264.52(b)}	Section G and Appendix M
G-1 General Information The contingency plan must be a stand alone document as it must be submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon in the event of an emergency. Therefore the following information must be included in the contingency plan: {264.53(b)} - Facility name and location and owner or operator name, - Site plan, and - Description of facility operations.	Section G-1
G-2 Emergency Coordinators - An up-to-date list of emergency coordinators which should also be posted on site in various locations. This list must include names, addresses, office and home phone numbers, and duties of primary and alternate coordinators. The names on this list must be in the order in which they will assume responsibility. {264.52(d)} [Guidance(2) - page 5-116]	Section G-2
- A statement authorizing designated coordinators to commit the necessary resources to implement the contingency plan. {264.55}	
- A statement indicating that the emergency coordinators can reach the facility in a short period of time. {264.55}	
G-3 Implementation Criteria for implementation of contingency plan for any potential	Section G-3

Subject Requirement and 40 CFR Reference	Location in Application and Comments
emergency: - Fires, - Explosions, - Unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. {264.52(a)}	
G-4 Emergency Response Procedures G-4a Notification Procedures for immediate notification of facility personnel and necessary state or local agencies in the event of an imminent or actual emergency. {264.56(a)}	Section G-4 and Appendix M
G-4b Identification of Hazardous Materials - Available data and/or procedures for identification of hazardous materials involved in the emergency and quantity and areal extent of release. Include information on: · Characteristics of waste, · Exact source, · Amount, and · Areal extent of release. {264.56(b)}	
- This information may be obtained by: · observation, · review of facility records or manifests, and · if necessary, by chemical analysis. {264.56(b)}	
G-4c Hazard Assessment - Procedure for assessment of possible hazards to the environment and human health. This assessment must consider both direct and indirect effects of the release, fire or explosion. {264.56(c)}	Section G-4 and Appendix M
- Procedures for determining the need for evacuation and notification of appropriate local authorities. {264.56(d)(1)}	
- The authorities to be notified must include the On-Scene-Coordinator for that area or the National Response Center. A report to these authorities must include: · Name and telephone number of the reporter; · Name and address of the facility; · Time and type of incident; · Name and quantity of material(s) involved, to the extent known; · The extent of injuries, if any; and · The possible hazards to human health, or the environment, outside the facility. {264.56(d)(2)}	
G-4d Control Procedures - Specific responses and control procedures to be taken in the	Section G-4 and Appendix M

Subject Requirement and 40 CFR Reference	Location in Application and Comments
event of a fire, explosion, or release of hazardous waste or hazardous waste constituents to air, land, or water. {264.52(a)}	
- Procedures for deployment of these resources. {264.52(a)}	
- Methods to contain, treat, and clean up a hazardous release and decontaminate the affected area. {264.52(a) and 264.56(g)}	
G-4d(1) Prevention of Recurrence or Spread of Fires, Explosions, or Releases During an emergency situation, a description of the necessary steps to be taken to ensure that fires, explosions, or releases do not occur, recur, or spread to other hazardous waste at the facility. Steps must include, where applicable: - Shut-down of processes and continued monitoring of them; {264.56(e)}	Section G-4 and Appendix M
- Collecting, containing, and treating released wastes; {264.56(e)}	
- Removing and isolating containers; and {264.56(e)}	
- Proper use of fire control structures (e.g., fire doors), systems (e.g., sprinkler systems), and equipment (e.g., extinguishers). [Guidance(2) - page 5-123]	
- Provisions to monitor for leaks, pressure buildup, gas generation, or ruptures as appropriate if operations at the facility are stopped in response to a release, fire, or explosion. {264.56(f)}	
G-4d(2) Container Spills and Leakage Procedures for responding to container spills or leakage including removal of spilled waste and repair or replacement of containers. {264.171}	Section G-4 and Appendix M
G-4d(3) Tank Spills and Leakage - Procedures for responding to tank spills or leakage including: · Cessation of use of tanks, {264.196(a)} · Removal of waste from the tank system within 24 hours of leak or spill detection (if possible), {264.196(b)(1)} · Removal of waste from secondary containment within 24 hours of leak or spill detection (if possible), {264.196(b)(2)} · Prevention of further migration of leak or spill to soils or surface water, {264.196(c)(1)} · Removal and disposal of visibly contaminated soil or surface water. {264.196(c)(2)}	Not applicable
- Any release must be reported to the Department within 24 hours of its detection except for leaks or spills which are: · Less than or equal to a quantity of one (1) pound, and · Immediately contained and cleaned up.	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.196(d)(1) and (2)}	
- Within 30 days of detection of a release to the environment, a report must be submitted to the Department. This report must contain the following information: · Likely route of migration of the release; · Characteristics of the surrounding soil; · Results of any sampling or monitoring conducted in connection with the release (submit as soon as available); · Proximity to downgradient drinking water, surface water, and populated areas; and · Description of the response actions taken or planned. {264.196(d)(3)}	
- Indicate that damaged tanks will be repaired or closed per the requirements of 40 CFR 264.196(e). {264.196(e)}	
- Indicate that a certification of major repairs by an independent, qualified, registered, professional engineer will be provided to the Department within 7 days after returning the tank system to use. {264.196(f)}	
G-4d(4) Waste Piles The owner/operator of waste piles must have an approved response action plan. The action plan must set forth the actions to be taken if the action leakage rate has been exceeded. {264.253}	Not applicable
G-4d(5) Surface Impoundments Spills, Leakage, and Sudden Drops A surface impoundment must be removed from service when the liquid level suddenly drops or the dike leaks. The following must be provided in the contingency plan: {264.227} - Procedures for stopping waste additions, {264.227(b)(1)}	Section G-4 and Appendix M
- Procedures for containing any leakage, {264.227(b)(2)}	
- Procedures for stopping leaks and preventing sudden drops and preventing catastrophic failure, {264.227(b)(3) and 264.227(b)(4)}	
- Procedures and criteria for emptying impoundment, {264.227(b)(5)}	
- Notification of the Department in writing within 7 days after detecting the problem, {264.227(b)(6)}	
- If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity must be recertified in accordance with 264.266(c), {264.227(d)(1)}	
- Procedures for installing a liner in existing portions of the impoundment or procedures for certification of the liner in other than existing portions when the impoundment is removed form service as the result of a sudden drop in liquid	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
level, {264.227(d)(2)}	
- Obtain independent, qualified, NC registered, professional engineer's certification of repairs and probability of leakage or failure. {264.227(d)(2)(ii)}	
G-4d(6) Landfills The owner/operator of landfills must have an approved response action plan. The action plan must set forth the actions to be taken if the action leakage rate has been exceeded. {264.304}	Not applicable
G-4e Incompatible Waste Provisions for preventing waste which is incompatible with the released material from being treated, stored, or located in the affected areas until cleanup procedures are completed. {264.56(h)(1)}	Not applicable
G-4f Storage and Treatment of Released Material Provisions for treatment, storage, or disposal of any hazardous waste, contaminated soil, contaminated surface water or any other material resulting from a release, fire, or explosion at the facility. {264.56(g)}	Not applicable
G-4g Post-Emergency Equipment Maintenance Procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed. Appropriate State and local authorities must be notified before operations are resumed in the affected areas of the facility. {264.56(h)(2) and 264.56(i)}	Not applicable
G-5 Emergency Equipment An up-to-date list of emergency equipment available at the facility. This list must be kept on site and contain the following information for each piece of emergency equipment: - Location, - Physical description, and - A description of the capabilities. {264.52(e)}	Section G-5 and Appendix M
The list should include the following equipment: {264.52(e)} [Guidance(2) - page 5-116] - Spill control equipment,	
- Fire control equipment,	
- Personal protective items such as respirators and protective clothing,	
- First aid and medical supplies,	
- Emergency decontamination equipment,	
- Emergency communication and alarm systems.	
G-6 Coordination Agreements - A description of coordination agreement with local police	Section G-6 and Appendix M

Subject Requirement and 40 CFR Reference	Location in Application and Comments
and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency. {264.37, 264.52(c) and 264.53}	
- A statement indicating that a copy of the contingency plan has been submitted to these organizations. {264.53(b)}	
- If applicable, document of refusal to enter into a coordination agreement. {264.37(b)}	
G-7 Evacuation Plan The plan must include: {264.52(f)} - Criteria for evacuation,	Not applicable
- A description of signal(s) to be used to begin evacuation,	
- Primary and alternate evacuation routes.	
G-8 Required Reports - Provisions for submission of reports of emergency incidents within 15 days of occurrence. {264.56(j)}	Section G-8 and Appendix M
- The report must include: · Name, address, and telephone number of the owner or operator;	
· Name, address, and telephone number of the facility;	
· Date, time, and type of incident;	
· Name and quantity of material(s) involved;	
· The extent of injuries, if any;	
· An assessment of actual or potential hazards to human health or the environment, where this is applicable, and	
· Estimated quantity and disposition of recovered material that resulted from the incident. {264.56(j)}	
- Notation of such incidents in the operating record identifying the time, date, and details of these emergency incidents. {264.56(j)}	
G-9 Amendment to Contingency Plan Indicate that the contingency plan will be reviewed and amended whenever: - The facility permit is revised; - The plan fails in an emergency; - The facility changes in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency; - The list of emergency coordinators changes; or - The list of emergency equipment changes. {264.54}	Section G-9 and Appendix M

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team: _____
_____
_____
Date Review Completed: _____

Guidance Document for Part H

(2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART H - PERSONNEL TRAINING H-1 Training Program Describe the training programs provided by owners or operators to prepare the personnel to operate and maintain the facility in a safe manner as required to demonstrate compliance with 264.16. This description should include the following topics. {264.16 and 270.14(b)(12)} [Guidance(2) - Section 5.12.2]	Section H-1
H-2 Job Titles and Duties For each employee whose position at the facility is related to hazardous waste management, provide the following information: {264.16(d) and comment following 264.16(a)(1)} [Guidance(2) - Sections 5.12.2.2 and 5.12.2.7] - Job title {264.16(d)(1))}	Section H-2 and Appendix L
- Written job description to include requisite skill, education or other qualifications, and job duties of employees assigned to each position. {264.16(d)(2)}	
H-3 Training Content - Provide an outline of both the introductory and continuing training programs (including annual review of the initial training) and/or a table of contents of the training manual (if applicable). {270.14(b)(12), 264.16(c), 264.16(d)(3) and comment following 264.16(a)(1)}	Section H-3
- Provide a brief description of how training of facility personnel in hazardous waste management procedures (including contingency plan implementation) is relevant to each employee's position. {264.16(a)(2) and comment following 264.16(a)(1)}	
- Documentation that the training program trains facility personnel to respond effectively to emergencies and trains them to be familiar with emergency procedures, emergency equipment, and emergency systems, include where applicable: {264.16(a)(3)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
· Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment; {264.16(a)(3)(i)} · Key parameters for automatic waste feed cut-off systems; {264.16(a)(3)(ii)} · Communications or alarm systems; {264.16(a)(3)(iii)} · Response to fires or explosions; {264.16(a)(3)(iv)} · Response to groundwater contamination incidents; and {264.16(a)(3)(v)} · Shutdown of operations. {264.16(a)(3)(vi)}	
H-4 Training Frequency - Provide the frequency at which training will be provided. Indicate that facility personnel will take part in an annual review of the initial training including a review of emergency procedures, the contingency plan, and any facility procedural revisions. {264.16(c)}	Section H-4
- Indicate the amount of training that each employee will receive. {264.16(d)(3)}	
- Indication that training has been and will be successfully completed by facility personnel within 6 months of their employment or assignment to a facility, or transfer to a new position at a facility, whichever is later. {264.16(b)}	
H-5 Training Techniques Describe the various techniques used to provide both the introductory and continuing training. This may include, but is not limited to: - In-house class room training, - On-the-job training, and - Formal training courses. {264.16(d)(3)}	Section H-5
H-6 Training Director Demonstration that the program is directed by a person trained in hazardous waste management procedures. Formal training programs should be instructed by hazardous waste management experts. On-the-job (performance) training should be provided by supervisors skilled in the actual operations of the facility. {264.16(a)(2)} [Guidance(2) - Section 5.12.2.1]	Section H-6
H-7 Recordkeeping - For each employee whose position is related to hazardous waste management, indicate that the following documentation will be maintained at the facility: · Job title, {264.16(d)(1)}	Section H-7

Subject Requirement and 40 CFR Reference	Location in Application and Comments
· Name of employee, {264.16(d)(1)} · Job description and duties, and {264.16(d)(2)} · Documentation that the required training has been given to and completed by facility personnel. {264.16(d)(4)}	
- Indicate that personnel records will be kept for current employees until facility closure or, for former employees, for three (3) years from the last date of employment at the facility. Personnel training records may accompany personnel transferred within the same company. {264.16(e)}	

h:\chklists\tsd\part-h.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team:

Date Review Completed:

The regulatory checklists are currently undergoing revision. While this checklist has been reformatted, it has not been reviewed for technical content.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART I - CLOSURE PLANS, POSTCLOSURE PLANS, AND FINANCIAL REQUIREMENTS {270.14(b)(13), 270.14(b)(15), 270.14(b)(16), 270.14(b)(17), 270.14(b)(18), 264.110-264.151, 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351} I-1 Closure Plans A copy of the written closure plan required by 264.112 and consistent with Items I-1a through I-1e. {270.14(b)(13) and 264.112}	Section I-1 and Appendix E
I-1a Closure Performance Standard A description of how closure: {264.111 (264.112 requires consistency with 264.111)} - Minimizes the need for further maintenance	Section I-1a
- Controls, minimizes, or eliminates post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere.	
- Complies with the closure requirements of Subpart G and unit-specific closure requirements.	
- Estimated expected year of closure for facilities that use trust funds to establish financial assurance and that are expected to close prior to the expiration of the permit.	
I-1b Partial Closure and Final Closure Activities Fully describe time and all activities required for: {264.112(b) (264.112(b)(1) through 264.112(b)(7) outline minimum acceptable plan elements)} - Partial closure, if applicable	Section I-1b
- Final closure	
- Maximum extent of operation which will be active during life of facility	
Description must identify how requirements of 264.111, 264.113, 264.114, 264.115 and applicable requirements of 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351 will	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
be met.	
I-1c Maximum Waste Inventory A description of the maximum inventory of wastes that could be in storage, treatment, and disposal at any time during the life of the facility. {264.112(b)(3)} Methods for removing, transporting, treating, storing, or disposing of all hazardous wastes. Identification of the type(s) of off-site hazardous waste management units to be used.	Section I-1c
I-1d Schedule for Closure A schedule for final closure including: {264.112(b)(6)} - Each HWMU and final closure of the facility	Section I-1d
- Closure schedule with total time to close, time for intervening closure activities, and inspection schedule during closure.	
- Estimated expected year of closure for facilities that use trust funds to establish financial assurance and that are expected to close prior to the expiration of the permit.	
I-d1(1) Time Allowed for Closure The schedule for closure must show: {264.112(b)(2), 264.113(a) and (b)} - All hazardous wastes will be treated, removed off-site, or disposed of on-site within 90 days from receipt of final volume of waste at the unit or facility	
- All closure activities will be completed within 180 days from receipt of final volume of waste at the unit or facility.	
I-1d(1)(a) Extensions for Closure Time A petition made to the Regional Administrator for a schedule for closure which exceeds the 90 days for treatment, removal, or disposal of wastes and/or the 180 days for completion of closure activities made to the Regional Administrator. One of the following must be demonstrated. {264.113(a) and 264.113(b)} - Closure activities require longer than 90 or 180 days,	
- Unit or facility has capacity to receive additional wastes,	
- There is a reasonable likelihood that another person other than owner or operator will recommence operation of the site within one year, and	
- Closure would be incompatible with continued operation. Demonstrate that all steps have and will be taken to prevent threats to human health and environment from unclosed but inactive facility.	
I-1e Closure Procedures I-1e(1) Inventory Removal, Disposal, or Decontamination of Equipment	Section I-1e and Appendix E

Subject Requirement and 40 CFR Reference	Location in Application and Comments
A description of how all facility equipment and structures will be decontaminated or disposed of when closure is completed. The following should be included: {264.112, 264.112(b)(4) and 264.114}	
- Decontamination procedures	
- Criteria for determining decontamination	
- List of equipment, structures, and soils	
- Disposal of contaminated soil and residues	
- Decontamination of clean-up materials and equipment	
- Demonstrate decontamination has been effective.	
A demonstration that any hazardous constituents left will not impact environmental media in excess of agency established exposure levels, and direct contact will not pose a threat to human health and the environment. {264.111(b)} [Guidance (Preamble 51 FR 16444, May 2, 1986)]	
I-1e(2) Closure of Disposal Units Closure plans for all piles, landfills, surface impoundments, and miscellaneous disposal units in which wastes or contaminated materials are to remain at closure must describe how the unit will be closed, including a description of the final cover to be established and its expected performance. Contingent closure plans for tanks, surface impoundments, and waste piles also must provide these descriptions. {270.14(b)(13), 270.17(f), 270.18(h), 270.21(e), 264.228(a)(2), 264.228(c)(1)(i), 264.258(c), 264.310(a), and 264.601}	Not applicable
I-1e(3) Closure of Containers A description of how at closure, all hazardous waste residues will be removed from the containment system, and how remaining containers, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed. {264.178} The description should address the following: - Hazardous waste removal and disposal [Guidance]	Not applicable
- Container decontamination and disposal [Guidance]	
- Site decontamination and disposal including linings, soil, and washes [Guidance]	
- Verification of decontamination [Guidance]	
- Maximum inventory {264.112(b)(3)}	
I-1e(4) Closure of Tanks A description of how at closure, all hazardous waste residues will be removed from tanks, discharge control equipment, and secondary containment structures, and the facility will be decontaminated. The description should address the following: {264.197(a)}	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Waste removal from tanks and equipment [Guidance]	
- Decontamination of all components [Guidance]	
- Verification of decontamination [Guidance]	
- Disposal of wastes and residues [Guidance]	
- Maximum inventory {264.112(b)(3)}	
If not all contaminated soils can be removed or decontaminated at closure, a closure and post-closure plan for a landfill must be included. If the tank systems do not have secondary containment or are not exempt, then a contingent closure and post-closure plan for a landfill must be provided. {264.197(b) and 264.197(c)}	
I-1e(5) Closure of Waste Piles The application must describe how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. {270.18(h), 264.258 and 264.112(b)(4)}	Not applicable
If any wastes, waste residues, or contaminated materials or soils will remain after closure, provide plans for closing the pile as a landfill [I-1f(6)] and provide postclosure plan [I-2]. Piles without liners or with liners that do not meet the requirement of D-3e must also provide contingent plans for closing the facility as a landfill {I-1d(6)] and a contingent post-closure {I-2], except for dry, enclosed piles meeting the requirements of D-3b or piles for which a liner exemption is sought in accordance with D-3c. The description should address the following: - Procedure and criteria for determining whether or not decontamination has been successful	
- Sampling and analytical techniques	
I-1e(6) Closure of Surface Impoundments A description of how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. {270.17(f), 264.228(a)(1) and (2), and 264.228(b)} The description should address the following: - Procedure and criteria for determining whether or not decontamination has been successful [Guidance]	Not applicable
- Sampling and analytical techniques [Guidance]	
- Continuance of treatment during closure (if appropriate). [Guidance]	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
If any wastes, waste residues or contaminated materials or soils will remain after closure, provide plans for closing the surface impoundment in place and provide post-closure plans [I-2]. Plans for closing a surface impoundment in place must address the following: - Elimination of liquids by removal or solidification	
- Stabilization of wastes to sufficient bearing capacity	
- Final cover designed and constructed to provide long-term minimization of migration of liquids through the closed impoundment, function with minimal maintenance, promote drainage, and minimize erosion of final cover, accommodate settling and subsidence, and have a permeability less than or equal to that of the bottom liner system or natural subsoils present.	
Surface impoundments without liners or with liners that do not meet requirements of D-4c must also provide contingent plans for closure in place and a contingent post-closure plan [I-2], except for impoundments requesting a liner exemption in accordance with D-4b.	
I-1e(7) Closure of Incinerators Description of how at closure all hazardous waste and hazardous waste residues including ash, scrubber waters, and scrubber sludges will be removed from the incinerator, associated duct work, piping, air pollution control equipment, sumps, and any other structures or operating equipment such as pumps, valves, etc., that have come into contact with the hazardous waste. Alternatively, a description of how the incinerator and associated units and equipment will be dismantled and disposed of as a hazardous waste will suffice. {264.351}	Not applicable
I-1e(8) Closure for Landfills Provide detailed plans and an engineering report which describes the final cover components in detail. Cover installation and construction quality assurance procedures should be thoroughly described. These detailed plans and engineering reports must describe how the final cover will: {270.21(e), 264.310(a) and 264.280(b)} - Provide long-term minimization of migration of liquids through closed landfill	Not applicable
- Function with minimum maintenance	
- Promote drainage and minimize erosion/abrasion	
- Settle/subside without losing integrity	
- Be less permeable than bottom liners or subsoils	
- Withstand freeze/thaw cycles.	
I-1e(9) Closure of Land Treatment During closure of land treatment facilities, the owner or operator must comply with the following: {270.20(f) and 264.280(a)} - Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
hazardous constituents within the treatment zone as required, except to the extent such measures are inconsistent with 264.280(a)(8)	
- Continue all operations in the treatment zone to minimize run-off of hazardous constituents	
- Maintain the run-on control system	
- Maintain the run-off management system	
- Control wind dispersal of hazardous waste if required	
- Continue to comply with any prohibitions or conditions concerning growth of food-chain crops	
- Continue unsaturated zone monitoring except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone	
- Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.	
When closure is complete the owner-operator may submit to the Regional Administrator certification by an independent qualified soil scientist, in lieu of na independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.	
I-1e(10) Closure of Miscellaneous Units Show that at closure, all hazardous waste and hazardous waste residues will be removed from the treatment process or equipment, discharge control equipment, and discharge confinement structures, and that the facility will be decontaminated. Description of the sampling/test procedures or other means used to ensure that no contamination remains on, in, or around the units and associated equipment and structures. If any wastes, waste residues, or contaminated materials or soils will remain after closure, provide plans for closing the miscellaneous unit as a disposal unit [I-1e(2)] and provide post-closure plans [I-2]. {264.601 and 270.23(a)(2)}	Not applicable
I-2 Post-Closure Plan An owner/operator of a disposal facility must have a written post-closure plan, or, if applicable, a contingent post-closure plan. A copy of the approved plan and all revisions to the plan must be kept at the facility until the post-closure care begins. Landfill, surface impoundment, waste pile, and tank post-closure plans should address items I-2a, b, c, f, g, h; land treatment unit post-closure plan, items I-2d f, g, and h; miscellaneous units should address items I-2a, b, c, e, f, g, and h. {270.14(b)(13), 270.17(f), 270.18(h), 270.20(f), 270.21(e), 270.23(a)(3), 264.118, 264.197(b), 264.197(c)(2), 264.228(b), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), 264.280(c), 264.310(b), and 264.603}	Section I-2 and Appendix E and Appendix F
I-2a Inspection Plan A description of the inspections to be conducted during the post-closure care period, their frequency, the inspection procedure,	Section I-2a and Appendix L

Subject Requirement and 40 CFR Reference	Location in Application and Comments
and the logs to be kept. The following items, as applicable, should be included in the inspection plan: {264.118(a), 264.197(b), 264.197(c)(2), 264.228(b), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), and 264.310(b)} - Security control devices	
- Erosion damage	
- Cover settlement, subsidence, and displacement	
- Vegetative cover condition	
- Integrity of run-on and run-off control measures	
- Cover drainage system function	
- Leachate collection/detection and removal system maintenance	
- Gas venting system	
- Well condition	
- Benchmark integrity	
The rationale to be used to determine the need for corrective maintenance activities.	
I-2b <u>Monitoring Plan</u> A description of the monitoring to be conducted during the post-closure care period, including, as applicable, the procedures for conducting the following operations and evaluating the data gathered should include: {264.118(b)(1), 264.228(b), 264.197(b), 264.197(c)(2), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), and 264.310(b)} - Groundwater monitoring	Section I-2b and Section E-5
- Leachate collection/detection and removal.	
I-2c <u>Maintenance Plan</u> A description of preventative and corrective maintenance procedures, equipment procedures, equipment requirements, and material needs. Include the following items in the maintenance plan, as applicable: {264.118(b)(2), 264.197(b), 264.197(c)(2), 264.228(b), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), and 264.310(b)} - Repair of security control devices	Section I-2c
- Erosion damage repair	
- Correction of settlement, subsidence, and displacement	
- Mowing, fertilization, and other vegetative cover maintenance	
- Repair of run-on and run-off control structures	
- Leachate collection/detection system maintenance	
- Well replacement	
- The rationale to be used to determine the need for corrective maintenance activities.	
I-2d <u>Land Treatment</u> A description of the operation, inspection, and maintenance programs to be used at the closed facility. Include descriptions of the procedures for conducting the following activities and identify frequencies at which they are to be conducted: {264.280(c)}	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Continuance of land treatment	
- Vegetative cover maintenance	
- Maintenance of run-on control systems and run-off management systems	
- Wind dispersal control	
- Control of food chain crops	
- Unsaturated zone monitoring	
I-2e Post-Closure Care for Miscellaneous Units A detailed description of the plans to ensure protection of human health and the environment. Include the prevention of any releases to groundwater or subsurface environment; surface water or wetlands or on the soil surface; or to air. This will include providing related information form [D-8]. {270.23(a)(3) and 264.603}	Not applicable
I-2f Post-Closure Security Indicate which security provisions will continue during closure when hazardous waste will remain exposed after completion of partial or final closure or access by the public or domestic livestock may pose a hazard to human health. {264.117(b)}	Section I-2f and Section F
I-2g Post-Closure Contact Provide the name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period. {264.118(b)(3)}	Section I-2g
I-3 Notices Required for Disposal Facilities I-3a Certification of Closure A statement by the applicant which indicates that within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of the completion of final closure, closure certification will be submitted to the Regional administrator. The certification must certify that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications of the approved closure plan. The certification must be signed by the owner/operator and by an independent registered professional engineer (or by an independent qualified soil scientist in the case of a land treatment closure). {264.115 and 264.280(b)}	Section I-3 and Appendix N
I-3b Survey Plat A statement by the applicant which indicates that no later than the submission of certification of closure of each hazardous waste disposal unit, a survey plat indicating the location and dimensions of landfill cells or other disposal units with respect to permanently surveyed benchmarks, will be submitted to the local zoning authority (or authority with jurisdiction over local land use) and to the Regional Administrator. The plat must be prepared and certified by a professional land surveyor and must contain a note, prominently displayed, which states the owner-operator's obligation to restrict disturbance of the disposal unit in	Appendix D

Subject Requirement and 40 CFR Reference	Location in Application and Comments
accordance with applicable 40 CFR 264 Subpart G regulations. {264.116}	
I-3c Notice to Local and Authority Documentation by applicant that within 60 days after closure, a record of the type, location, and quantity of hazardous waste within each cell or disposal area will be submitted to the appropriate local land use authority and to the Regional Administrator. {264.119}	Section I-3 and Appendix N
I-3d Post-Closure Certification Provide a statement which indicates that within 60 days of completion of the post-closure care period for each hazardous waste disposal unit, certification will be submitted to the Regional Administrator. The certification must certify that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications of the approved post-closure plan. The certification must be signed by the owner/ operator and by an independent registered professional engineer. {264.120}	Appendix N
I-3e Notice in Deed to Property Documentation by applicant that s/he has or will record a notation on the facility deed, or other instrument examined during a title search, that notifies any potential purchase of the property that: {270.14(b)(14) and 264.119} - The property has been used to manage hazardous wastes	Appendix N
- Use of the land is restricted to activities that will not disturb integrity of final cover system, or monitoring system during post-closure care period	
- Requirements stated under I-3a above have been complied with.	
I-4 Closure Cost Estimate A copy of the most recent closure or contingent closure cost estimate, prepared in accordance with 264.142. {270.14(b)(15)} - Cost estimate based on third party costs {264.142(a)(2)}	Not applicable
- Fully loaded (most costly) [Guidance]	
- No salvage credits {264.142(a)(3) and (4)}	
- Current year costs {264.142(a)}	
- Cost adjusted annually from anniversary date of first cost estimate {264.142(b)}	
- Based on point in operating life when extent and manner of operation would make closure most expensive. {264.142(a)}	
I-5 Financial Assurance Mechanism for Closure	Not applicable

Subject Requirement and 40 CFR Reference	Location in Application and Comments
A copy of the established financial assurance mechanism for facility closure adopted in compliance with 264.143. The mechanism must be one of the following [I-5(a) through I[5(f)] and include due dates and use standard wording. {270.14(b)(15), 264.143 and 264.151}	
I-5a Closure Trust Fund A copy of the closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgement. {264.143(a) and 264.151(a)(1)} - Bank or approval institution	Not applicable
- Mechanics: ▪ pay-in period; life of permit or remaining life of facility, whichever is shorter, ▪ annual payment; unfunded liability divided by years left in pay-in period.	
I-5b Surety Bond A surety bond from a federally acceptable surety company meeting one of the following requirements: {264.143(b) and(c), 264.151(b) and (c)} - Surety bond guaranteeing payment into a closure trust fund. A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund agreement {264.143(b) and 264.151(b)}	Not applicable
- Surety bond guaranteeing performance of closure. A copy of the surety bond with the wording required in Part 264.151(c), Guaranteeing that the owner/operator will perform closure according to the closure plan and the requirements of Subpart G. {264.143(c) and 264.151(c)}	
I-5c Closure Letter of Credit A copy of a closure letter of credit with the wording required in 264.151(d): {264.143(d) and 264.151(d)} - Irrevocable letter of credit	Not applicable
- At least one year period, automatic renewal	
- Standby trust fund	
- Amount reflects current cost estimate.	
I-5d Closure Insurance To demonstrate that the owner/operator has closure insurance, s/he must submit to the Regional Administrator 60 days before hazardous waste is received a certificate of insurance worded as specified in 264.151(e). {264.143(e) and 264.151(e)} - Non-cancelable policy, automatic renewal	Not applicable
- Insurer licensed or eligible surplus lines carrier	
- Certificate of insurance	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Funds available whenever final closure occurs.	
I-5e Financial Test and Corporate Guarantee for Closure To demonstrate that this test is met, an owner/operator must submit a letter signed by the company's chief financial officer that is worded as specified in 264.151(f) and meets the following criteria: {264.143(f), 264.151(f), and 264.151(h)} - Tangible net worth $10 million	Not applicable
- Tangible net worth 6 x all closure and post-closure costs	
- U.S. assets at least 90% of total assets or at least six times all closure and post-closure costs	
- Bond rating requirement or alternative financial ratio tests	
- Application must include: ▪ copy of a report from the owner's/ operator's independent CPA to the owner/operator stating that s/he has examined the data in the letter from the chief financial officer and that it is consistent with the amounts in the independently-audited year-end financial statements for the latest fiscal year and that no matters came to attention to cause her/him to believe that the data should be adjusted.	
In lieu of the above items, the owner/ operator may submit a corporate guarantee worded as required by 264.151(h). This guarantee provides that the guarantor must be the parent company of the owner/ operator. A copy of these items should be submitted with the Part B for review by the permit writer. {264.143(f)(10)}	
I-5f Combinations I-5f(1) Use of Multiple Financial Mechanisms A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a closure trust fund, letter of credit, or insurance, and state assumption of responsibility, which provide financial assurance for the amount of closure. Combined financial assurance must be at least equal to the adjusted closure cost estimate. Financial assurance instruments must meet requirements 264.143(a),(b),(d), or (e) which include closure trust fund, surety bond guaranteeing payment into a closure trust fund, closure letter of credit, and closure insurance, respectively. {264.143(g)}	Not applicable
I-5f(2) Use of Financial Mechanism for Multiple Facilities A copy of a financial assurance mechanism for more than one facility showing for each facility, the EPA ID number, name, address, and amount of closure funds assured by the mechanism. {264.143(h)} Total funding must be no less than the sum required for each facility considered separately. Documents must be submitted to each Region where facilities are located. Financial test applies to sum of closure and post-closure costs for all facilities. {264.143(h)}	Not applicable
I-6 Post-Closure Cost Estimate	Section I-6 and Appendix N

Subject Requirement and 40 CFR Reference	Location in Application and Comments
If landfill, land treatment, surface impoundments, or waste piles are utilized, the application must include a post-closure or a contingent post-closure cost estimate prepared in accordance with 264.144: {270.14(b)(16) and 264.144} - Fully loaded labor rate (third party) [Guidance]	
- No salvage values [Guidance]	
- No operation credits (gas, crops, livestock) [Guidance]	
- Current year [Guidance]	
- Based on the extent of operation most likely to make post-closure most expensive [Guidance]	
- Inspection costs [Guidance]	
- Administration [Guidance]	
- Transportation [Guidance]	
I-7 Financial Assurance Mechanism for post-Closure A copy of the established financial assurance mechanism for post-closure care adopted in compliance with 264.145. The mechanism must be one of the following: {270.14(b)(16), 264.145 and 264.151} [I-7(a) through I-7(f)] and include due dates and use standard wording.	Section I-7 and Appendix N
I-7a Post-Closure Trust Fund A copy of the post-closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgement: {264.145(a) and 264.151(a)(1)} - Bank or approval institution	Section I-7 and Appendix N
- Mechanics ▪ pay-in period; life of permit or remaining life of facility, whichever is shorter ▪ annual payment; unfunded liability divided by years left in pay-in period.	
I-7b Surety Bond A surety bond from a federally acceptable surety company meeting one of the following requirements: {264.145(b) and (c), 264.151(b) and (c)} - Surety bond guaranteeing payment into a post-closure trust fund. A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund agreement. {264.145(b) and 264.151(b)}	Section I-7 and Appendix N

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Surety bond guaranteeing performance of post-closure activities. A copy of the surety bond with the wording required in Part 264.151(c), guaranteeing that the owner/operator will perform post-closure plan and the requirements of Subpart H. {264.145(c) and 264.151(c)}	
I-7c Post-Closure Letter of Credit A copy of post-closure letter of credit with the wording required in 264.151(d): {264.145(d) and 264.151(d)} - Irrevocable letter of credit	Section I-7 and Appendix N
- At least one year period, automatic renewal	
- Standby trust fund	
- Amount reflects current cost estimate	
I-7d Post-Closure Insurance To demonstrate that the owner/operator has post-closure insurance, s/he must submit to the Regional Administrator 60 days before hazardous waste is received a certificate of insurance worded as specified in 264.151(e): {264.145(e) and 264.151(e)} - Noncancellable policy, automatic renewal	Section I-7 and Appendix N
- Insurer licensed or eligible surplus lines carrier	
- Certificate of insurance	
- Funds available whenever final post-closure occurs.	
I-7e Financial Test and Corporate Guarantee for Post-Closure To demonstrate that this test is met, an owner/operator must submit a letter signed by the company's chief financial officer that is worded as specified in 264.151(f) and meets the following criteria: {264.145(f), 264.151(f) and 264.151(h)} - Tangible net worth $10 million	Section I-7 and Appendix N
- Tangible net worth 6 x all closure and post-closure costs	
- U.S. assets at least 90 percent of total assets or at least six times all closure and post-closure costs	
- Bond rating requirements or alternative	
- Application must include: · copy of a report on the company's latest financial statements drafted by an independent certified public accountant (CPA) · copy of a report from the owner's/ operator's independent CPA to the owner/operator stating that s/he has examined the data in the letter from the chief financial officer and that it is consistent with the amounts in the independently-audited year-end financial statements for the latest fiscal year and that no matters came to attention to cause him to believe that the data should be adjusted.	
In lieu of the above items, the owner/ operator may submit a corporate guarantee worded as required by 264.151(h). This	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
guarantee provides that the guarantor, which must be the parent company of the owner/operator, will perform post-closure activities in accordance with the post-closure plan it the owner/operator fails to do so or will establish a post-closure trust fund for the owner/operator. A copy of these items should be submitted with the Part B for review by the permit writer. {264.145(f)(10)}	
I-7f Combinations I-7f(1) Use of Multiple Financial Mechanisms A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a post-closure trust fund or letters of credit, insurance, and state assumption of responsibility, which provide financial assurance for the amount of post-closure. Combined financial assurance must be at least equal to the adjusted post-closure cost estimate. Financial assurance instruments must meet requirements of 264.143(a),(b), (d), or (e) which include post-closure trust fund, surety bond guaranteeing payment into a post-closure trust fund, post-closure letter of credit, and post-closure insurance, respectively. {264.145(g)}	Not applicable
I-7f(2) Use of Financial Mechanism for Multiple Facilities A copy of a financial assurance mechanism for more than one facility showing for each facility, the EPA ID number, name, address, and amount of closure funds assured by the mechanism. Total funding must be no less than the sum required for each facility considered separately. Documents must be submitted to each Region where facilities are located. Financial test applies to the sum of closure and post-closure costs for all facilities. {264.145(h)}	Not applicable
I-8 Liability Requirements Where applicable, a copy of the insurance policy or other documentation which comprise compliance with the requirements of 264.147. (Coverage is for all facilities owned and operated and applies until certification for closure and post-closure is completed. For facilities in Phase I authorized states, originally signed duplicates of executed instruments or certificates of insurance are not required until the time of permit issuance, except as required by state law.) {270.147(b)(17), 264.147(a) and (b)}	Not applicable
I-8a Sudden Insurance Hazardous waste treatment, storage, or disposal facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences. {264.147(a), 264.147(g), and 264.151(g, i, j)} - Amount of at least $1 million per occurrence	Not applicable
- An annual total of at least $2 million, exclusive of legal costs	
- A signed duplicate original of the Hazardous Waste Facility Liability Endorsement worded as specified in ?????	
- A Certificate of Liability Insurance worded as specified in 264.151(j), or	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Financial test · letter from CFO · auditor report · auditor opinion · other information requested by R.A. · acceptable ratios · notification to EPA by Attorneys General or insurance commissioner of guarantor's state and facility state that corporate guarantee is legally valid and enforceable.	
- A combination of endorsement of certification and financial test or a combination of endorsement or certification and corporate guarantee. Amounts of coverage must total at least the minimum amounts required by 264.147(a).	
I-8b Nonsudden Insurance This applies to high risk storage facilities (designated by Regional Administrator), surface impoundments, land disposal and land treatment. {264.147(b) and (d), 264.151(i) and (j), and 264.147(f)}	Not applicable
- A least $3 million per occurrence	
- An annual total of at least $6 million is required, exclusive of legal costs	
- Same endorsement or certification requirements as for sudden insurance coverage, or	
- Financial test · letter from CFO (264.151(g)) · auditor's report · auditor's opinion · other information requested by R.A.	
- Corporate guarantee - {264.147(b)(2), 264.147(g)(2)(i), and 264.151(h)(2)} · guarantor must be parent corporation · certified copy of corporate guarantee with wording as specified in 264.151(h)(2) · financial test for guarantor	
I-8c Variance Procedures and R.A. Adjustments Evaluation of degree and duration of risk sufficient to allow R.A. to make a judgment on reduction of required liability. The financial responsibility levels specified above for liability insurance for sudden accidental occurrences may be adjusted downward if the owner/operator can prove to the Regional Administrator that these levels are not consistent with the degree and duration of risk at the owner's/operator's facility. Conversely, the Regional Administrator may adjust the levels of financial responsibility up or down, based on the administrator's assessment of the degree and duration of risk associated with the facility. {264.147(c) and (d)}	Not applicable
I-9 State Financial Mechanism Where appropriate, proof of coverage by a state financial mechanism in compliance with 264.149 or 264.150. {270.14(b)(18)}	Not applicable
I-9a Use of State-Required mechanisms	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
Where a state has hazardous waste regulations with equivalent or greater liability requirements for financial assurance for closure and post-closure care, evidence of establishment of the state-required financial mechanisms, including the facility EPA ID number, name, address, and required mechanism do not satisfy amount of funds required, funds may be made available through the state-required mechanisms or by using additional mechanisms specified in 264.143. {264.149(a) and 264.149(b)}	
I-9b State Assumption of Responsibility If a state assumes legal responsibility for compliance with closure, post-closure, or liability requirements or the state assures that state funds are available to cover those requirements, then facility is in compliance and must include a copy of a letter from the state describing the state assumption of responsibility and a letter from the owner/operator requesting that the state's assumption of responsibility be considered acceptable in meeting the financial coverage requirements, and including the facility EPA ID number, name, address, and amounts of liability coverage or funds for closure or post-closure care that are assured by the state. {264.150}	Not applicable

h:\chklists\tsd\part-i.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team: _____

Date Review Completed: _____

Other Federal Laws - Module J

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART J - OTHER FEDERAL LAWS Applicants may be required to submit information that will enable the Department to carry out his duties under other Federal laws. The applicant must provide demonstration of compliance with applicable Federal laws such as the following, or at a minimum, the applicant must state that these laws do not apply: - Wild and Scenic Rivers Act, - National Historic Preservation Act of 1966, - Endangered Species Act, - Coastal Zone Management Act, - Fish and Wildlife Coordination Act. {270.3, 270.14(b)(20)}	Section J-1

h:\chklists\tsd\part-j.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team: _____

_____

_____

Date Review Completed: _____

Certification - Module K

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART K - CERTIFICATION K-1 Application Signature For a corporation, certification of the application by a responsible corporate officer meaning: - a president, secretary, treasurer, vice-president, or any other person who performs similar policy or decisionmaking functions for the corporation, or - the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million. {270.11(a)(1)(i)and (ii)}	Section K
For a partnership or sole proprietorship, certification by a general partner or the proprietor, respectively. {270.11(a)(2)}	
For a municipality, State, Federal, or other public agency, certification by a principal executive officer or ranking elected official. {270.11(a)(3)}	
K-2 Certification Statement The person signing the application shall make the following certification statement: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." {270.11(d)}	Section K

h:\chklists\tsd\part-k.doc

REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

Facility Name: Former Parker Hannifin Facility
EPA ID Number: NCD002591014
Permit Review Team: _____

Date Review Completed: _____

Guidance Documents for Part L

(12) RCRA Facility Assessment Guidance, EPA-OSW, October 1986.

(13) RFA Checklist - produced in conjunction with the RCRA Facility Assessment Guidance.

(14) Confirmatory Sampling Workplan Guidance.

For information about SWMUs and AOCs a facility can submit the RCRA Facility Assessment and all subsequently identified SWMUs or AOCs reported or submit the information listed in the following checklist.

PART L - INFORMATION REQUIREMENTS FOR SOLID WASTE MANAGEMENT UNITS	
Provide a tabular listing of all SWMUs and AOCs. For each SWMU and AOC provide the following in the table: - SWMU Number - SWMU name - Current status of SWMU; (No Further Action, Under Assessment, Remedy Selected, Remedy Construction Complete (include selected remedy), etc.) - Date current status achieved	Section L-2 and Table B-1
For SWMUs and AOCs that are NOT listed as No Further Action provide the following information	
L-1 Minimum Information Requirements for Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)	Section L-2 and Table B-1
L-1a Description of Solid Waste Management Units and Areas of Concern: A description of each solid waste management unit or area of concern that was not listed as No Further Action at the facility including: - Location of the unit on the topographic map and a facility site map required under 270.14(b)(19), {270.14(d)(1)(i)}	Section L-2, Table B-1 and Figure B-1
- General Description of the SWMU or AOC (e.g. concrete sump, land disposal area, spill, etc.), {270.14(d)(1)(ii)}	
- General dimensions and structural description (provide	

drawings if available), {270.14(d)(1)(iii)}	
- Dates of operation of the unit, and {270.14(d)(1)(iv)}	
- Specification of all wastes that have been managed at the unit. {270.14(d)(1)(v)}	
L-1b <u>Information Pertaining to Releases:</u> The applicant must provide a summary of all available information pertaining to releases of hazardous wastes or hazardous constituents from solid waste management units and areas of concern at the facility. {270.14(d)(2)}	Section L-2
L-1c <u>Sampling and Analysis:</u> The applicant must provide a summary of the results of sampling and analysis of groundwater, land surface and subsurface strata, surface water, and air. (270.14(d)(3))	Section L-2

Additional Requirements	Location in Application and Comments
Sampling frequency and constituents sampled for SWMUs or AOC where long term monitoring is part of the selected remedy or is used to demonstrate remedy effectiveness. Identify on a facility site map the locations of monitoring points (wells, indoor air, soil samples, etc) where long term monitoring is part of the selected remedy or is used to demonstrate remedy effectiveness. Cost Estimate for the assessment and remediation of all SWMUs and AOC. [Note: this estimate can be combined with the cost estimate for closure or post-closure of the regulated unit.]	Not applicable

Appendix B.
Resource, Conservation, and Recovery Act Subtitle C Site Identification Form

OMB# 2050-0024; Expires 01/31/2017

SEND COMPLETED FORM TO: The Appropriate State or Regional Office.

United States Environmental Protection Agency
RCRA SUBTITLE C SITE IDENTIFICATION FORM

1. Reason for Submittal (MARK ALL BOX(ES) THAT APPLY)

Reason for Submittal:

- ☐ To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location)
- ☒ To provide a Subsequent Notification (to update site identification information for this location)
- ☐ As a component of a First RCRA Hazardous Waste Part A Permit Application
- ☐ As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #_____)
- ☐ As a component of the Hazardous Waste Report (If marked, see sub-bullet below)
  - ☐ Site was a TSD facility and/or generator of >1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)

2. Site EPA ID Number

EPA ID Number: NCD002591014

3. Site Name

Name: Parker Hannifin Corporation (Pneumatic Division)

4. Site Location Information

Street Address: 12415 Capital Boulevard
City, Town, or Village: Wake Forest | County: Wake
State: NC | Country: USA | Zip Code: 27587

5. Site Land Type

☒ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other

6. NAICS Code(s) for the Site (at least 5-digit codes)

A. 331291 | C. 333319
B. 332919 | D. 339960

7. Site Mailing Address

Street or P.O. Box: 12415 Capital Boulevard
City, Town, or Village: Wake Forest
State: NC | Country: USA | Zip Code: 27587

8. Site Contact Person

First Name: Jim | MI: | Last: Schenker
Title: Assistant Manager, Environmental Engineering
Street or P.O. Box: 6035 Parkland Boulevard
City, Town or Village: Cleveland
State: OH | Country: USA | Zip Code: 44124
Email: jschenker@parker.com
Phone: 216-896-2052 | Ext.: | Fax:

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner: RREF BB NC SICP, LLC (known as Rialto Capital) | Date Became Owner: 06/29/12
Owner Type: ☒ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other
Street or P.O. Box: 12415 Capital Boulevard
City, Town, or Village: Wake Forest | Phone:
State: NC | Country: USA | Zip Code: 27587

B. Name of Site's Operator: Parker Hannifin Corporation | Date Became Operator:
Operator Type: ☒ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other

10. Type of Regulated Waste Activity (at your site)
Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities; Complete all parts 1-10.

Y [X] N [ ] **1. Generator of Hazardous Waste**
If "Yes," mark only one of the following – a, b, or c.

- [ ] a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs/mo.) or more of hazardous waste; **or** Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs/mo) of acute hazardous waste; **or** Generates, in any calendar month, **or** accumulates at any time, more than 100 kg/mo (220 lbs/mo) of acute hazardous spill cleanup material.
- [ ] b. SQG: 100 to 1,000 kg/mo (220 – 2,200 lbs/mo) of non-acute hazardous waste.
- [ ] c. CESQG: Less than 100 kg/mo (220 lbs/mo) of non-acute hazardous waste.

If "Yes" above, indicate other generator activities in 2-10.

Y [ ] N [X] **2. Short-Term Generator** (generate from a short-term or one-time event and not from on-going processes). If "Yes," provide an explanation in the Comments section.

Y [ ] N [X] **3. United States Importer of Hazardous Waste**

Y [ ] N [X] **4. Mixed Waste (hazardous and radioactive) Generator**

Y [ ] N [X] **5. Transporter of Hazardous Waste**
If "Yes," mark all that apply.

- [ ] a. Transporter
- [ ] b. Transfer Facility (at your site)

Y [X] N [ ] **6. Treater, Storer, or Disposer of Hazardous Waste** Note: A hazardous waste Part B permit is required for these activities.

Y [ ] N [X] **7. Recycler of Hazardous Waste**

Y [ ] N [X] **8. Exempt Boiler and/or Industrial Furnace**
If "Yes," mark all that apply.

- [ ] a. Small Quantity On-site Burner Exemption
- [ ] b. Smelting, Melting, and Refining Furnace Exemption

Y [ ] N [X] **9. Underground Injection Control**

Y [ ] N [X] **10. Receives Hazardous Waste from Off-site**

B. Universal Waste Activities; Complete all parts 1-2.

Y [ ] N [X] **1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes," mark all that apply.**

- a. Batteries [ ]
- b. Pesticides [ ]
- c. Mercury containing equipment [ ]
- d. Lamps [ ]
- e. Other (specify) _____ [ ]
- f. Other (specify) _____ [ ]
- g. Other (specify) _____ [ ]

Y [ ] N [X] **2. Destination Facility for Universal Waste**
Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities; Complete all parts 1-4.

Y [ ] N [X] **1. Used Oil Transporter**
If "Yes," mark all that apply.

- [ ] a. Transporter
- [ ] b. Transfer Facility (at your site)

Y [ ] N [X] **2. Used Oil Processor and/or Re-refiner**
If "Yes," mark all that apply.

- [ ] a. Processor
- [ ] b. Re-refiner

Y [ ] N [X] **3. Off-Specification Used Oil Burner**

Y [ ] N [X] **4. Used Oil Fuel Marketer**
If "Yes," mark all that apply.

- [ ] a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- [ ] b. Marketer Who First Claims the Used Oil Meets the Specifications

D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

❖ You can ONLY Opt into Subpart K if:

- you are at least one of the following: a college or university; a teaching hospital that is owned by or has a formal affiliation agreement with a college or university; or a non-profit research institute that is owned by or has a formal affiliation agreement with a college or university; AND
- you have checked with your State to determine if 40 CFR Part 262 Subpart K is effective in your state

Y☐ N☒ 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories **See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:**

☐ **a. College or University**

☐ **b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university**

☐ **c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university**

Y☐ N☒ 2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

11. Description of Hazardous Waste

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

F006	F008					

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

12. Notification of Hazardous Secondary Material (HSM) Activity

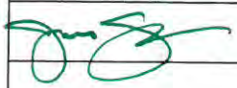
Y ☐ N ☒ Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

If "Yes," you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

13. Comments

Site is a TSD because of closed-in place RCRA Unit (SWMU 16).

14. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	JAMES SCHENKER: ASSISTANT MANAGER, ENV ENGINEERING	01/28/2016

EPA ID Number | N | C | D | 0 | 0 | 2 | 5 | 9 | 1 | 0 | 1 | 4 | OMB#: 2050-0024; Expires 01/31/2017

United States Environmental Protection Agency

HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact

First Name: Martha **MI:** **Last Name:** Connell

Contact Title: Director, Environmental Health and Safety

Phone: 216-896-2710 **Ext.:** **Email:** mconnell@parker.com

2. Facility Permit Contact Mailing Address

Street or P.O. Box: 6035 Parkland Boulevard

City, Town, or Village: Cleveland

State: Ohio

Country: USA **Zip Code:** 44124

3. Operator Mailing Address and Telephone Number

Street or P.O. Box: 6035 Parkland Boulevard

City, Town, or Village: Cleveland

State: Ohio **Phone:** 216-896-2710

Country: USA **Zip Code:** 44124

4. Facility Existence Date

Facility Existence Date (mm/dd/yyyy):

5. Other Environmental Permits

A. Facility Type *(Enter code)*	B. Permit Number	C. Description
E	0101	Discharge of Treated Groundwater to POTW

6. Nature of Business:

Parker Hannifin manufactured pneumatic values and pneumatic devices. Manufacturing operations ceased in January 2002.

7. Process Codes and Design Capacities – Enter information in the Section on Form Page 3

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 8.

B. PROCESS DESIGN CAPACITY – For each code entered in Item 7.A; enter the capacity of the process.

1. **AMOUNT – Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.**
2. **UNIT OF MEASURE – For each amount entered in Item 7.B(1), enter the code in Item 7.B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.**

C. PROCESS TOTAL NUMBER OF UNITS – Enter the total number of units for each corresponding process code.

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity
Disposal		
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day
D80	Landfill	Acre-feet; Hectares-meter; Acres; Cubic Meters; Hectares; Cubic Yards
D81	Land Treatment	Acres or Hectares
D82	Ocean Disposal	Gallons Per Day or Liters Per Day
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards
D99	Other Disposal	Any Unit of Measure Listed Below
Storage		
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S03	Waste Pile	Cubic Yards or Cubic Meters
S04	Surface Impoundment	Gallons; Liters; Cubic Meters; or Cubic Yards
S05	Drip Pad	Gallons; Liters; Cubic Meters; Hectares; or Cubic Yards
S06	Containment Building Storage	Cubic Yards or Cubic Meters
S99	Other Storage	Any Unit of Measure Listed Below
Treatment		
T01	Tank Treatment	Gallons Per Day; Liters Per Day
T02	Surface Impoundment	Gallons Per Day; Liters Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Metric Tons Per Hour; or Million BTU Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Short Tons Per Day; BTUs Per Hour; Gallons Per Day; Liters Per Hour; or Million BTU Per Hour
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; or Million BTU Per Hour
T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; Liters Per Hour; Kilograms Per Hour; or Million BTU Per Hour
T82	Lime Kiln	
T83	Aggregate Kiln	
T84	Phosphate Kiln	
T85	Coke Oven	
T86	Blast Furnace	
T87	Smelting, Melting, or Refining Furnace	
T88	Titanium Dioxide Chloride Oxidation Reactor	
T89	Methane Reforming Furnace	
T90	Pulping Liquor Recovery Furnace	
T91	Combustion Device Used in the Recovery of Sulfur Values from Spent Sulfuric Acid	
T92	Halogen Acid Furnaces	
T93	Other Industrial Furnaces Listed in 40 CFR 260.10	
T94	Containment Building Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTU Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million BTU Per Hour
Miscellaneous (Subpart X)		
X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; or Million BTU Per Hour
X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
X99	Other Subpart X	Any Unit of Measure Listed Below

Unit of Measure	Unit of Measure Code
Gallons	G
Gallons Per Hour	E
Gallons Per Day	U
Liters	L
Liters Per Hour	H
Liters Per Day	V
Short Tons Per Hour	D
Short Tons Per Day	N
Metric Tons Per Hour	W
Metric Tons Per Day	S
Pounds Per Hour	J
Kilograms Per Hour	X
Million BTU Per Hour	X
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
BTU Per Hour	I

7. Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 7 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number		A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY (1) Amount (Specify)	B. PROCESS DESIGN CAPACITY (2) Unit of Measure	C. Process Total Number of Units	For Official Use Only
X	1	S	0	2	533.788	G	001	
	1	D	8	3	133.33	Y	002	
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
1	0							
1	1							
1	2							
1	3							

Note: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the line sequentially, taking into account any lines that will be used for "other" process (i.e., D99, S99, T04, and X99) in Item 8.

8. Other Processes (Follow instructions from Item 7 for D99, S99, T04, and X99 process codes)

Line Number (Enter #s in sequence with Item 7)		A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY (1) Amount (Specify)	(2) Unit of Measure	C. Process Total Number of Units	For Official Use Only
X	2	T	0	4	100.00	U	001	

9. Description of Hazardous Wastes - Enter Information in the Sections on Form Page 5

A. EPA HAZARDOUS WASTE NUMBER – Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY – For each listed waste entered in Item 9.A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Item 9.A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE – For each quantity entered in Item 9.B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all listed hazardous wastes.

For non-listed waste: For each characteristic or toxic contaminant entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. **Enter the first two as described above.**
2. **Enter "000" in the extreme right box of Item 9.D(1).**
3. **Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 9.E.**

2. PROCESS DESCRIPTION: If code is not listed for a process that will be used, describe the process in Item 9.D(2) or in Item 9.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. **Select one of the EPA Hazardous Waste Numbers and enter it in Item 9.A. On the same line complete Items 9.B, 9.C, and 9.D by estimating the total annual quantity of the waste and describing all the processes to be used to store, treat, and/or dispose of the waste.**
2. **In Item 9.A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Item 9.D.2 on that line enter "included with above" and make no other entries on that line.**
3. **Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.**

EXAMPLE FOR COMPLETING Item 9 (shown in line numbers X-1, X-2, X-3, and X-4 below) – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES									
								(1) PROCESS CODES (Enter Code)									(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))
X	1	K	0	5	4	900	P	T	0	3	D	8	0				
X	2	D	0	0	2	400	P	T	0	3	D	8	0				
X	3	D	0	0	1	100	P	T	0	3	D	8	0				
X	4	D	0	0	2												Included With Above

9. Description of Hazardous Wastes *(Continued. Use additional sheet(s) as necessary; number pages as 5a, etc.)*

Line Number		A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES	
					(1) PROCESS CODES (Enter Code)	(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))
	1	F008	0		D83	
	2	F008	0		D83	
	3					
	4					
	5					
	6					
	7					
	8					
	9					
1	0					
1	1					
1	2					
1	3					
1	4					
1	5					
1	6					
1	7					
1	8					
1	9					
2	0					
2	1					
2	2					
2	3					
2	4					
2	5					
2	6					
2	7					
2	8					
2	9					
3	0					
3	1					
3	2					
3	3					
3	4					
3	5					
3	6					

9. Description of Hazardous Wastes *(Continued. Use additional sheet(s) as necessary; number pages as 5a, etc.)*

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES	
				(1) PROCESS CODES (Enter Code)	(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)

10. Map

Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

11. Facility Drawing

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

12. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas (see instructions for more detail).

13. Comments

Appendix C.
Site Photographs

Former Parker Facility, Wake Forest, NC

Remaining Building Structure
(former plating room area – 2008)

Confirmation of Danger Sign and
Perimeter Fencing (September 2016)

Former Parker Facility, Wake Forest, NC

ERD Field Pilot Test Area
(NEBA-SWMU 16; August 2014)

Groundwater Treatment and SVE Equipment Shed

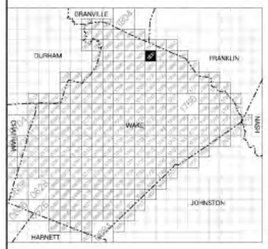
Former Parker Facility, Wake Forest, NC

Former Sand Filter Beds -SWMU 16 Area (2008)

Former Sand Filter Beds -SWMU 16 Area (2008)

Appendix D.
Federal Emergency Management Administration Floodplain Map

STATE OF NORTH CAROLINA FIRM PANEL LOCATOR DIAGRAM



DATUM INFORMATION

The **projection** used in the preparation of this map was the North Carolina State Plane (FIPSZONE 3200). The **horizontal datum** was the North American Datum of 1983, GRS80 ellipsoid. Differences in datum, ellipsoid, projection, or Universal Transverse Mercator zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdictional boundaries. These differences do not affect the accuracy of this FIRM. All coordinates on this map are in U.S. Survey Feet, where 1 U.S. Survey Foot = 1200/3937 Meters.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988 (NAVD 88). These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. An average offset between NAVD 88 and the National Geodetic Vertical Datum of 1929 (NGVD 29) has been computed for each North Carolina county. This offset was then applied to the NGVD 29 flood elevations that were not revised during the creation of this statewide format FIRM. The offsets for each county shown on this FIRM panel are shown in the vertical datum offset table below. Where a county boundary and a flooding source with unrevised NGVD 29 flood elevations are coincident, an individual offset has been calculated and applied during the creation of this statewide format FIRM. See Section 6.1 of the accompanying Flood Insurance Study report to obtain further information on the conversion of elevations between NAVD 88 and NGVD 29. To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the North Carolina Geodetic Survey at the address shown below. You may also contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at www.ngs.noaa.gov.

North Carolina Geodetic Survey
121 West Jones Street
Raleigh, NC 27601
(919) 733-3836
www.ncgs.state.nc.us

County Average Vertical Datum Offset Table

County	Vertical Datum Offset (ft)
Wake	– 0.88

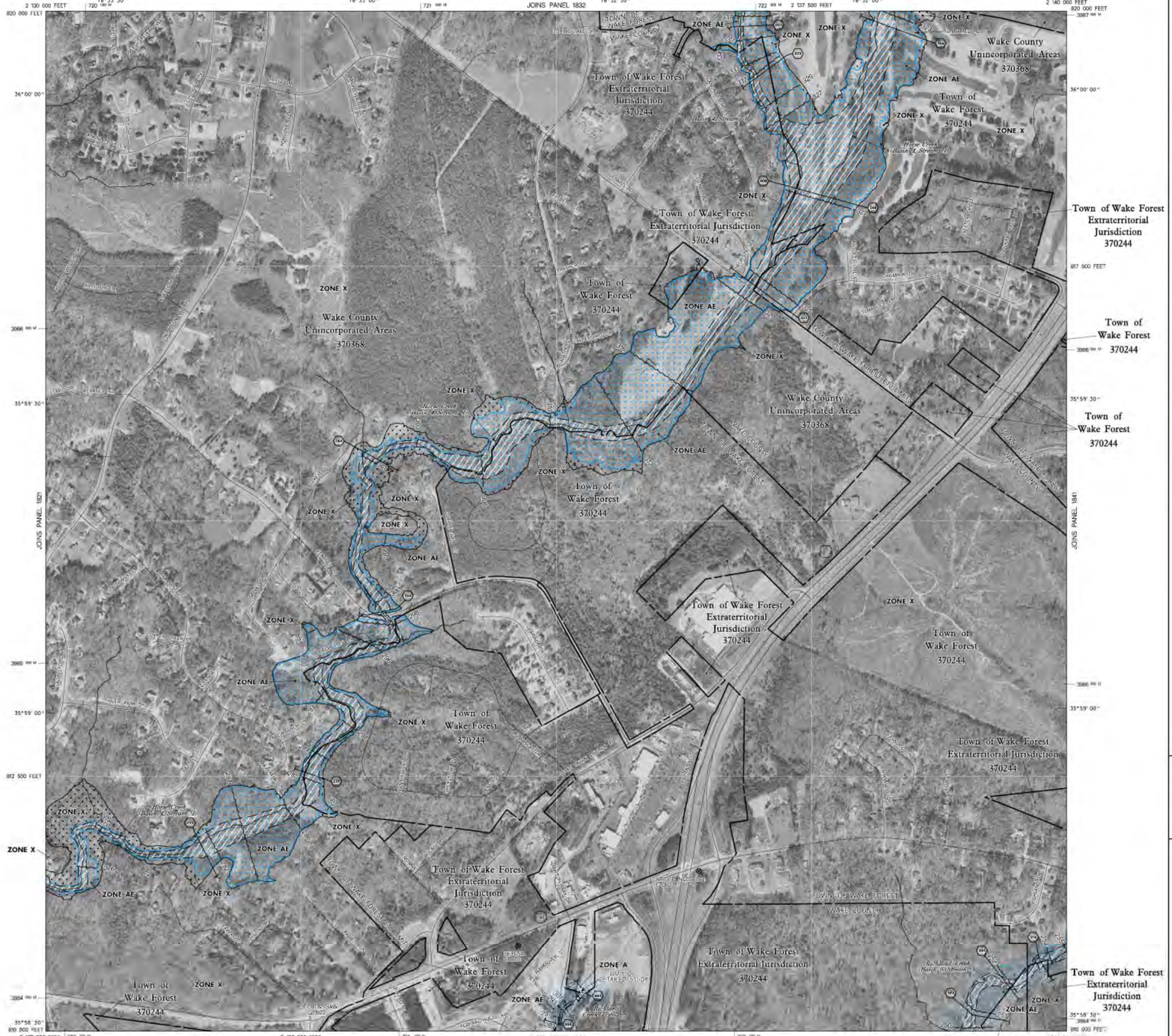
Example: NAVD 88 = NGVD 29 + (–0.88)

All streams listed in the **Flood Hazard Data Table** below were studied by detailed methods using field survey. Other flood hazard data shown on this map may have been derived using either a coastal analysis or limited detailed riverine analysis. More information on the flooding sources studied by these analyses is contained in the Flood Insurance Study report.

FLOOD HAZARD DATA TABLE

Cross Section	Stream Station*	Flood Discharge (cfs)	1% Annual Chance (100-year) Future Conditions Water-surface Elevation (feet NAVD 88)	1% Annual Chance (100-year) Water-surface Elevation (feet NAVD 88)	Floodway Width (feet) Left/Right Distance From the Centerline of Stream to Encroachment Boundary (Looking Downstream) or Total Floodway Width
BASIN 4, STREAM 3					
608	780	N/A	322.2	N/A	440[1]
622	2,110	N/A	331.7	N/A	80
627	3,966	N/A	336.0	N/A	50
HORSE CREEK (BASIN 4, STREAM 1)					
225	22,650	N/A	281.9	N/A	195
239	23,850	N/A	288.2	N/A	185
266	26,620	N/A	289.7	N/A	135
284	28,400	N/A	301.3	N/A	160
337	33,670	N/A	320.9	N/A	190
348	34,800	N/A	322.2	N/A	440[1]
386	38,810	N/A	322.6	N/A	235
RICHLAND CREEK (BASIN 5, STREAM 1)					
202	20,245	4,730	250.5	250.5	40 / 50
209	20,939	4,730	251.9	251.9	80 / 80
214	21,418	4,730	253.4	253.4	90 / 30
RICHLAND CREEK TRIBUTARY					
065	6,038	672	269.3	269.3	10 / 8
064	6,450	672	316.8	316.8	36 / 35

* Feet above mouth [1] Combined Floodway width of Horse Creek (Basin 4, Stream 1) and Basin 4, Stream 3



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- **ZONE A** No Base Flood Elevations determined.
- **ZONE AE** Base Flood Elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- **ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- **ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- **ZONE X** Areas of 0.2% annual chance flood; areas of future conditions 1% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside the 0.2% annual chance and future conditions 1% annual chance floodplain.
- **ZONE D** Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary and future conditions 1% annual chance floodplain boundary
- Floodway boundary
- Zone D Boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 Base Flood Elevation line and value; elevation in feet*
- (EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- 23 Cross section line
- 23 Transect line
- 97°07'30", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000 m 1000-meter Universal Transverse Mercator grid ticks, zone 17
- 1 477 500 FEET 2500-foot grid values: North Carolina State Plane coordinate system (FIPSZONE 3200, State Plane NAD 83 feet)
- BM5510 North Carolina Geodetic Survey bench mark (see explanation in the Datum Information section of this FIRM panel).
- BM5510 National Geodetic Survey bench mark (see explanation in the Datum Information section of this FIRM panel).
- M1.5 River Mile

GRID NORTH

MAP SCALE 1" = 500' (1 : 6,000)

250 0 500 1000 FEET

150 0 150 300 METERS

NFIP

PANEL 1831J

FIRM
FLOOD INSURANCE RATE MAP
NORTH CAROLINA

PANEL 1831

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	CID No.	PANEL	SUFFIX
WAKE COUNTY	370298	1831	J
WAKE FOREST, TOWN OF	370344	1831	J

EFFECTIVE DATE MAY 2, 2006

MAP NUMBER 3720183100J

State of North Carolina
Federal Emergency Management Agency

This digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long term approach of floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map floodplain areas at the local level. As a part of this effort, the State of North Carolina has joined in a Cooperating Technical State agreement with FEMA to produce and maintain this digital FIRM.

www.ncfloodmaps.com

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles, Floodway Data, Limited Detailed Flood Hazard Data, and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of **regulatory floodways** shown on the FIRM for flooding sources studied by detailed methods were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data for flooding sources studied by detailed methods as well as **non-encroachment widths** for flooding sources studied by limited detailed methods are provided in the FIS report for this jurisdiction. The FIS report also provides instructions for determining a floodway using non-encroachment widths for flooding sources studied by limited detailed methods.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 4.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

Base map information and geospatial data used to develop this FIRM were obtained from various organizations, including the participating local community(ies), state and federal agencies, and/or other sources. The primary base for this FIRM is aerial imagery acquired by Wake County. The time period of collection for the imagery is 1999. Information and geospatial data supplied by the local community(ies) that met FEMA base map specifications were considered the preferred source for development of the base map. See geospatial metadata for the associated digital FIRM for additional information about base map preparation.

Base map features shown on this map, such as **corporate limits**, are based on the most up-to-date data available at the time of publication. **Changes in the corporate limits may have occurred since this map was published.** Map users should consult the appropriate community official or website to verify current conditions of jurisdictional boundaries and base map features. This map may contain roads that were not considered in the hydraulic analysis of streams where no new hydraulic model was created during the production of this statewide format FIRM.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

If you have **questions about this map**, or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at www.fema.gov.

An accompanying Flood Insurance Study report, Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) revising portions of this panel, and digital versions of this FIRM may be available. Visit the **North Carolina Floodplain Mapping Program** website at www.ncfloodmaps.com, or contact the **FEMA Map Service Center** at 1-800-358-9616 for information on all related products associated with this FIRM. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at www.msc.fema.gov.

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index or visit www.ncfloodmaps.com

EFFECTIVE DATE OF FLOOD INSURANCE RATE MAP PANEL
MAY 2, 2006

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to statewide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent, the North Carolina Division of Emergency Management or the National Flood Insurance Program at the following phone numbers or websites:

NC Division of Emergency Management (919) 715-8000 www.nccrimecontrol.org/nfip
National Flood Insurance Program: 1-800-638-6620 www.fema.gov/nfip

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

EFFECTIVE DATE MAY 2, 2006

MAP NUMBER 3720183100J

State of North Carolina
Federal Emergency Management Agency

Appendix E.
Survey Plat Map/Legal Description

SURVEYOR'S CERTIFICATION

I, Phillip W. Riley, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision; that this ground survey was performed at the 95 percent confidence level (2 sigma) to meet Federal Geographic Data Committee Standards; that the accuracy of the survey is 1 foot in 10,000 feet (1:10,000) or greater; and that the original data was obtained on September 27, 2016; that the survey was completed on November 21, 2016; that contours shown meet the stated standard; all elevations are based on GPS observations as noted below.

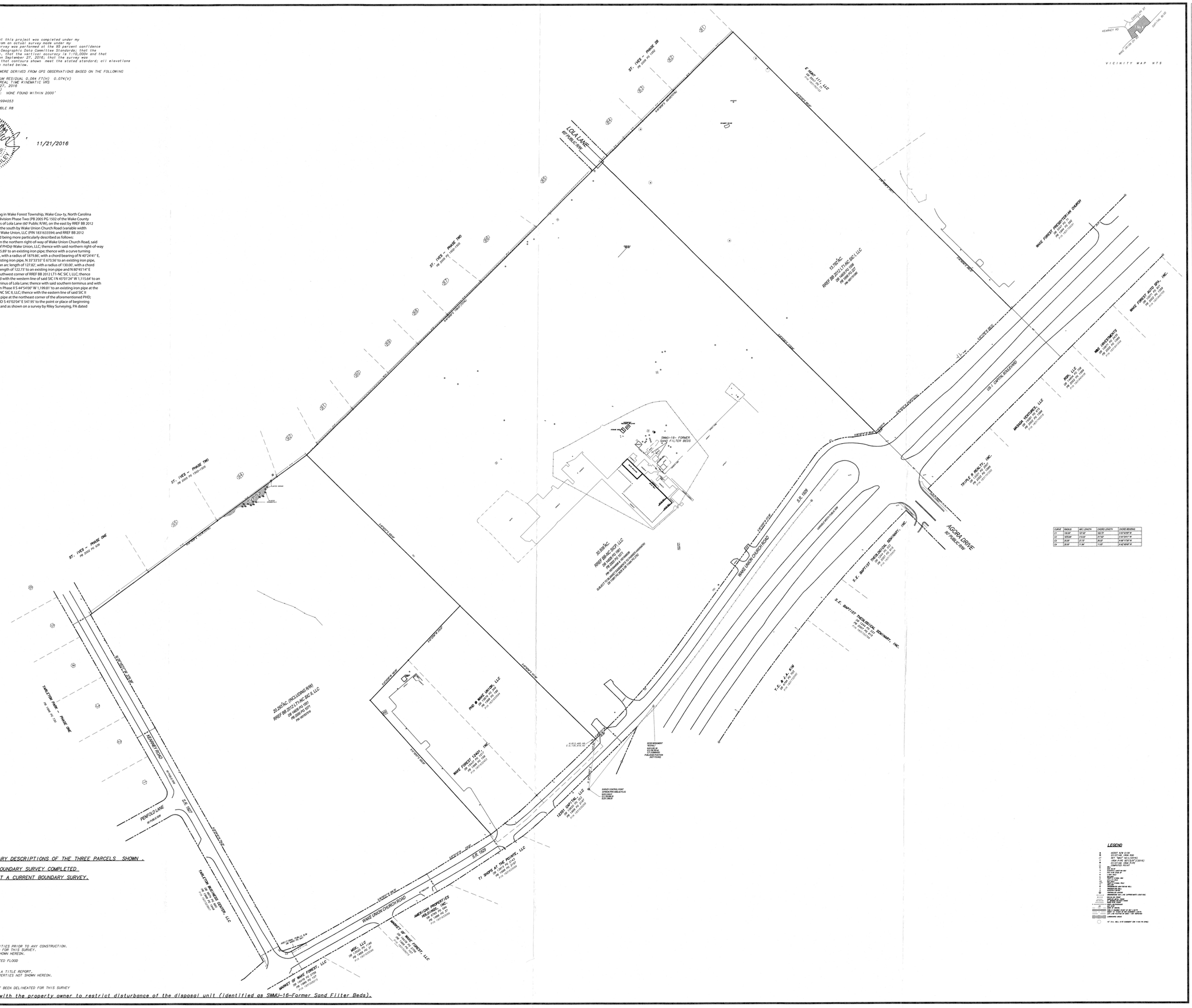
THE SURVEY CO-ORDINATES NOTED WERE DERIVED FROM GPS OBSERVATIONS BASED ON THE FOLLOWING
1) CLASS OF SURVEY: CLASS 'A'
2) POSITIONAL ACCURACY: MAXIMUM RESIDUAL 0.064 FT(H) 0.074(V)
3) TYPE OF GPS FIELD SURVEY: REAL TIME K(INEMATIC VRS
4) DATE OF SURVEY: September 27, 2016
5) DATUM/EPOCH: NAD '83/(2011)'
6) PUBLISHED/FIXED CONTROL USE: NONE FOUND WITHIN 2000'
7) GEOID MODEL: G 12A
8) COMBINED GRID FACTOR: 0.99994053
9) UNITS: US SURVEY FOOT
10) GPS INSTRUMENTATION: TRIMBLE R8

JOSEPH CARLTON RILEY NORTH CAROLINA SEAL L-3066 LAND SURVEYOR PHILLIP W. RILEY

11/21/2016

RREF BB-NC SICP, LLC
Being all of a certain parcel of land lying in Wake Forest Township, Wake Cou▪ ty, North Carolina bounded on the north by St. Ives Subdivision Phase Two (PB 2005 PG 1502 of the Wake County Registry and the right -of-way terminus of Lola Lane (60' Public R/W), on the east by RREF BB 2012 LT1-NC SIC I, LLC (PIN 1831751080), on the south by Wake Union Church Road (variable width Public R/W) and on the west by PHD@ Wake Union, LLC (PIN 1831633594) and RREF BB 2012 LT1-NC SIC II, LLC (PIN 1831537516) and being more particularly described as follows:
Beginning at an existing iron pipe at on the northern right-of-way of Wake Union Church Road, said pipe also being the southeast corner of PHD@ Wake Union, LLC; thence with said northern right-of-way the following five calls; N 46°01' 21" E 45.89' to an existing iron pipe; thence with a curve turning to the left with an arc length of 318.00', with a radius of 1879.86', with a chord bearing of N 40°24'41" E, with a chord length of 317.62' to an existing iron pipe, N 35°33'55" E 673.56' to an existing iron pipe, with a curve turning to the right with an arc length of 127.82', with a radius of 130.00', with a chord bearing of N 63°43'55" E, with a chord length of 122.73' to an existing iron pipe and N 80°45'14" E 69.40' to an existing iron pipe at the southwest corner of RREF BB 2012 LT1-NC SIC I, LLC; thence leaving said northern right -of-way and with the western line of said SIC I N 45°01'24" W 1,115.64' to an existing mag nail on the southern terminus of Lola Lane; thence with said southern terminus and with the southern line of St. Ives Subdivision Phase II S 44°54'00" W 1,199.81' to an existing iron pipe at the northeast corner of RREF BB 2012 LT1-NC SIC II, LLC; thence with the eastern line of said SIC II S 45°07'27" E 620.64' to an existing iron pipe at the northeast corner of the aforementioned PHD; thence with the eastern line of said PHD S 45°02'04" E 547.95' to the point or place of beginning containing 30.506± acres, more or less and as shown on a survey by Riley Surveying, PA dated November 21, 2016.
Phone

VICINITY MAP NTS



CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	1879.86'	318.00'	317.62'	S 40°24'41" W
C2	130.00'	127.82'	122.73'	S 63°43'55" W
C3	25.00'	39.27'	35.36'	N 89°57'36" W
C4	25.00'	11.96'	11.85'	S 42°56'58" E

THIS EXHIBIT PREPARED TO SUPPLEMENT BOUNDARY DESCRIPTIONS OF THE THREE PARCELS SHOWN.

THIS EXHIBIT IS BASED ON A BOUNDARY SURVEY COMPLETED IN NOVEMBER 2016. THIS IS NOT A CURRENT BOUNDARY SURVEY.

NOTES

1. AREAS BY THE CO-ORDINATE METHOD.
2. CONTRACTORS TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION. LIMITED UNDERGROUND UTILITIES WERE FIELD MARKED FOR THIS SURVEY. THERE MAY BE UNDERGROUND UTILITIES BEYOND THOSE SHOWN HEREON.
3. SUBJECT PROPERTIES ARE NOT SITUATED IN A DESIGNATED FLOOD HAZARD ZONE ACCORDING TO F.E.M.A..
4. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. THEREFORE THERE MAY BE ENCUMBRANCES ON THESE PROPERTIES NOT SHOWN HEREON.
5. HORIZONTAL GROUND DISTANCES SHOWN HEREON.
6. WETLANDS, IF PRESENT ON SUBJECT TRACTS, HAVE NOT BEEN DELINEATED FOR THIS SURVEY
7. Parker Hannifin will coordinate with the property owner to restrict disturbance of the disposal unit (identified as SWMJ-16-Former Sand Filter Beds).

LEGEND

●	HOOEY ALUM DISK
▲	MAG NAIL SET
■	SET "NAIL" NAIL(S)(SIZE)
○	IRON PIPE SET(S)(SIZE)(3/4")
⊙	IRON PIPE FOUND AS NOTED
⊕	COMPUTED POINT
⊗	TBM NAIL
⊗	TBM IRON ROD/PIPE SET
⊗	TBM IRON ROD/PIPE FOUND
⊗	SQUARE
⊗	SQUARE & ANGLE IRON
⊗	ANGLE IRON
⊗	FLAT ROD
⊗	ROUND ROD
⊗	MONUMENT
⊗	MONUMENT WITH WITNESS MARK(S)
⊗	WITNESS MARK
⊗	WITNESS CORNER
⊗	WITNESS MARK(S) TO APPROXIMATE LOCATION
⊗	DRIVEN NAIL FOUND
⊗	DRIVEN NAIL SET
⊗	MAG NAIL FOUND
⊗	MAG NAIL SET
⊗	CONCRETE MONUMENT
⊗	CONTROL POINT
⊗	CENTERLINE POINT
⊗	POINT OF BEGINNING
⊗	POINT OF COMMENCEMENT
⊗	POINT OF REFERENCE
⊗	POINT OF ENDING
⊗	POINT OF CURVATURE (P.C.) OR POINT OF ACCURACY
⊗	POINT OF TANGENCY (P.T.) OR POINT OF ENDING
⊗	POINT OF REVERSE CURVATURE (P.R.C.)
⊗	LANDSCAPE AREAS
⊗	10' WIDE, WELL SITE EASEMENT (SEE NOTES NO 8THIS)

REVISIONS	BY
3/7/2017 REMOVED TOPOGRAPHIC DATA REVISED LEGEND REMOVED STORM & SEWER REVISED NOTES REVISED TEXT AND PROPERTY OWNER SYMBOLS	PWR
3/8/2017 NCDEQ NOTES ADDED	PWR

EXHIBIT OF BOUNDARY SURVEY(2016)

RILEY SURVEYING, P.A.
3328 DURHAM CHAPEL HILL BLVD, STE B-100
DURHAM, N.C. 27707
919-667-0242 C-1281 phil@rileysurveying.pa.com

PROPERTIES OF
RRREF BB 2012 LT1 NC SIC I, LLC, RREF BB 2012 LT1-NC SIC II, LLC & RREF BB-NC SICP, LLC

PREPARED FOR
KIMLEY-HORN AND ASSOCIATES, INC.
WAKE FOREST TOWNSHIP, WAKE COUNTY
NORTH CAROLINA

DATE	NOVEMBER 21, 2016
SCALE	1" = 100'
DRAWN BY	PWR
JOB	1619
SHEET	1
	OF 1 SHEETS

Former Parker Hannifin Parcels

Riley Surveying, P.A.

3326 Durham Chapel Hill Blvd. Ste. B-100
Durham, North Carolina 27707

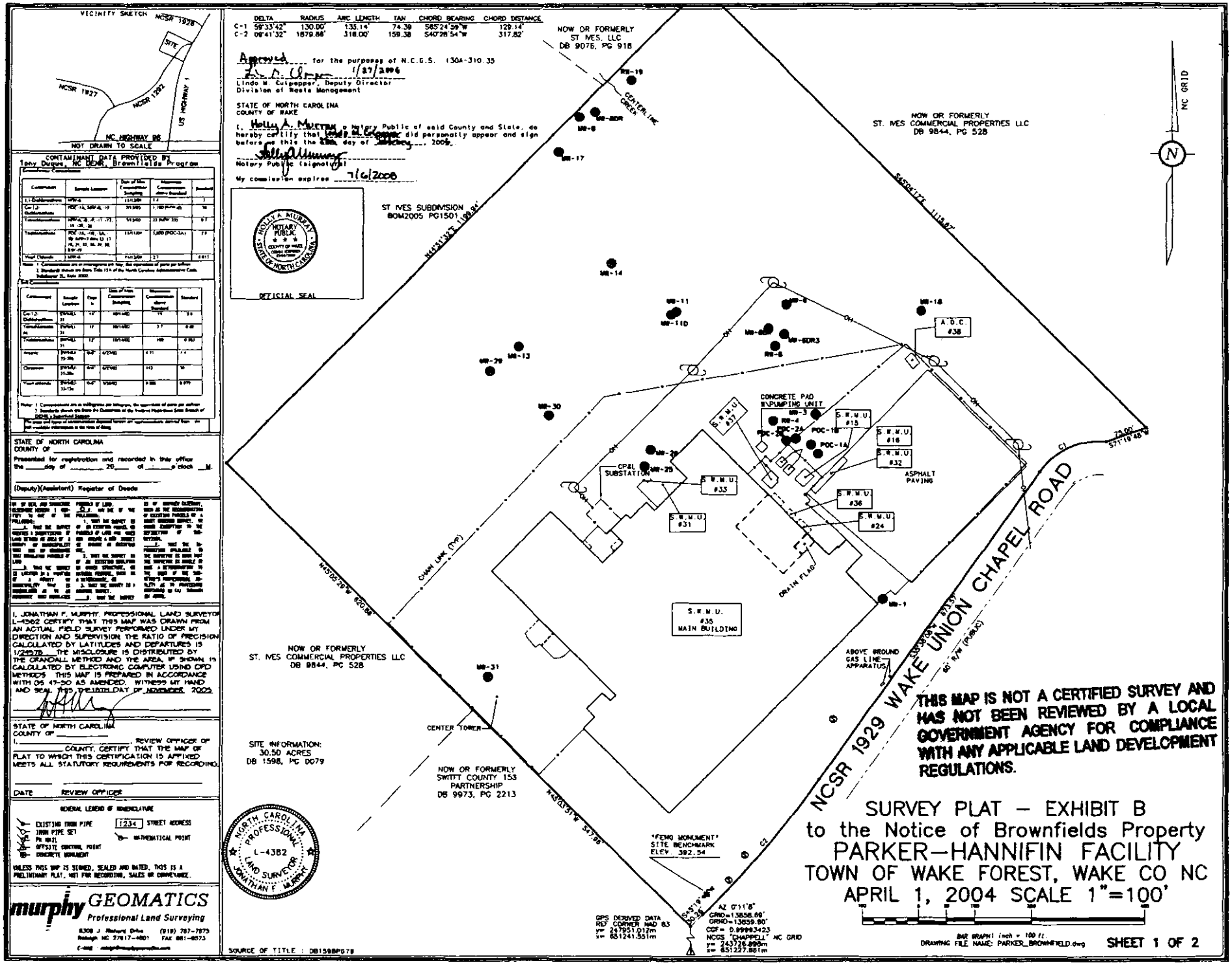
RREF BB-NC SICP, LLC

Being all of a certain parcel of land lying in Wake Forest Township, Wake County, North Carolina bounded on the north by St. Ives Subdivision Phase Two (PB 2005 PG 1502 of the Wake County Registry and the right-of-way terminus of Lola Lane (60' Public R/W), on the east by RREF BB 2012 LT1-NC SIC I, LLC (PIN 1831751080), on the south by Wake Union Church Road (variable width Public R/W) and on the west by PHD @ Wake Union, LLC (PIN 1831633594) and RREF BB 2012 LT1-NC SIC II, LLC (PIN 1831537516) and being more particularly described as follows:

Beginning at an existing iron pipe at on the northern right-of-way of Wake Union Church Road, said pipe also being the southeast corner of PHD @ Wake Union, LLC; thence with said northern right-of-way the following five calls: N 46°01'21" E 45.89' to an existing iron pipe; thence with a curve turning to the left with an arc length of 318.00', with a radius of 1879.86', with a chord bearing of N 40°24'41" E, with a chord length of 317.62' to an existing iron pipe, N 35°33'55" E 673.56' to an existing iron pipe, with a curve turning to the right with an arc length of 127.82', with a radius of 130.00', with a chord bearing of N 63°43'55" E, with a chord length of 122.73' to an existing iron pipe and N 80°45'14" E 69.40' to an existing iron pipe at the southwest corner of RREF BB 2012 LT1-NC SIC I, LLC; thence leaving said northern right-of-way and with the western line of said SIC I N 45°01'24" W 1,115.64' to an existing mag nail on the southern terminus of Lola Lane; thence with said southern terminus and with the southern line of St. Ives Subdivision Phase II S 44°54'00" W 1,199.81' to an existing iron pipe at the northeast corner of RREF BB 2012 LT1-NC SIC II, LLC; thence with the eastern line of said SIC II S 45°02'27" E 620.64' to an existing iron pipe at the northeast corner of the aforementioned PHD; thence with the eastern line of said PHD S 45°02'04" E 547.95' to the point or place of beginning containing 30.506± acres, more or less and as shown on a survey by Riley Surveying, PA dated November 21, 2016.

Phone – (919)667-0742 Email philr@rileysurveyingpa.com
NC Firm License C-1281

Exhibit B - Page 1 of 2



LAND USE RESTRICTIONS

LAND USE RESTRICTIONS

The following Land Use Restrictions are hereby imposed on the Brownfields Property that is the subject of this survey plat, and shall remain in force in perpetuity unless canceled by the Secretary of the North Carolina Department of Environment and Natural Resources (DENR) (or its successor in function), or his/her designee, after the hazards have been eliminated, pursuant to NCGS § 130A-310.35(e):

1. No use may be made of the Brownfields Property other than for mixed commercial uses, including retail, flex space, warehousing, office, church and conference/convention/events center purposes.

2. Surface water and groundwater at the Brownfields Property may not be used for any purpose without the approval of DENR or its successor in function.

3. No activities that encounter, expose, remove or use groundwater (for example, installation of water supply wells, fountains, ponds, lakes or swimming pools, or construction or excavation activities that encounter or expose groundwater) may occur on the Brownfields Property without prior sampling and analysis of groundwater to the satisfaction of DENR or its successor in function in any areas proposed for such activities, and submittal of the analytical results to DENR or its successor in function. If such results disclose to DENR or its successor in function contamination in excess of North Carolina's groundwater quality standards, the proposed activities may not occur without the approval of DENR or its successor in function on such conditions as DENR or its successor in function imposes, including at a minimum compliance with plans and procedures, approved pursuant to applicable law, to protect public health and the environment during the proposed activities.

4. Soil underlying existing paved or other man-made impervious surfaces and buildings at the Brownfields Property, as reflected on this survey plat, may not be exposed without prior sampling and analysis of such soil to the satisfaction of DENR or its successor in function, and submittal of the analytical results to DENR or its successor in function. A party proposing exposure of soil underlying paved surfaces and buildings may request that DENR or its successor in function make a determination that previous sampling results are sufficient. If the sampling results disclose contamination that DENR or its successor in function determines is capable of making the Brownfields Property unsuitable for the uses specified in Land Use Restriction 1 above, the soil may not be exposed without the approval of DENR or its successor in function on such conditions as

LUR no. 4 continued

DENR or its successor in function imposes. Such conditions shall include, at a minimum, compliance with plans and procedures designed to protect public health and the environment during the activities that would expose such soil and approved pursuant to applicable law. If DENR determines the exposed soil contains contamination capable of making the Brownfields Property unsuitable for the uses specified in Land Use Restriction 1 above, then as much soil as DENR requires shall be removed and disposed in accordance with applicable law, and any other actions DENR reasonably requires to make the Brownfields Property suitable for the uses specified in Land Use Restriction 1 above shall be taken. Alternatively, if DENR determines that such soil contamination is not capable of making the Brownfields Property unsuitable for the uses specified in Land Use Restriction 1 above if left in place, DENR may require the soil contamination to be capped, with perpetual maintenance of the cap to the satisfaction of DENR, or treated to DENR's satisfaction.

5. No mining may be conducted on or under the Brownfields Property, including, without limitation, extraction of coal, oil, gas or any other minerals or non-mineral substances.

6. In order to address potential vapor intrusion, no basements may be constructed on the Brownfields Property unless they are, as determined by DENR or its successor in function, vented in accordance with applicable building codes, and any structures placed on the Property must be constructed or retrofitted in a manner that will prevent or mitigate, to DENR's written satisfaction, unacceptable indoor air quality

7. None of the contaminants known to be present in the environmental media at the Brownfields Property, including those listed in paragraph 7 of Exhibit A to the documentary component of the Notice of Brownfields Property, to which a reduction of this survey plat is Exhibit B, may be used or stored at the Brownfields Property without the prior approval of DENR or its successor in function, except in *de minimis* amounts for cleaning and other routine housekeeping activities.

8. The Brownfields Property may not be used as a park or for sports of any kind, including, but not limited to, golf, football, soccer and baseball, without the approval of DENR or its successor in function. For purposes of this Land Use Restriction 8., outdoor and indoor common open space areas associated with mixed commercial uses shall not be considered parks.

9. Neither day care facilities nor schools, whether associated with another institution or not, nor playgrounds are permitted on the Brownfields Property without the approval of DENR or its successor in function.

10. No party conducting environmental assessment or remediation at the Brownfields Property at the direction of, or pursuant to a permit or order issued by, DENR, may be denied access to the Brownfields Property for purposes of conducting such assessment or remediation.

11. During January of each year after Exhibit A to the documentary component of the Notice of Brownfields Property, to which a reduction of this survey plat is Exhibit B, becomes effective, the then current owner of any part of the Brownfields Property shall submit a notarized Land Use Restrictions Update to DENR or its successor in function certifying that the Notice of Brownfields Property containing these Land Use Restrictions remains recorded at the Wake County Register of Deeds office, and that the Land Use Restrictions are being complied with.

SURVEY PLAT – EXHIBIT B
to the Notice of Brownfields Property
PARKER–HANNIFIN FACILITY
TOWN OF WAKE FOREST, WAKE CO NC
APRIL 1, 2004 SCALE 1"=100'

BAR GRAPH: inch = 100 ft.
DRAWING FILE NAME: PARKER_BROWNFIELD.dwg

UNLESS THIS MAP IS SIGNED, SEALED AND DATED, THIS IS A PRELIMINARY PLAT, NOT FOR RECORDING, SALES OR CONVEYANCE.

murphy GEOMATICS
Professional Land Surveying
8308 J. Richard Drive (919) 787-7873
Raleigh NC 27617-6801 FAX 881-8573

Legal Description

BEGINNING at an existing iron pipe in the western edge of Wake Union Chapel Road, said iron pipe having N.C. Grid Coordinates NAD "83" Y = 247951.012 m and X = 651241.551 m; thence leaving said right of way and running with the eastern line of that certain parcel of land now or formerly owned by Swift County 153 Partnership N 45° 03' 51" W 547.96 feet to an existing iron pipe in the southeastern corner of that certain parcel of land now or formerly owned by St. Ives Commercial Properties, LLC; runs thence N 45° 05' 29" W 620.88 feet with the eastern line of the aforementioned parcel of land now or formerly owned by St. Ives Commercial Properties, LLC to an existing iron pipe in the southern line of that certain parcel now or formerly owned by St. Ives, LLC; runs thence N 44° 51' 32" E 1199.94 feet with the southern line of the aforementioned parcel of land now or formerly owned by St. Ives, LLC to an existing iron pipe in the western line of that certain parcel of land now or formerly owned by St. Ives Commercial Properties, LLC; runs thence with the western line of the immediately aforementioned parcel now or formerly owned by St. Ives Commercial Properties, LLC S 45° 04' 17" E 1115.67 feet to an existing iron pipe; runs thence S 71° 19' 48" W 75.0 feet to an existing iron pipe in the western edge of the right of way of Wake Union Chapel Road; runs thence with the western edge of the right of way of Wake Union Chapel Road the following four courses and distances: (i) on a curve having a radius of 130.00 feet as turns to the LEFT an arc length of 135.14 feet, said curve having a chord bearing of S 65° 24' 59" W and a chord distance of 129.14 feet to a point; (ii) thence S 35° 38' 08" W 673.57 feet to a point on a curve; (iii) thence with said curve having a radius of 1879.86 feet as it turns to RIGHT an arc length of 318.00 feet, said curve having chord bearing of S 40° 28' 54" W and a chord distance of 317.82 feet to a point; and (iv) thence S 45° 19' 40" W 30.26 feet to be the POINT AND PLACE of BEGINNING. Said described tract being shown on that certain survey entitled "Survey Plat – Exhibit B to the Notice of Brownfields Property Parker-Hannifin Facility" dated April 1, 2004, by Jonathan F. Murphy, Registered Land Surveyor.

Appendix F.
Revised Closure Plan (2008)

Prepared for:
Parker Hannifin Corporation
Cleveland, Ohio

Revised Closure Plan
Sand Filter Beds (SWMU #16)
Parker Hannifin Facility
Wake Forest, North Carolina
EPA ID No. NCD 002 591 014

ENSR Consulting and Engineering (NC), Inc.
February 2008
Document No.: 05303-025-700

ENSR | AECOM

Prepared for:
Parker Hannifin Corporation
Cleveland, Ohio

Revised Closure Plan
Sand Filter Beds (SWMU #16)
Parker Hannifin Facility
Wake Forest, North Carolina
EPA ID No. NCD 002 591 014

_____
Prepared By:

Matt Allen, P.G.
Project Geologist

_____
Reviewed By

David H. Simpson, P.G.
Program Manager

ENSR Consulting and Engineering (NC), Inc.
February 2008
Document No.: 05303-025-700

ENSR | AECOM

Contents

1.0 Introduction 1-1

1.1 Facility Conditions 1-1

1.2 Overview of Proposed Closure Activities 1-2

2.0 Closure Activities – Field Implementation 2-1

2.1 Goals and Constraints for Revised Closure Plan 2-1

2.2 Pre-Mobilization 2-1

2.2.1 Erosion and Sediment Control Plan 2-1

2.2.2 Health and Safety Plan 2-1

2.2.3 Hauling Roads 2-2

2.2.4 Volume of Excavated Material 2-2

2.2.5 Dust Monitoring and Control 2-2

2.3 Post Excavation Backfilling 2-2

3.0 Construction of RCRA Cap 3-1

4.0 Waste Management Plan 4-1

4.1 Waste Characterization 4-1

4.2 Transportation and Disposal 4-2

5.0 Decontamination Plan 5-1

5.1 Decontamination Areas 5-1

5.2 Personnel Decontamination Station 5-1

5.3 Truck and Large Equipment Decontamination 5-1

5.4 Decontamination Procedures 5-1

5.5 Disposal of Decontamination Water and Expendables 5-2

6.0 Closure Certification 6-1

6.1 Certification of Closure 6-1

6.2 Survey Plat and Notice to Local Land Use Authority 6-1

6.3 Post Closure Notices 6-1

6.3.1 40 CFR 264.119 (a) 6-1

6.3.2 40 CFR 264.119 (b) 6-2

List of Tables

Table 1 – Schedule of Closure – Post Closure Implementation Tasks

List of Figures

Figure 1 Site Location

Figure 2 Site Plan

Figure 3 NEBA and SWMU #16 Locations

Figure 4 SWMU #16 RCRA CAP Design

List of Appendices

Appendix A Photograph of SWMU #16- Former Filter Bed Structures (Current Conditions)

1.0 Introduction

ENSR Consulting and Engineering (NC) Inc. (ENSR) has prepared this Revised Closure Plan on behalf of Parker Hannifin Corporation (Parker) to address changes required in the configuration of the RCRA Cap (SWMU#16). This facility is regulated under a RCRA Part B Post Closure Permit (Permit). Parker is required to provide post closure care and corrective action at this facility under the RCRA Permit issued in June 2006. The regulated unit addressed in the Permit is the SWMU#16, former filter bed units, which were closed in 1986. Changes to the configuration of the SWMU#16 are required due to redevelopment and construction-related activities proposed for the former Parker facility. The changes in the configuration of the SWMU#16 Cap will be conducted concurrently with interim action soil excavation procedures conducted in the northeast building area (NEBA) as outlined in a separate workplan currently under development by ENSR and Parker titled *Interim Measure – Northeast Building Area Workplan* (ENSR, 2007).

This Revised Closure Plan is being submitted to the North Carolina Department of the Environment and Natural Resources (NCDENR), Hazardous Waste Section, to present the following: methods of site preparation and setup, health and safety oversight, excavation and removal of material in the SWMU#16 area, off-site disposal of contaminated soil, post-excavation restoration of the excavated area, and construction of a new RCRA Cap for the SWMU#16.

1.1 Facility Conditions

The Site is located at 12415 Capital Boulevard in Wake Forest, Wake County, North Carolina as illustrated on **Figure 1**. The Site currently consists of the concrete slab and foundation of the former manufacturing building located on an approximately 30 acre parcel (**Figure 2**). The current property owner has demolished the building and is working to remove portions of the concrete slab and asphalt surfaces not related to active SWMUs/AOCs. No concrete pads or asphalt will be removed from SWMUs/AOCs until the implementation of this workplan.

The plant was constructed in 1964 for the manufacture and distribution of air control devices. The property was owned by the Industrial Development Corporation (IDC) of the Town of Wake Forest and leased to Scovill Manufacturing Company, a company later purchased by Parker in 1986. Site manufacturing operations used chlorinated solvents, primarily trichloroethene (TCE), to degrease machined parts. Manufacturing operations ceased in January 2002, after which remaining process materials and equipment were removed. The property was purchased by St. Ives Commercial 220, LLC (St. Ives) from the IDC in 2006.

Parker operated a wastewater treatment facility used to treat wastewater from metal plating and cleaning operations. Two sand filter beds were used for collecting metal hydroxide sludge generated by the treatment system. The two sand filter bed structures are approximately square boxes constructed of concrete block, approximately five feet tall and with dimensions of twelve feet by fifteen feet. The filter beds were taken out of service in November 1985 and subsequently closed in accordance with an approved Closure Plan in October 1986. The Closure of the beds involved removal of contaminated materials within the filter bed structures and immediately below the structures, 2) backfilling the filter bed structures with clean fill, and 3) capping the filter bed structures with an impermeable concrete cap.

1.2 Overview of Proposed Closure Activities

The proposed redevelopment activities at the former Parker facility include re-grading the site. The proposed new elevation in the vicinity of SWMU#16 is below the base of the sand filter structures (Figure 3). In response to the proposed changes in site elevation in this area, Parker plans to remove the existing concrete caps; the concrete block walls and footings for each structure; the clean gravel placed in the SWMU structure during closure; and soils immediately adjacent to the block walls and footings. Subsequently, a replacement RCRA Cap will be installed over SWMU#16 at the new lower elevation.

The overall Closure Performance Standards are summarized in 40 CFR 264.111.

"The Owner of Operator must close the facility (in this case SWMU#16) in a manner that:

(a) Minimizes the need for further maintenance; and
(b) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; and
(c) Complies with the closure requirements of this subpart …(in particular 264.228, Closure and Post Closure Care for Surface Impoundments) "

2.0 Closure Activities – Field Implementation

The Revised Closure Plan for SWMU#16 includes a combination of surface soil removal, removal of concrete block wall and concrete structures (the former filter beds), characterization and disposal of the materials, and installation of a new RCRA Cap. The following sections describe specific activities associated with the field implementation of this Revised Closure.

2.1 Goals and Constraints for Revised Closure Plan

The goal of the Revised Closure Plan is to remove the filter bed structures and restore the RCRA Cap over SWMU#16 at a lower elevation. The redevelopment activities call for the elevation in the vicinity of SWMU#16 to be approximately 390 feet above mean sea level (ft msl). The implementation of the Revised Closure Plan will establish the new RCRA Cap with a top elevation of approximately 390 ft msl. The excavation in this area will be slightly deeper to facilitate the installation of proper structural foundation layers beneath the new RCRA Cap.

2.2 Pre-Mobilization

The following sections address items that will be performed prior to the implementation of the Revised Closure Plan. As noted previously, the implementation of the Revised Closure Plan will be conducted concurrently with the proposed interim measure of soil excavation in the NEBA. Some of the following activities will be required and/or implemented in response to the interim action workplan.

2.2.1 Erosion and Sediment Control Plan

Because surface soil removal activities will disturb greater than one acre of land (based on the concurrent implementation of the NEBA Workplan), an erosion and sediment control plan is needed. ENSR and Parker will prepare the plan, and the current property owner will assist with submitting the plan and obtaining approval from the local authorities. The property owner will revise and update the plan as needed to address the other subsequent redevelopment activities under their direction. This plan would be submitted to the Town of Wake Forest at least 30 days prior to initiation of field implementation measures outlined herein.

2.2.2 Health and Safety Plan

The site-specific Health and Safety Plan (HASP) for this project will be updated prior to the initiation of the Site activities described herein. During field implementation activities, an ENSR representative will act as the Site Safety Officer (SSO) responsible for monitoring daily activities and enforcing the requirements of the HASP. Site controls will be imposed as necessary to limit potential contamination exposure to workers, protect the public and the surrounding natural environment from site hazards, and prevent unauthorized entry in accordance with the HASP.

The work area will be divided into three zones: 1) Exclusion Zone; 2) Contamination Reduction Zone; and 3) Support Zone. The exclusion zone is the immediate area around the active work area (i.e., excavation) where the greatest potential hazards are anticipated. The contamination reduction zone is an area adjacent to the exclusion zone where decontamination of personnel and equipment staging will occur. The support zone is the area outside both the exclusion and contamination reduction zones where support materials, equipment and vehicles will be stored. The final location and boundaries of each of these zones will be determined at the

site prior to soil removal work, and may be modified during the performance of the work based upon criteria established in the HASP. Fencing will be installed and used as necessary to control unauthorized entry. At the end of each work day, security fencing will be properly secured and locked.

2.2.3 Hauling Roads

Truck traffic required for the removal and transport procedures will be restricted to specific hauling routes. Existing concrete and asphalt areas will be utilized to the extent possible. When necessary, crushed stone will be placed along the proposed hauling routes to allow vehicle traffic. The current property owner has demolished the building and is working to remove portions of the concrete slab and asphalt surfaces not related to active SWMUs/AOCs. No concrete pads or asphalt will be removed from SWMUs/AOCs until the implementation of this workplan.

2.2.4 Volume of Excavated Material

The material within the filter bed structures will be removed. Along with soils adjacent to the footings, down to an elevation of approximately 388 ft msl. An estimated 20 to 30 cubic yards of soil adjacent to the walls and footings will be removed. The estimated volume of backfill material to be removed from within the concrete block filter bed structures is 103 cubic yards, as determined by the following calculations.

1. Cross-section area of soil to be removed equals 93 square feet.
2. Length of sand filter bed excavation = 30 feet.
3. Volume of soil = area X length

   = 93' X 30'

   =2790 cubic feet or 103 cubic yards

2.2.5 Dust Monitoring and Control

Dust potentially generated during excavation, stockpiling, and loading will be minimized. The proposed handling practices provide for the minimization of fugitive dust by minimizing the number of times the soil is handled. The excavated material handling will be conducted in the controlled exclusion zone. Fugitive dust emissions will be controlled by spraying water as necessary. Water for dust control will be obtained from local water supply sources or decontamination water. Appropriate measures will be taken during spraying to prevent surface runoff and/or accumulation of excess water in the excavations. Dust monitoring will be according the methodology outlined in the HASP.

2.3 Post Excavation Backfilling

After soils have been excavated to approximately 388 feet, the excavation will be backfilled with approximately 1.5 feet of structural backfill as required to properly support the proposed RCRA Cap. Backfill will consist of clean soil (obtained either on-site or off-site) and will be compacted in 6-inch lifts to a minimum of 95 percent density as measured using the standard proctor test.

3.0 Construction of RCRA Cap

The SWMU#16 closure procedures and the RCRA Cap (final cover) for SWMU#16 will meet the performance standards for final cover systems contained in 40 CFR 264.228 (a) (2). This section states that "At closure, the owner or operator must:

(iii) Cover the surface impoundment with a final cover designed and constructed to:

(A) Provide long-term minimization of the migration of liquids through the closed impoundment;

(B) Function with minimum maintenance;

(C) Promote drainage and minimize erosion or abrasion of the final cover;

(D) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(E) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

After compaction is complete, a new RCRA Cap will be installed over the SWMU#16 area (Figure 3). The RCRA Cap will be a reinforced concrete slab constructed to minimize infiltration of surface water through SWMU#16, designed in accordance with **Figure 4**. Concrete will have a minimum strength of 4,000 pounds per square inch compressive strength at 28 days. The slab will be 7 inches thick in the center and taper evenly across its surface to 5 inches thick along the sides. The slab will be 16.5 feet wide by 32.5 feet long, which will cover the footprint of the existing SWMU#16 covers. The edge of the slab will be flush with the surface grade, which will slope away from the slab. The slab will be reinforced by a steel grid comprised of No. 4 steel rebar wired together on approximately 8 inch centers. Beneath the slab, compacted #57 stone will be used as a foundation and as a drainage layer. Both the stone layer and the concrete slab will rest on top of the compacted backfill. After smoothing the slab, the surface will be treated with a cementitious waterproofing (e.g. Xypex or equivalent) according to manufacturers instructions. See **Figure 4** for additional details specifying the foundation layer and construction of the concrete cap.

Based on the current development plan, the RCRA Cap will be isolated from the rest of the development and will not be incorporated into any other use (e.g.; parking lot surface or building foundation). If development plans change such that the use of the area adjacent to the RCRA Cap are impacted, Parker will contact the HWS to discuss revisions and/or changes which may be required.

4.0 Waste Management Plan

Soils excavated from the SWMU#16 area, along with backfill and debris from the filter bed structures, will be managed based on the NCDENR Hazardous Waste Section (HWS) Contained-In Policy. The materials will be handled as Hazardous Waste materials until after waste characterization procedures are complete, at which time the materials will be properly disposed of offsite. The materials will be initially staged in lined, covered roll-off boxes. Samples will be collected and analyzed from these roll-off boxes to meet the disposal requirements for the selected hazardous waste disposal facility. Debris and excavated soil that are classified as hazardous waste will be transported offsite for proper disposal within 90 days from the date that the wastes were generated.

The materials will fall into one of three categories within the NCDENR HWS Contained-In Policy, based on the results of the Waste Characterization sampling and analysis. The material will be managed according to the following general guidelines:

1) Materials containing contaminants of concern (COCs) at concentrations below the criteria for unrestricted use (Unrestricted Materials) will be kept onsite and will be used for backfill, or will be properly disposed of offsite. Some volume of soils within this category may be generated as the result of sloping and benching of the excavations for health and safety reasons.
2) Materials containing COCs at concentrations above the criteria for unrestricted use, but below the maximum concentration allowed for disposal in a MSWLF (Landfill Materials) will be transported offsite for disposal at an appropriate facility. These materials may require limited short term staging onsite in order to coordinate proper authorizations and transportation.
3) Materials containing COCs at concentrations above the criteria for disposal in a MSWLF (Hazardous Materials) will be transported offsite for disposal at an appropriate hazardous waste disposal facility. These materials may require limited short term staging onsite in order to coordinate proper authorizations and transportation. Samples will be collected and analyzed from these roll-offs to meet the disposal requirements for the selected hazardous waste disposal facility.

The soils and backfill material at SWMU#16 were contaminated with listed hazardous waste (F006 and F008), therefore the disposal of that soil must be in compliance with Land Disposal Restrictions (40 CFR 268.48 and 40 CFR 268.49) along with the NCDENR-HWS Contained In/Contained Out Policy. The excavated materials will be evaluated and compared to the appropriate standards to determine if they require treatment prior to disposal. Based on the depth of excavation completed during the original SWMU#16 closure procedures in 1986, and the soil sampling that has previously been completed adjacent to SWMU#16, Parker does not anticipate that the soils excavated during the implementation of the Revised Closure Plan (outlined herein) will contain high concentrations of targeted compounds or be characteristically hazardous.

4.1 Waste Characterization

Waste characterization sampling will be performed on all materials. Each roll-off box containing materials will be sampled at two locations (from the middle or lower portion of the box) using a hand-auger. For roll-offs containing concrete block and concrete debris, samples will be extracted from the material. The samples will be submitted to a North Carolina certified laboratory for the analysis of volatile organic compounds (VOCs) and RCRA metals by toxicity characteristic leaching procedure (TCLP) by United States Environmental Protection

Agency (USEPA) Method 1311 on a 48-hour turnaround. Following receipt of the analytical data, the soil will be transported to a North Carolina permitted facility for disposal.

4.2 Transportation and Disposal

The disposal contractor shall require all personnel who handle or are occupationally exposed to soils or waste generated during the cleanup and decontamination operations to utilize level "D" personnel protective equipment. Waste manifests will be completed for each truck load and will include the following: vehicle identification number, manifest number, driver identification, date and time of departure, and approximate volume hauled.

Excavated material will be transported by an EPA-licensed waste hauler certified to transport both non-hazardous and hazardous waste materials. Soil transportation will be conducted in accordance with the applicable regulations, including the requirements of the U.S. Department of Transportation (USDOT). Materials transporters will be appropriately licensed, permitted, and in compliance with applicable regulations. If necessary, signage, flagmen, or similar controls will be maintained in areas where removal work impedes local traffic.

5.0 Decontamination Plan

This decontamination plan provides procedures to decontaminate equipment, reduce cross-contamination, and reduce contaminants from being imported or exported from the Site during the execution of the work described herein. Decontamination procedures will follow EPA protocols.

5.1 Decontamination Areas

The work area will be divided into the following three zones:

- the exclusion zone ("hot zone");
- the contamination reduction zone; and
- the support zone.

The exclusion zone is the immediate area around the active work area (i.e., excavation) where the greatest potential hazards are anticipated. The contamination reduction zone is an area adjacent to the exclusion zone where decontamination of personnel and equipment staging occurs. The support zone is the area outside both the exclusion and contamination reduction zones where clean support materials, equipment and vehicles are stored. The final location and boundaries of each of these zones will be determined at the site prior to excavation work, and may be modified during the performance of the work based upon criteria established in the HASP.

5.2 Personnel Decontamination Station

A personnel decontamination (decon) station will be set up within the project site. This decon station will provide for the decontamination of personnel, hand tools and instruments. If water-based decon equipment and/or wastewater holding containers are required for decon, they will be provided and maintained at this decon station.

5.3 Truck and Large Equipment Decontamination

A decon station for large equipment will also be constructed. Before trucks leave the exclusion zone, they will stop for inspection at the decon area. If required, truck tires will be decontaminated before the truck exits the exclusion zone and departs the Site. At the completion of the soil and solid waste removal, vehicles, equipment, and machinery which have worked within the exclusion zone will be decontaminated prior to leaving the exclusion zone.

The decon station will be constructed by berming an area of approximately 20' x 20' and lining the area with an impervious liner. Berms will be constructed of clean soil, straw bales, timber, etc., and used to secure the impervious liner. A prefabricated decontamination pad may also be used.

5.4 Decontamination Procedures

Decontamination of heavy machinery, excavation equipment, bucket loaders, dump trucks, track hoes, etc. will be completed prior to departing the exclusion zone. Personal protective equipment (PPE) will be worn during the decontamination of equipment. Expendable PPE (Tyvek suits, gloves, etc.) from decontamination and

excavation activities is to be collected and stored on-site for subsequent disposal. If required, water generating equipment, detergents, and/or cleaning agents will be used during the decon process. Sampling equipment and reusable PPE equipment will be decontaminated in accordance with procedures outlined in the HASP.

5.5 Disposal of Decontamination Water and Expendables

At the conclusion of the project containers of soil material will be properly managed and disposed of by ENSR or its subcontractors, on behalf of Parker. Rinse water resulting from decontamination activities will be containerized on-site and sampled for VOCs, Site Permit defined metals (Arsenic, Barium, Cadmium, total Chromium, Copper, Nickel, Selenium, Silver, Zinc, and Mercury) and 1,4-dioxane. The appropriate disposal of the rinse water (either onsite through the groundwater treatment system or offsite) will be determined based on the sampling results. Used PPE will be disposed as non-hazardous waste.

6.0 Closure Certification

Upon completion of the implementation of this Revised Closure Plan for the former sand filter beds (SWMU#16), Parker will complete the require closure certification and notification tasks as outlined in the following sections.

6.1 Certification of Closure

Within 60 days after completion of the implementation of the Revised Closure Plan, Parker will submit to the Regional Administrator, by registered mail, a certification that SWMU#16 has been closed in accordance with the specifications in the approved Closure Plan (40 CFR 264.115 - Certification of Closure). The written Certification of Closure shall be prepared by an independent registered professional engineer and shall be signed by the RCRA Permittee and by the certifying engineer. This certification shall be transmitted to the NCDENR-HWS within 60 days after the closure date. An attachment to the Certification of Closure will be provided which will provide the following information:

1. The volume of soil, backfill, and debris removed;
2. A description of the method of waste hauling and transport;
3. Waste manifest numbers for removal of waste material;
4. A description of the sampling and analysis methods used;
5. A chronological summary of the closure activities;
6. Photographic documentation of closure; and
7. Tests performed, methods and results.

6.2 Survey Plat and Notice to Local Land Use Authority

A survey plat will be submitted no later than 60 days after the implementation of the Revised Closure Plan to the local zoning authority of the authority with jurisdiction over local land use, and to the NCDENR-HWS. This survey plat will indicate the location and dimensions of the RCRA Cap (final cover) on SWMU#16 with respect to a permanently surveyed benchmark. This plat will be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or authority with jurisdiction over local land use will contain a note, prominently displayed, stating the owner's/operator's obligation to restrict disturbance of the final cover and the area of SWMU#16.

6.3 Post Closure Notices

Within 60 days after the Certification of Closure of SWMU#16, Parker will address the following Post Closure Notices

6.3.1 40 CFR 264.119 (a)

No later than 60 days after certification of closure of SWMU#16, Parker will submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the NCDENR-HWS, a record of the type, location, and quantity of hazardous wastes remaining in the closed unit (SWMU#16).

6.3.2 40 CFR 264.119 (b)

Within 60 days of Certification of Closure of SWMU#16, Parker will:

(1) Record, in accordance with State Law, a notation on the deed to the facility property – or on some other instrument which is normally examined during title search – that will in perpetuity notify any potential purchaser of the property that:

(i) The land has been used to manage hazardous wastes; and

(ii) Its use is restricted under 40 CFR Subpart G regulations; and

(iii) The survey plat and record of the type, location and quantity of hazardous wastes remaining in SWMU#16 have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Regional Administrator.

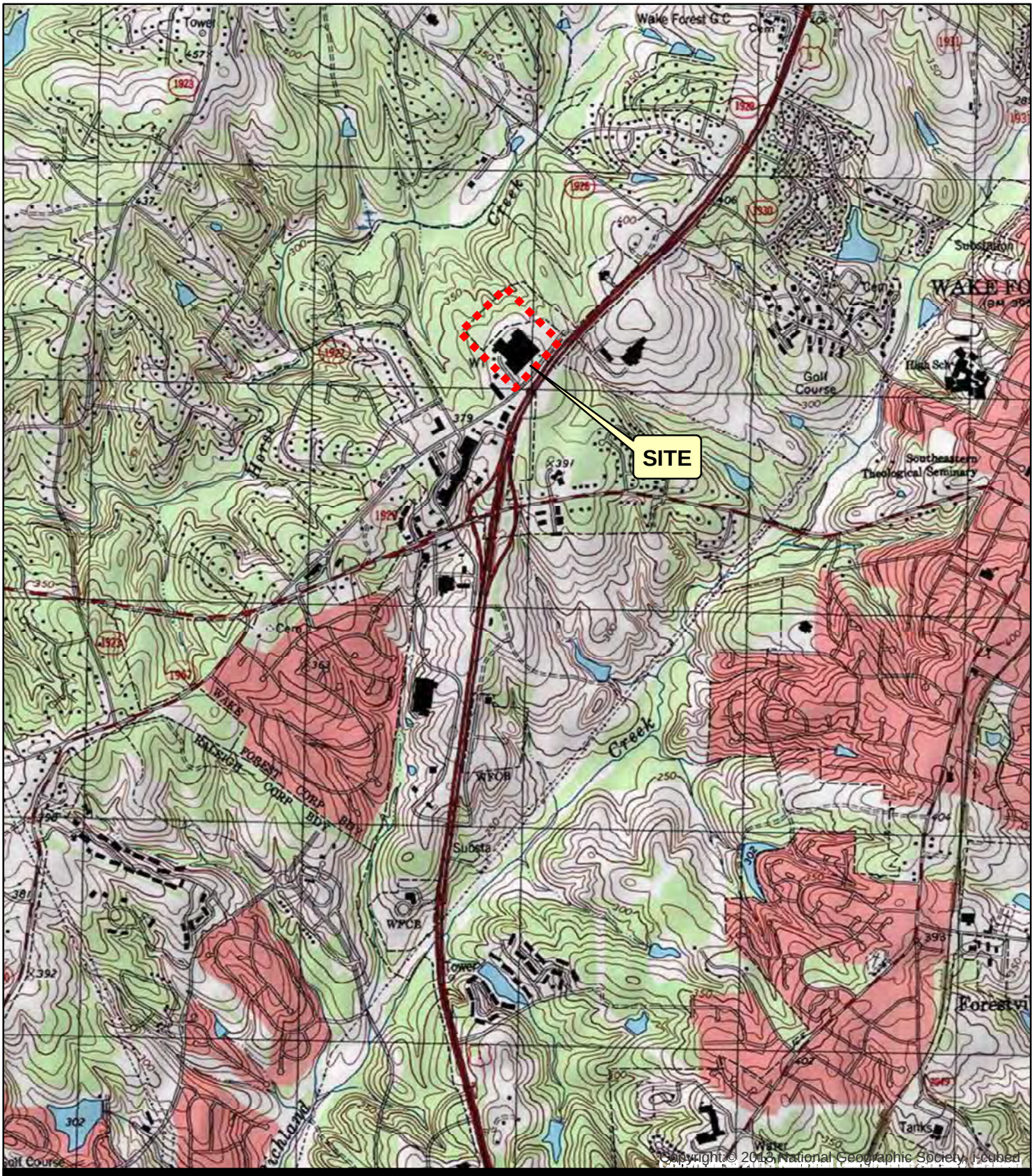
(2) Submit a certification, signed by the owner or operator, that he has recorded the notation specified above {(1)(iii)} including a copy of the document in which the notation has been placed, to the Regional Administrator.

Tables

Table 1
Schedule of Closure / Post Closure Implementation Tasks

Weeks After NCDENR-HWS Approval of Closure Plan / Post Closure Plan Workplans																				
TASK/EVENT	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
NCDENR Issues Approval of Workplans																				
Public Comment Period																				
Public Meeting																				
Final NCDENR Approval of Permit Modifications																				
Planning - Staging for Closure Plan Implementation																				
Field Implementation - Closure Plan																				
Laboratory Analytical Time																				
Disposal Coordination																				
Transportation/Disposal of Soils																				
Submission of Certification of Closure																				
Preparation/Submission of Survey Plat																				
Post Closure Notifications																				
Record Notice in Deed																				
Certification to NCDENR - Deed Recording Complete																				

Figures



Map Location

Site Location Map

Former Parker Hannifin Corp. Facility
Wake Forest, North Carolina

N
W E
S

0 2,000 4,000 Feet 1:24,000

USGS Topographic Quadrangle Wake Forest (1983) 60489813

Figure 1

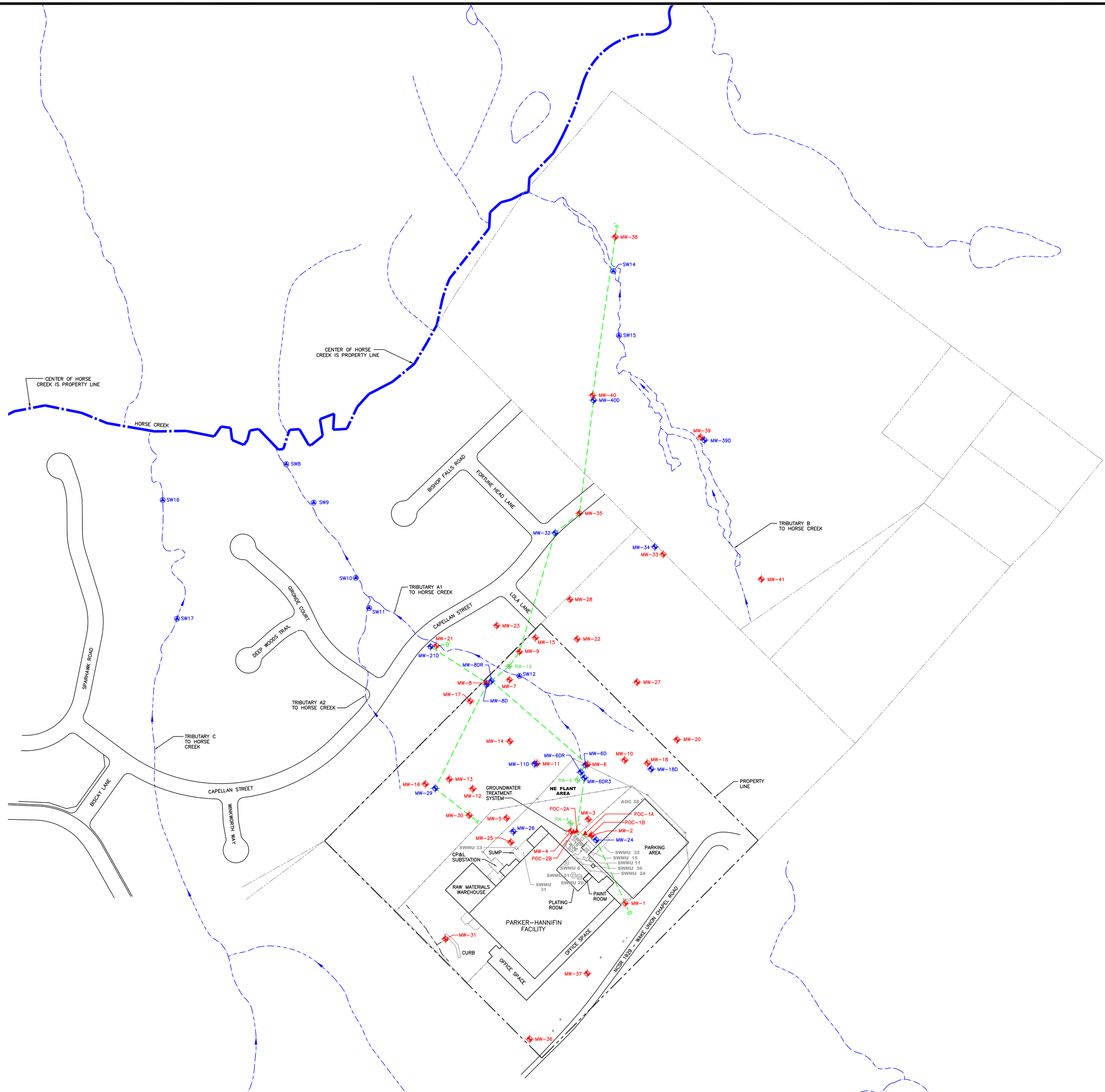
AECOM

AECOM
1600 Perimeter Park Driv,
NC 27560 Phone: (919)
461-1100 Fax: (919)
461-1415
www.aecom.com

X:\DCS\Projects\L-AECOM\Geomatics\GIS\Projects\P\Parker_Hannifin\Wake_Forest_NC\MXD\Figure_1-1_Site_Location_Topo_2016.mxd

LEGEND

- PARKER–HANNIFIN SITE PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- CREEK WITH FLOW DIRECTION
- FENCE
- OH — OVERHEAD POWER LINES
- MW–14 — MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- MW–11D — MONITORING WELL COMPLETED IN BEDROCK
- RW–4 — RECOVERY WELL
- POC–2A — POINT OF COMPLIANCE MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- SW9 — SURFACE WATER SAMPLE LOCATION
- SWMU 32 — SOLID WASTE MANAGEMENT UNIT
- A — A' — CROSS SECTION TRANSECT LINE



SOURCE:
BASE MAP CREATED FROM "BOUNDARY RETRACEMENT" DONE BY MURPHY & SACKS, PROFESSIONAL LAND SURVEYORS, 6308 J. RICHARD DR., RALEIGH, NORTH CAROLINA, DATED OCTOBER 2002. WELL LOCATIONS WERE NOT INCLUDED IN SURVEY, AND ARE APPROXIMATE.

200 0 200 400
SCALE IN FEET
1" = 200'

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: JLD
CHECKED BY:
APPROVED BY:

ENSR | AECOM
ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7586
WEB: HTTP://WWW.ENSR.AECOM.COM

SITE PLAN WITH CROSS–SECTION TRANSECTS

Parker–Hannifin
Wake Forest, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1"=200'	9/17/07	05303–025–0700

FIGURE NUMBER:
2

DRAWING NUMBER:
B70700D

LEGEND

- 390 — TOPOGRAPHIC CONTOUR LINE
- FENCE
- UNDERGROUND GROUNDWATER CONVEYANCE LINE
- LIMITS OF EXCAVATION/BACKFILL
- MW–14 — MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- MW–11D — MONITORING WELL COMPLETED IN BEDROCK
- RW–4 — RECOVERY WELL
- POC–1A — POINT OF COMPLIANCE MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- VE–3 — VAPOR EXTRACTION WELL
- SWMU 32 — SOLID WASTE MANAGEMENT UNIT
- 392 — CONCEPTUAL GRADING CONTOURS FROM KIMLEY–HORN AND ASSOCIATES, INC., P.O. BOX 33068, RALEIGH, NORTH CAROLINA DATED MAY 2, 2007

20 0 20

SCALE IN FEET
1" = 20'

SOURCE:
BASE MAP CREATED FROM "BOUNDARY RETRACEMENT" DONE BY MURPHY & SACKS, PROFESSIONAL LAND SURVEYORS, 6308 J. RICHARD DR., RALEIGH, NORTH CAROLINA, DATED OCTOBER 2002. WELL LOCATIONS WERE NOT INCLUDED IN SURVEY, AND ARE APPROXIMATE.

EXISTING GROUNDWATER TREATMENT SYSTEM

FORMER PARKER–HANNIFIN FACILITY

PLATING ROOM

PAINT ROOM

SWMU 8
SWMU 11
SWMU 13/36
SWMU 14
SWMU 15
SWMU 16
SWMU 20
SWMU 21
SWMU 23
SWMU 24
SWMU 32

SWMU #16 CAP
SEE FIG 4 FOR DETAILS

VE–3
VE–2
RW–4
RW–3 (ABANDON.)
MW–3
MW–4
MW–2
MW–24
POC–2A
POC–2B
POC–1A
POC–1B

388
390
392
394

REVISIONS

NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: JLD
CHECKED BY:
APPROVED BY:

ENSR | AECOM

ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872–6600
FAX: (919) 872–7996
WEB: HTTP://WWW.ENSR.AECOM.COM

SWMU #16 LOCATION REVISED CLOSURE PLAN

Parker–Hannifin
Wake Forest, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1"=20'	2/13/08	05303–025–0700

FIGURE NUMBER: 3

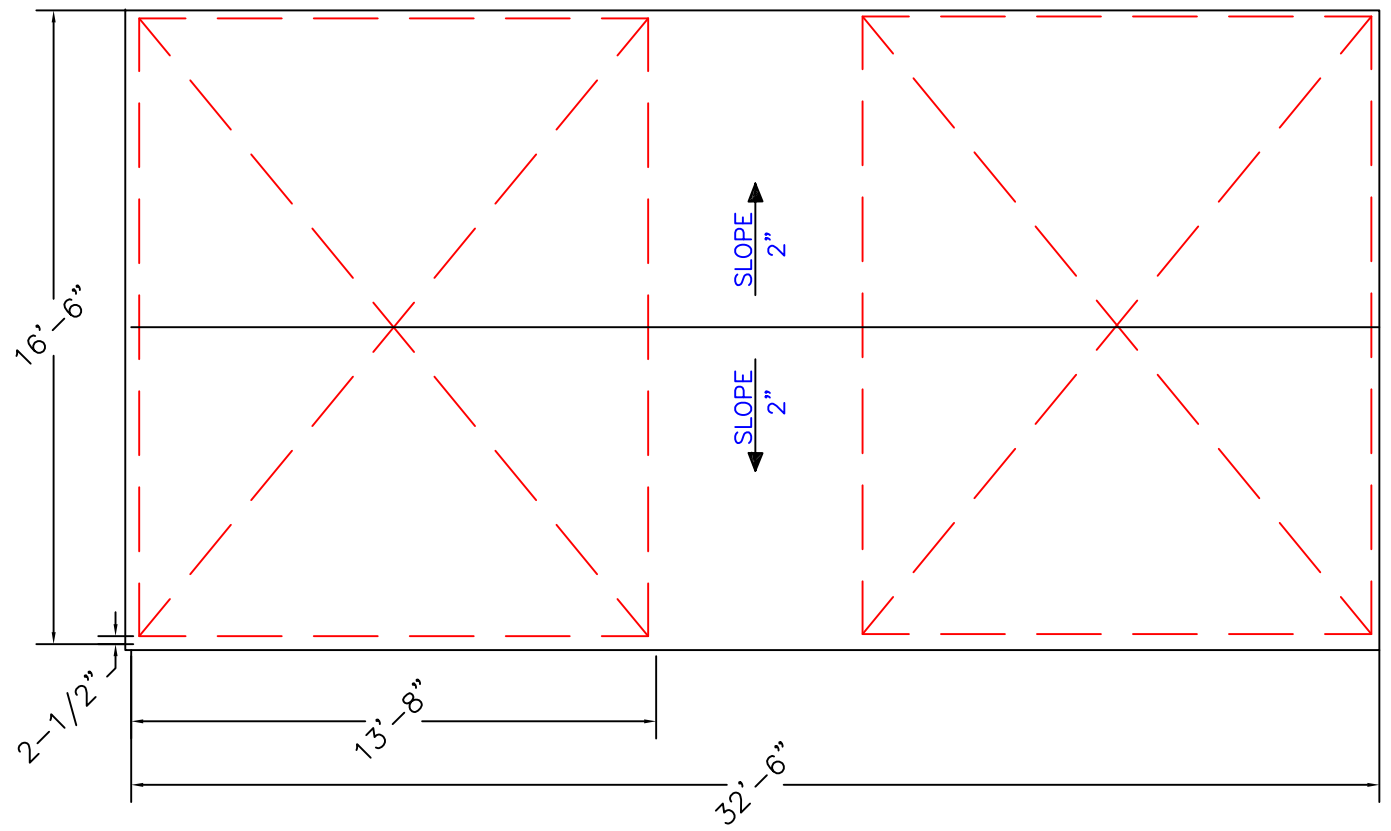
DRAWING NUMBER: B70699C

NOTES

1. No concrete shall be placed on the site until site has been approved for concrete placement by the Engineer.
2. Subcontractor will supply duplicate delivery certificates with each load of concrete verifying that the mix meets specified requirements.
3. Subcontractor will supply a copy of the Manufacturer's material certification for all materials listed on the Design Drawings.
4. Potable water is to be used for mixing at a water:cement ratio not to exceed 0.5.
5. Subgrade must be compacted to a minimum of 95% density as measured by standard proctor.
6. Stone shall be clean washed stone of sound quality meeting the gradation requirements of #57 Stone as defined by AASHTO M 43. Crushed stone foundation and drainage layer shall be at least 6 inches thick below slabs on grade.
7. Placing of reinforcement must comply with Concrete Reinforcing Steel Institute's Manual of Standard Practice.
8. Concrete must comply with ACI 304 Standard and must have a compressive strength at 28 days of 4,000 psi, slump at a minimum of 2 inches and a maximum of 4 inches, and a maximum air entrainment of 6 percent.
9. The concrete shall not be allowed dry out from the time of placement until a minimum of 10 consecutive days of curing. Curing will be done using impervious sheeting or membrane forming compound followed by an impervious sheet curing.
10. Cementitious Waterproofing: Use "Xypex" as manufactured by Xypex Chemical Corporation or equivalent.

5 0 5 10

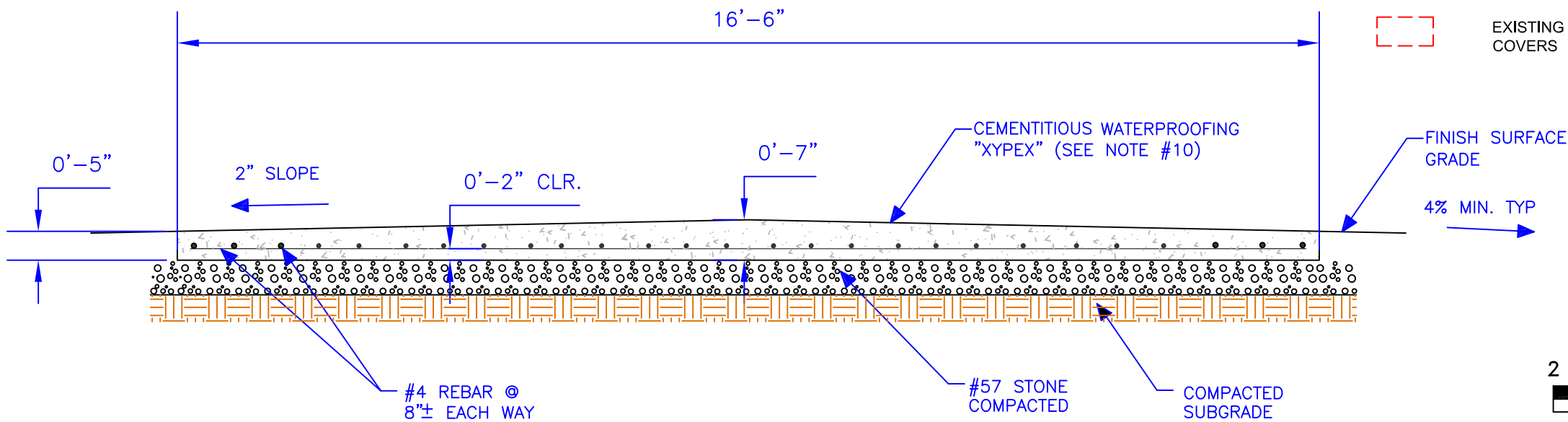
PLAN VIEW
SCALE IN FEET
1" = 5'



PLAN VIEW

LEGEND

- CONCRETE
- STONE
- SUBGRADE MATERIAL
- EXISTING CONCRETE COVERS



SECTION VIEW

2 0 2 4

SECTION VIEW
SCALE IN FEET
1" = 2'

REVISIONS

NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: JLD
CHECKED BY:
APPROVED BY:

ENSR | AECOM
ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.ENSR.AECOM.COM

SWMU #16
CONCRETE SLAB DETAIL

Parker-Hannifin
Wake Forest, North Carolina

PROJECT NUMBER: 05303-025-0700
DATE: 9/13/07
SCALE:

FIGURE NUMBER: 4

SHEET NUMBER: G70694B

Appendix A

SWMU#16 Photographs – Current Conditions

Former Filter Bed Structures
SWMU#16

Appendix G.
Revised Post-Closure Plan (2008)

Prepared for:
Parker Hannifin Corporation
Cleveland, Ohio

Revised Post-Closure Plan
Closed Sand Filter Beds (SWMU #16)
Parker Hannifin Facility
Wake Forest, North Carolina
EPA ID No. NCD 002 591 014

ENSR Consulting and Engineering (NC), Inc.
February 2008
Document No.: 05303-025-800

ENSR | AECOM

Prepared for:
Parker Hannifin Corporation
Cleveland, Ohio

Revised Post-Closure Plan
Closed Sand Filter Beds (SWMU #16)
Parker Hannifin Facility
Wake Forest, North Carolina
EPA ID No. NCD 002 591 014

_____
Prepared By:

Matt Allen, PG
Project Geologist

_____
Reviewed By:

David Simpson, PG
Program Manager

ENSR Consulting and Engineering (NC), Inc.
February 2008
Document No.: 05303-025-800

ENSR | AECOM

Contents

1.0 Introduction 1-1

1.1 Facility Conditions 1-1

2.0 Post-Closure Plan 2-1

2.1.1 Inspection Plan 2-1
2.1.2 Monitoring Plan 2-1
2.1.3 Maintenance Plan 2-1
2.1.4 Post-Closure Security 2-2
2.1.5 Post-Closure Contact 2-2
2.1.6 Miscellaneous 2-2

2.2 Notices Required for Disposal Facilities 2-2
2.2.1 Certification of Closure 2-2
2.2.2 Survey Plat and Notice to Local Land Use Authority 2-3

2.3 Post-Closure Certification 2-3

2.4 Post-Closure Cost Estimate 2-3

2.5 Financial Assurance Mechanism for Post-Closure 2-3

List of Figures

Figure 1 Site Location

Figure 2 Site Plan

1.0 Introduction

ENSR Consulting and Engineering (NC) Inc. (ENSR) has prepared this Revised Closure Plan on behalf of Parker Hannifin Corporation (Parker) to address changes required in the configuration of the RCRA Cap (SWMU#16). This facility is regulated under a RCRA Part B Post Closure Permit (Permit). Parker is required to provide post closure care and corrective action at this facility under the RCRA Permit issued in June 2006. The regulated unit addressed in the Permit is the SWMU#16, former filter bed units, which were closed in 1986. Changes to the configuration of the SWMU#16 are required due to redevelopment and construction-related activities proposed for the former Parker facility. The changes in the configuration of the SWMU#16 Cap will be conducted concurrently with interim action soil excavation procedures conducted in the northeast building area (NEBA) as outlined in a separate workplan currently under development by ENSR and Parker titled *Interim Measure – Northeast Building Area Workplan* (ENSR, 2007).

This Revised Post Closure Plan is being submitted to the North Carolina Department of the Environment and Natural Resources (NCDENR), Hazardous Waste Section, to update the following: inspection, monitoring, security, maintenance, and contacts for the former Parker Facility.

1.1 Facility Conditions

The Site is located at 12415 Capital Boulevard in Wake Forest, Wake County, North Carolina as illustrated on **Figure 1**. The Site currently consists of the concrete slab and foundation of the former manufacturing building located on an approximately 16 acre parcel (**Figure 2**). The current property owner has demolished the building and is working to remove portions of the concrete slab and asphalt surfaces not related to active SWMUs/AOCs. No concrete pads or asphalt will be removed from SWMUs/AOCs until the implementation of this workplan.

The plant was constructed in 1964 for the manufacture and distribution of air control devices. The property was owned by the Industrial Development Corporation (IDC) of the Town of Wake Forest and leased to Scovill Manufacturing Company, a company later purchased by Parker in 1986. Site manufacturing operations used chlorinated solvents, primarily trichloroethene (TCE), to degrease machined parts. Manufacturing operations ceased in January 2002, after which remaining process materials and equipment were removed. The property was purchased by St. Ives Commercial 220, LLC (St. Ives) from the IDC in 2006.

Parker operated a wastewater treatment facility used to treat wastewater from metal plating and cleaning operations. Two sand filter beds were used for collecting metal hydroxide sludge generated by the treatment system. The two sand filter bed structures are approximately square boxes constructed of concrete block, approximately five feet tall and with dimensions of twelve feet by fifteen feet. The filter beds were taken out of service in November 1985 and subsequently closed in accordance with an approved Closure Plan in October 1986. The Closure of the beds involved removal of contaminated materials within the filter bed structures and immediately below the structures, 2) backfilling the filter bed structures with clean fill, and 3) capping the filter bed structures with an impermeable concrete cap.

2.0 Post-Closure Plan

Post Closure care for SWMU#16 will begin after completion of the implementation of the Revised Closure Plan, and continue for 30 years after that date. Post Closure activities include monitoring and reporting, inspection and maintenance, and security. At any time during the post closure care of SWMU#16, the NCDENR-HWS may shorten or extend the post closure care time period (permit modification procedures would be required). A detailed discussion of the conditions associated with changing the post closure care period is detailed in 40 CFR 264.117.

2.1 Inspection Plan

The final cover system (Cap), monitoring wells, and groundwater remediation system will be inspected semi-annually during the post-closure care period. If conditions such as erosion, subsidence, etc., are noted during the inspection of the Cap, arrangements will be made to correct the deficiency. Inspection of the monitoring wells listed in Appendix B of the Hazardous Waste Management Permit (Permit) will include a semi-annual examination of the standpipe, protective cover, lock, concrete collar, and the standpipe cap. Inspection of the groundwater remediation system, as specified in Appendix C of the Permit, will include both weekly and monthly inspection items such as the control panel, tanks, pumps, valves, etc.

These inspections will be documented in an inspection log. The inspection log will include the time and date of the inspection, the name of the inspector, a notation of observations made, and the date and nature of any repairs or other actions required. Forms for inspection of the Cap, monitoring wells and groundwater remediation system are included in Appendix C of the Permit.

2.2 Monitoring Plan

Groundwater monitoring and reporting will be conducted as described in Appendices A and B of the Permit, and also in accordance with the Sampling and Analysis Plan dated August 2007.

2.3 Maintenance Plan

The cover system of the closed sand filter beds is graded so as to prevent run-on. Run-off will flow with stormwater run-off from the remainder of the facility. As the cover system will be made of concrete, and there is little topographic relief, erosion is not anticipated to be a problem. Any repairs will be inspected by a licensed P.E. to insure they restore the cap's integrity. A report of these repairs will be submitted to the Hazardous Waste Section (HWS) within 30 day of completion. Identified corrective maintenance activities will include the following:

- Repair of security control devices (fencing, etc.);
- Erosion control damage repair; and
- Correction of Cap settlement, subsidence and displacement.

2.4 Post-Closure Security

After closure activities are complete, a barrier (decorative fence or wall) will be constructed to surround SWMU #16 in order to prevent unauthorized access. Both the inside and the outside of the barrier will be inspected on a weekly basis as part of the regular weekly groundwater treatment system inspections currently required by the Permit. The barrier will be inspected for signs of damage, vandalism, attempted opening or egress, settling or other structural distortions, or other damage that could lead to a breach in security. A report of the findings of the inspection will be maintained on-site as part of the Permit Operating Record, along with the other Permit required documents. The inspection reports will be available for review during the annual RCRA inspection conducted by the NCDENR-HWS.

2.5 Post-Closure Contact

During the post-closure care period, Parker will retain the responsibility for maintaining the area around the closed sand filter beds, the inspections and repairs outlined in this section, and the monitoring and reporting outlined in the Permit. The following facility contacts are provided below:

Parker Hannifin Contact:	**ENSR Contact**
Martha Connell	David H. Simpson, PG
Parker Hannifin Corporation	ENSR Project Manager
Manager Environmental Services	7041 Old Wake Forest Road
6035 Parkland Boulevard	Suite 102
Cleveland, Ohio 44124	Raleigh, NC 27616
216-896-2710	919-872-6600
216-502-1306 (cell)	919-610-8415 (cell)

Notification of any change in personnel during the Post-Closure period will be provided within 30 days of each change. The contacts listed above will maintain a copy of the most up to date Post-Closure Plan for the duration of the Post Closure period.

2.6 Miscellaneous

Parker will amend the Post-Closure Plan whenever: (a) changes in operating plans or facility design affect the Post-Closure Plan; or (b) events occur during the post-closure period that will affect the Post-Closure Plan. The amended Post-Closure Plan will be submitted at least 60 days prior to the proposed change in facility design or operation or no later than 60 days after the unexpected event has occurred which affected the Post-Closure Plan.

2.7 Notices Required for Disposal Facilities

2.7.1 Certification of Closure

Upon completion of the implementation of the Revised Closure Plan, Parker will submit the Certification of Closure. The written Certification of Closure, documenting that the Revised Closure Plan has been properly implemented, shall be prepared by an independent registered professional engineer and shall be signed by the RCRA Permittee and by the certifying engineer. This certification shall be transmitted to the NCDENR-HWS within 60 days after the closure date. Information presented in the written certification of closure shall include:

1. The volume of soil, backfill, and debris removed;
2. A description of the method of waste hauling and transport;
3. Waste manifest numbers for removal of waste material;
4. A description of the sampling and analysis methods used;
5. A chronological summary of the closure activities;
6. Photographic documentation of closure; and
7. Tests performed, methods and results.

2.7.2 Survey Plat and Notice to Local Land Use Authority

A survey plat will be submitted no later than 60 days after the implementation of the Revised Closure Plan to the local zoning authority or the authority with jurisdiction over local land use, and to the NCDENR-HWS. This survey plat will indicate the location and dimensions of the final RCRA Cap on SWMU#16 with respect to a permanently surveyed benchmark. This plat will be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or authority with jurisdiction over local land use will contain a note, prominently displayed, stating the obligation to restrict disturbance of the final cover and the area of SWMU #16.

2.8 Post-Closure Certification

Parker will provide, within 60 days of completion of the post-closure care period for the hazardous waste disposal unit, certification to the Regional Administrator. The certification will state that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications of the approved post-closure plan. The certification will be signed by the owner/operator and by an independent registered professional engineer.

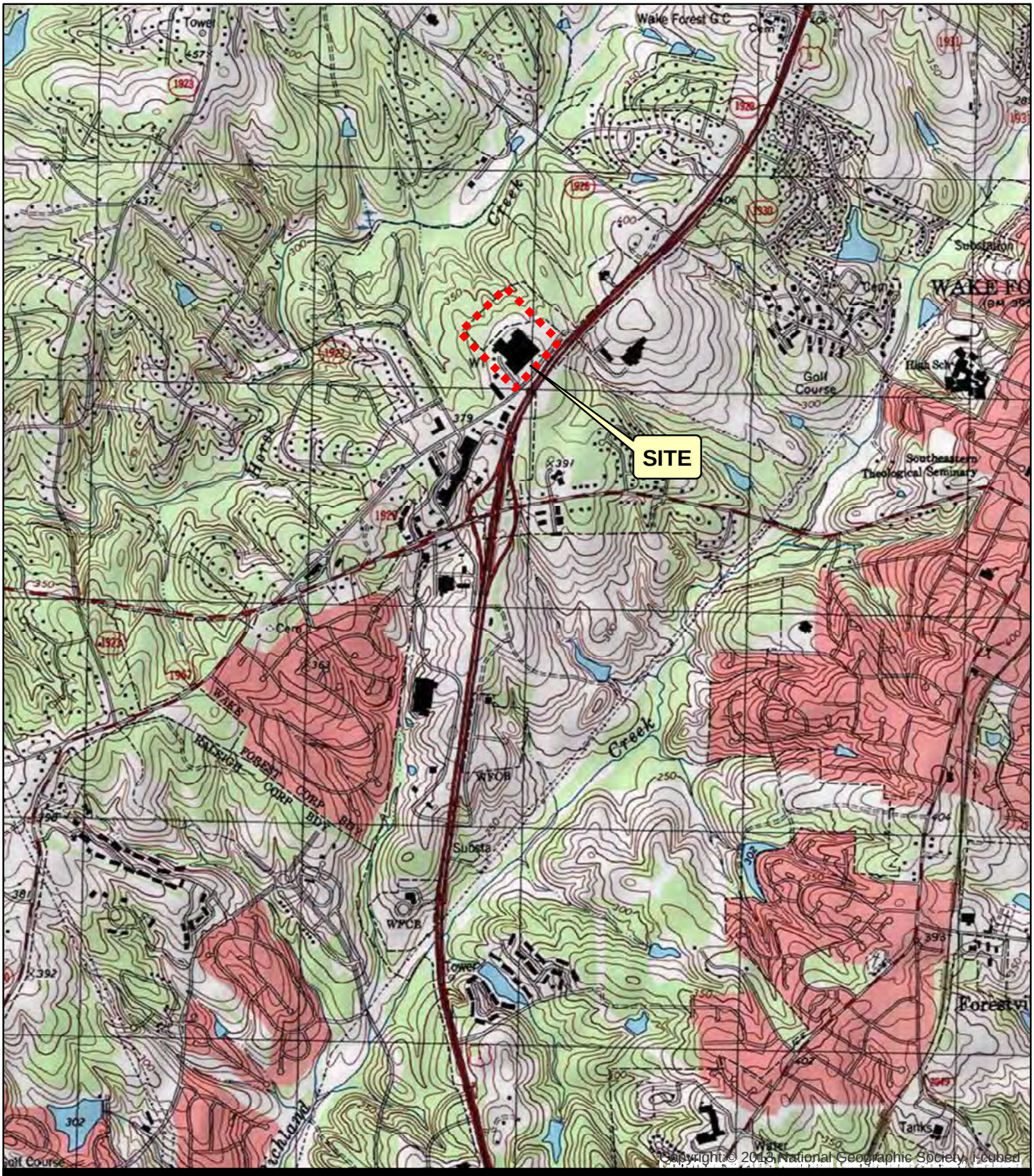
2.9 Post-Closure Cost Estimate

The current post-closure cost estimate, prepared in accordance with 40 CFR 264.144(a) as adopted in 15A NCAC 13A .0109, is specified in Appendix J of the Permit and is updated annually.

2.10 Financial Assurance Mechanism for Post-Closure

Financial assurance mechanisms for post-closure are specified in Part II Sections H and K and Appendix J of the Permit and are updated annually.

Figures



Map Location

Site Location Map

Former Parker Hannifin Corp. Facility
Wake Forest, North Carolina

N
W E
S

0 2,000 4,000 Feet 1:24,000

USGS Topographic Quadrangle Wake Forest (1983) 60489813

Figure 1

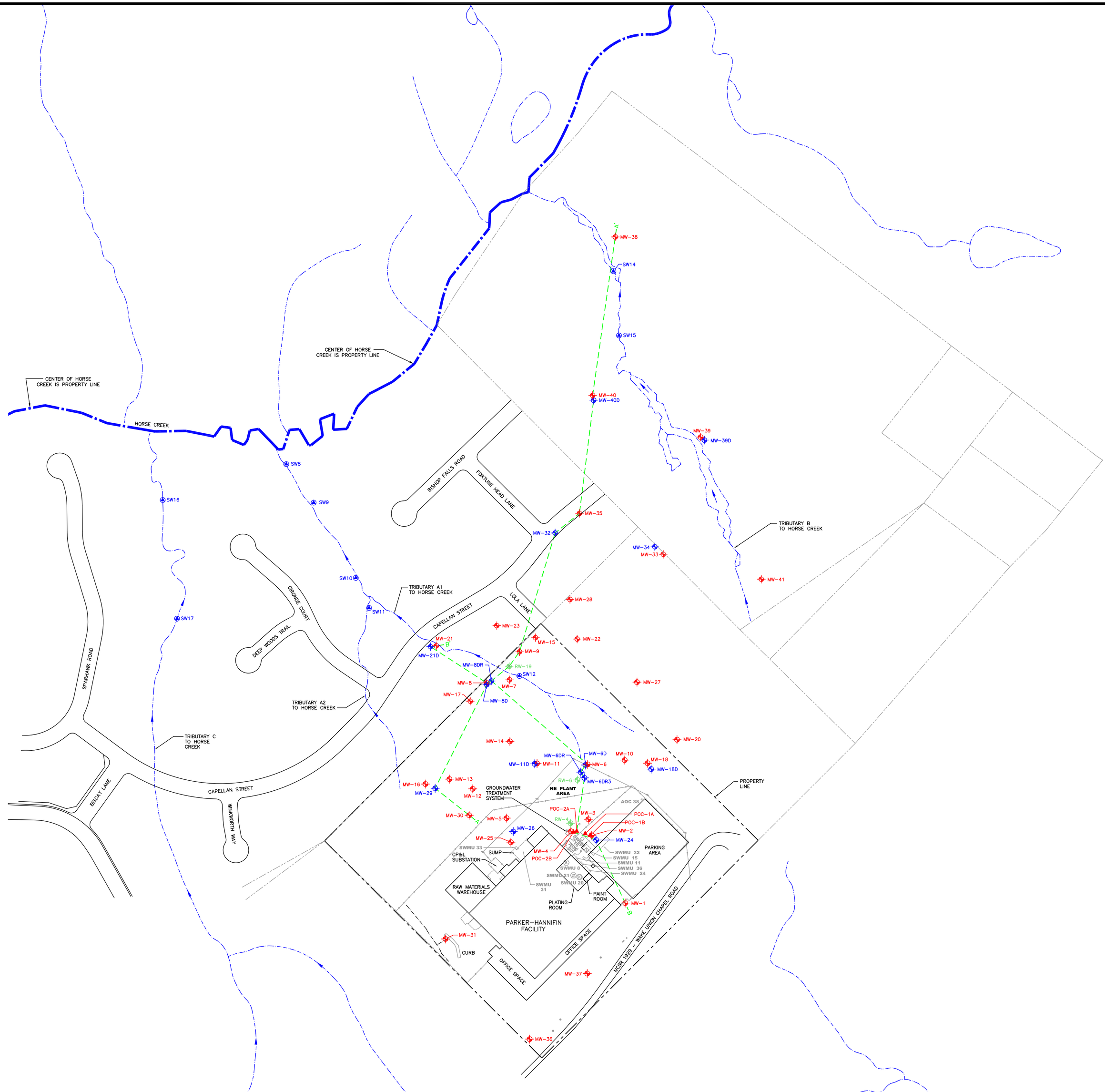
AECOM

AECOM
1600 Perimeter Park Driv,
NC 27560 Phone: (919)
461-1100 Fax: (919)
461-1415
www.aecom.com

X:\DCS\Projects\L-AECOM\Geomatics\GIS\Projects\P\Parker_Hannifin\Wake_Forest_NC\MXD\Figure_1-1_Site_Location_Topo_2016.mxd

LEGEND

- PARKER–HANNIFIN SITE PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- CREEK WITH FLOW DIRECTION
- FENCE
- OH — OVERHEAD POWER LINES
- MW–14 — MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- MW–11D — MONITORING WELL COMPLETED IN BEDROCK
- RW–4 — RECOVERY WELL
- POC–2A — POINT OF COMPLIANCE MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- SW9 — SURFACE WATER SAMPLE LOCATION
- SWMU 32 — SOLID WASTE MANAGEMENT UNIT
- A — A' — CROSS SECTION TRANSECT LINE



SOURCE:
BASE MAP CREATED FROM "BOUNDARY RETRACEMENT" DONE BY MURPHY & SACKS, PROFESSIONAL LAND SURVEYORS, 6308 J. RICHARD DR., RALEIGH, NORTH CAROLINA, DATED OCTOBER 2002. WELL LOCATIONS WERE NOT INCLUDED IN SURVEY, AND ARE APPROXIMATE.

200 0 200 400
SCALE IN FEET
1" = 200'

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: JLD
CHECKED BY:
APPROVED BY:

ENSR | AECOM
ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7586
WEB: HTTP://WWW.ENSR.AECOM.COM

SITE PLAN WITH CROSS–SECTION TRANSECTS

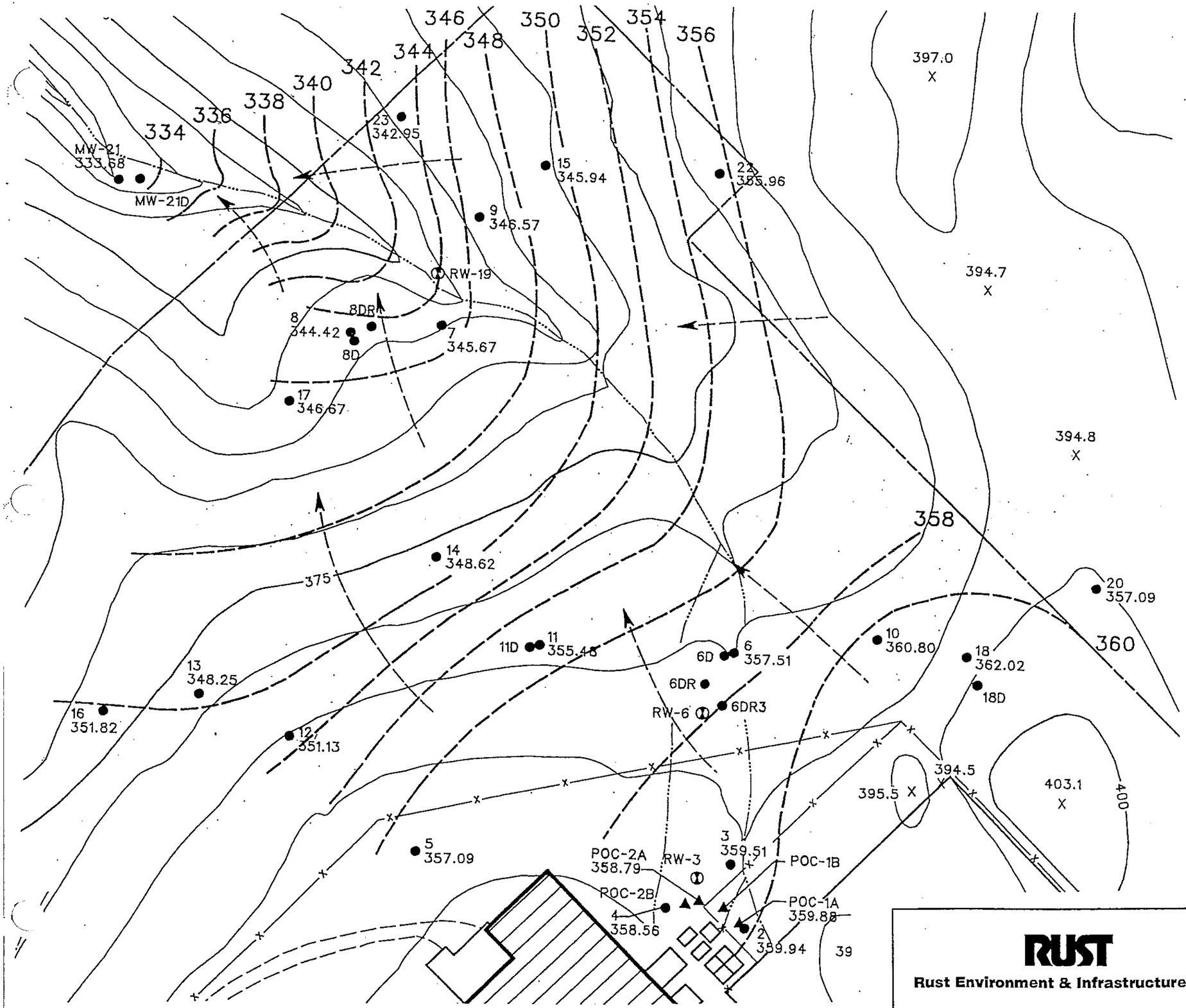
Parker–Hannifin
Wake Forest, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1"=200'	9/17/07	05303–025–0700

FIGURE NUMBER:
2

DRAWING NUMBER:
B70700D

Appendix H.
Interim Status Groundwater Data



Attachment 4
Groundwater Elevation Map and Water Table Data
Prior to Remediation Pumping

EXPLANATION

- RECOVERY WELL
- MONITOR WELL
- 357.09 WATER LEVEL ELEVATION OBSERVED IN SHALLOW WELL ON NOVEMBER 14 & 15, 1991
- WATER TABLE ELEVATION CONTOURS (DASHED WHERE INFERRED)
- GROUND WATER FLOW DIRECTION

NOTE: THE WATER LEVEL ELEVATION OBSERVED IN MONITOR WELL MW-15 WAS ANOMALOUS WHEN COMPARED TO HISTORICAL DATA AND WAS NOT USED TO CONFIGURE THE WATER TABLE ELEVATION CONTOURS

RUST
Rust Environment & Infrastructure Inc.

FIGURE 7
GROUNDWATER ELEVATION MAP
PRIOR TO REMEDIATION PUMPING
(NOV. 1991, FROM WEGS 1991)
SCHRADER BELLOWS, WAKE FOREST, NORTH CAROLINA
7/97 200325

p:\200325\cadd\fig7.dgn Jul. 31, 1997 12:23:41

August 1988

TABLE 2

Water Table Elevation
(MSL Reference with all units in feet)

Well	Top of Casing	Depth to Water August 9, 1988	Water Table Elevation
W-1	396.14	36.10	360.04
W-2	391.76	34.60	357.16
W-3	391.33	34.46	356.87
W-4	393.35	37.18	356.17
W-5	392.33	37.30	355.03
W-6	383.29	28.02	355.27
W-6D*	383.38	66.20	317.18
W-7	352.32	8.55	343.77
W-8	355.62	14.01	341.61
W-8D*	355.94	13.19	342.75
W-9	360.10	15.83	344.27
W-10	387.02	29.10	357.92
W-11	382.42	28.98	353.44
W-11D*	382.55	29.27	353.28
W-12	384.40	35.14	349.26
W-13	375.33	26.48	348.85
W-14	374.65	25.22	349.43
W-15	367.57	21.03	346.54
TW-1	341.40	4.82	336.58
TW-2	340.48	3.75	336.73
TW-3	330.92	3.80	327.12
TW-4	319.12	3.92	315.20
TW-5	316.02	3.58	312.44
TW-6	316.00	3.50	312.50

* The three deep wells were not used in construction of the water table map.

April 18/19 1989

TABLE 2

Potentiometric and Well Head Elevation Data (NGVD)
Schrader Bellows
Wake Forest, North Carolina
Westinghouse Job No. 4112-87-108D

Well	Elevation at Top of Casing	Depth to Water 4/18 - 4/19/89	Potentiometric Elevation
1	398.52	36.08	362.44
2	394.14	34.09	360.05
3	393.71	33.89	359.82
4	395.82	35.39	360.43
5	394.74	35.85	358.89
6	385.67	26.55	359.12
6D	385.79	27.89	357.90
6DR*	387.25	27.81	359.44
7	354.62	7.28	347.34
8	357.99	11.89	346.10
8D	358.34	10.98	347.36
8DR	358.50	11.69	346.81
9	362.49	11.88	350.61
10	389.40	27.84	361.56
11	384.81	27.06	357.75
11D	384.93	27.32	357.61
12	386.82	32.47	354.35
13	377.96	21.91	356.05
14	377.01	22.39	354.62
15	369.98	16.40	353.58
16	373.02	14.29	358.73
17	357.22	6.95	350.27
18	394.43	32.81	361.62

*Measured after well installation 5/24/89.

June 18, 1990

TABLE 3

WATER LEVEL MEASUREMENTS

WELL NO.	DEPTH TO WATER	ELEVATION TOP OF CASING	ELEVATION WATER TABLE
1	31.83	398.52	366.69
2	32.36	394.14	361.78
3	32.18	393.71	361.53
4	34.86	395.82	360.96
5	34.63	394.74	360.11
6	25.33	385.67	360.34
6D	25.80	385.79	359.99
6DR	27.31	387.25	
6DR-3	31.67	388.15	356.48
7		354.62	
8	12.06	357.99	343.93
8D	11.07	358.34	347.27
8DR	11.27	358.50	347.23
9	13.81	362.49	348.68
10	24.72	389.40	364.68
11	26.59	384.81	358.22
11D	27.00	384.93	357.93
12	28.99	386.82	357.83
13	20.92	377.96	357.04
14	21.66	377.01	355.35
15	19.14	369.98	350.84
16	14.88	373.02	358.14
17	7.39	357.22	349.83
18	28.72	394.43	365.71
18D	42.68	397.15	354.47
19	10.40	359.10	348.70
20	30.00	396.15	366.15
21	7.79	339.32	331.53
21D	4.98	340.15	335.17

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Sampling Dates					
			Sep-85	Dec-85	Mar-86	Jun-86	Nov-86	Mar-87
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9		4	14	3	57	
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6					8.2	5.2
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.0026				0.0004	0.013
Barium	mg/L	7440-39-3				0.18	0.24	0.16
Cadmium	mg/L	7740-43-9	0.004	0.005	0.005	0.002	0.006	
Chromium	mg/L	7440-47-3		0.004	0.054		0.009	
Iron	mg/L	15438-31-0	0.294	2.85	22.4	3.85	0.092	14
Lead	mg/L	7439-92-1	0.008		0.023			
Manganese	mg/L	7439-96-5	0.234	0.383	0.596	0.209	0.014	0.682
Mercury	mg/L	7439-97-6	0.0011				0.0004	0.013
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2	0.0008					
Silver	mg/L	7440-22-4	0.012	0.004	0.018			0.01
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Apr-87	Jun-87	Oct-87	Feb-88	Apr-88	Jun-88
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	33.1					
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	9.8			3	53.8	
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		0.01		0.006		
Barium	mg/L	7440-39-3		0.1	0.35	0.28	0.06	
Cadmium	mg/L	7740-43-9				0.008		
Chromium	mg/L	7440-47-3		0.014		0.001	0.004	
Iron	mg/L	15438-31-0		14.8	0.231	7.16	2.37	
Lead	mg/L	7439-92-1				0.01	0.001	
Manganese	mg/L	7439-96-5		0.528	0.174	0.478	2.77	
Mercury	mg/L	7439-97-6		0.0003			0.0006	
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2				0.001		
Silver	mg/L	7440-22-4				0.004	0.002	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Jul-88	Oct-88	Jan-89	Apr-89	May-89	Nov-91
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	10	2.55	3.7	11	11.2	
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.002	0.001			0.001	
Barium	mg/L	7440-39-3	0.08	0.15			10.5	
Cadmium	mg/L	7740-43-9	0.004	0.004	0.001		0.013	
Chromium	mg/L	7440-47-3	0.004	0.01	0.002		0.04	
Iron	mg/L	15438-31-0	0.099	1.02	0.09		0.307	
Lead	mg/L	7439-92-1	0.007	0.001	0.09		0.004	
Manganese	mg/L	7439-96-5	0.108	0.042	0.102		0.296	0.06
Mercury	mg/L	7439-97-6	0.0023	0.0002	0.0007			
Nickel	mg/L	7440-02-0			0.012		0.046	
Selenium	mg/L	7782-49-2	0.001	0.001				
Silver	mg/L	7440-22-4		0.007	0.006		0.003	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93	Apr-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6			3.5	3.8	4.3	1.7
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.1				1.74	
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	8.9	0.52		1.54		
Lead	mg/L	7439-92-1				0.042		
Manganese	mg/L	7439-96-5		0.06	0.06	0.091	0.061	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	2.3	2.1	2.2	1.7		
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						all bql
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0		1.01	1.21	0.934	1.36	
Lead	mg/L	7439-92-1		0.146				
Manganese	mg/L	7439-96-5		0.098	0.093	0.111	0.107	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97
Acetone	µg/L	67-64-1						all bql
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		all bql				
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9	0.017					
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	3.9		0.204	7.23	0.693	
Lead	mg/L	7439-92-1				0.0045		
Manganese	mg/L	7439-96-5	0.22		0.046	0.599	0.102	
Mercury	mg/L	7439-97-6	0.0006					
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99	Feb-00
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3					0.162	
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	1.53		1.19			
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.144		0.155		0.042	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 2.
HISTORICAL GROUNDWATER
MONITORING DATA -- WELL MW-1

Compound	Units	CAS #	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02	Jan-03
Acetone	µg/L	67-64-1		all bql	all bql	all bql		
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1			bqls			
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5				all bql		
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.117		0.011			
Barium	mg/L	7440-39-3		0.158	0.183		0.104	
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	2.02	0.037	0.08			
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.09	0.147	0.491		0.0142	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 3.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-2

Compound	Units	CAS #	Sampling Dates					
			Sep-85	Dec-85	Mar-86	Jun-86	Nov-86	Mar-87
Acetone	µg/L	67-64-1					101	86
Benzene	µg/L	71-43-2					101	86
Bromodichloromethane	µg/L	75-27-4				5.8		
Chloroform	µg/L	67-66-3		1220		15.9	32	
Dibromochloromethane	µg/L	124-48-1				20.2		
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3				4.6		
1,2-Dichloroethane	µg/L	107-06-2				2.4		
1,1-Dichloroethene	µg/L	75-35-4		1280	91.8	6.2		8.1
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5			42.2	416	129	3.95
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9	8	6	15	7	54	
Tetrachloroethene	µg/L	127-18-4	32.8	317	26		37.6	38.1
Toluene	µg/L	108-88-3	51	66	4		82	2,190
1,1,1-Trichloroethane	µg/L	71-55-6				11.4	12.6	32.9
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	16,700	20,892	17,000	11,900	18,200	1,920
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.0025	0.001	0.022	0.0006	0.0002	0.156
Barium	mg/L	7440-39-3				0.54	0.17	0.36
Cadmium	mg/L	7740-43-9	0.008	0.005	0.007	0.001	0.006	
Chromium	mg/L	7440-47-3	0.01	0.014	0.44	0.02	0.017	0.053
Iron	mg/L	15438-31-0	3.36	8.5	140	25.6	0.332	67.6
Lead	mg/L	7439-92-1	0.04	0.018	0.025	0.058	0.013	
Manganese	mg/L	7439-96-5	2.51	1.65	0.021	2	0.6	1.74
Mercury	mg/L	7439-97-6	0.0005			0.0002	0.0011	0.0005
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2	0.0013				0.0031	
Silver	mg/L	7440-22-4	0.01	0.007	0.03			0.012
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 3.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-2

Compound	Units	CAS #	Apr-87	Jun-87	Oct-87	Feb-88	Apr-88	Jun-88
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3		2.7	371			
1,2-Dichloroethane	µg/L	107-06-2			65			
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5	128	531			2006	
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	58	68.8			75.5	
Toluene	µg/L	108-88-3		6,080	233	112		
1,1,1-Trichloroethane	µg/L	71-55-6	20.2			51.7		
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	30,300	17,600	3,130	19,100	20,042	
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7			10.9			
Arsenic	mg/L	7440-38-2		0.051		0.046	0.103	
Barium	mg/L	7440-39-3		0.43	0.05	1.08	0.63	
Cadmium	mg/L	7740-43-9				0.013		
Chromium	mg/L	7440-47-3		0.08	0.01	0.21	0.063	
Iron	mg/L	15438-31-0		103	1.03	191	98.2	
Lead	mg/L	7439-92-1				0.05	0.024	
Manganese	mg/L	7439-96-5		2.4	0.339	6.22	6.38	
Mercury	mg/L	7439-97-6			0.0007		0.0018	
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2				0.001		
Silver	mg/L	7440-22-4				0.003	0.004	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 3.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-2

Compound	Units	CAS #	Jul-88	Oct-88	Jan-89	Apr-89	May-89	Jun-89
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	16,300	13,300	12,000	1,000,000	15,600	240,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.04	0.009	0.024		0.004	
Barium	mg/L	7440-39-3	0.33	0.53			0.63	
Cadmium	mg/L	7740-43-9	0.008	0.011	0.002		0.008	
Chromium	mg/L	7440-47-3	0.04	0.08	0.005		0.04	
Iron	mg/L	15438-31-0	42.75	18.7	2.21		14	
Lead	mg/L	7439-92-1	0.013	0.001	0.001		0.012	
Manganese	mg/L	7439-96-5	0.936	0.284	0.27		1.05	
Mercury	mg/L	7439-97-6	0.0007	0.0002				
Nickel	mg/L	7440-02-0			0.002		0.033	
Selenium	mg/L	7782-49-2	0.002	0.001				
Silver	mg/L	7440-22-4	0.003	0.014	0.004		0.002	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 3.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-2

Compound	Units	CAS #	12-97	Jan-98
			35.4	
			5.5	
			1,110	
			8	
			29.4	
			42,000	620
			6.8	

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Sampling Dates					
			Sep-85	Dec-85	Mar-86	Jun-86	Nov-86	Mar-87
Acetone	µg/L	67-64-1					73.4	2.7
Benzene	µg/L	71-43-2				5.6		
Bromodichloromethane	µg/L	75-27-4		517		17.9	27.9	36.3
Chloroform	µg/L	67-66-3				120		
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8				3		
1,1-Dichloroethane	µg/L	75-34-3				2.5		
1,2-Dichloroethane	µg/L	107-06-2		426	7	9.3		
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5			224	240	98.2	112
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9	11	6	16	6	11	58
Tetrachloroethene	µg/L	127-18-4	26.3		21.9	33.7	20.9	52.1
Toluene	µg/L	108-88-3	42	55	26		1	1,490
1,1,1-Trichloroethane	µg/L	71-55-6				7.6	111.1	
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	13,500	15,567	14,600	10,400	14,500	22,600
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.0018				0.0004	0.004
Barium	mg/L	7440-39-3				0.25	0.2	0.18
Cadmium	mg/L	7740-43-9	0.004	0.003	0.006		0.01	
Chromium	mg/L	7440-47-3	0.002	0.006	0.106		0.007	0.015
Iron	mg/L	15438-31-0	1.02	0.415	31	2.52	0.057	5.1
Lead	mg/L	7439-92-1	0.03	0.015	0.018	0.036		
Manganese	mg/L	7439-96-5	0.689	0.644	1.18	0.48	0.162	0.358
Mercury	mg/L	7439-97-6	0.0003			0.0016	0.0006	0.0002
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2	0.0005				0.0067	
Silver	mg/L	7440-22-4	0.008	0.004	0.024	0.013		0.018
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Apr-87	Jun-87	Oct-87	Feb-88	Apr-88	Jun-88
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3		3.3				
1,2-Dichloroethane	µg/L	107-06-2			350			
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5	70.2	281			574	
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	40.7	42.6	912		42.9	
Toluene	µg/L	108-88-3			20	7	13	
1,1,1-Trichloroethane	µg/L	71-55-6	25.3			29.8		
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	24,200	14,000	32,300	15,300	15,783	
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl Chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		0.001		0.002		
Barium	mg/L	7440-39-3		0.04	0.04	0.21	0.09	
Cadmium	mg/L	7740-43-9				0.008		
Chromium	mg/L	7440-47-3		0.025		0.012	0.011	
Iron	mg/L	15438-31-0		0.591	0.155	1.59	0.281	
Lead	mg/L	7439-92-1					0.003	
Manganese	mg/L	7439-96-5		0.202	0.029	0.192	0.193	
Mercury	mg/L	7439-97-6		0.0003			0.0011	
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2				0.003		
Silver	mg/L	7440-22-4		0.01		0.012	0.009	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Jul-88	Oct-88	Jan-89	Apr-89	May-89	Nov-91
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	9,700	9,450	6,470	1,300,000	10,000	310,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.002	0.002				
Barium	mg/L	7440-39-3	0.11	0.12	0.35		0.1	
Cadmium	mg/L	7740-43-9	0.006	0.003	0.002		0.005	0.001
Chromium	mg/L	7440-47-3	0.012	0.01	0.014		0.01	
Iron	mg/L	15438-31-0	5.95	0.73	0.65		1.24	0.5
Lead	mg/L	7439-92-1	0.004	0.001	0.001			0.013
Manganese	mg/L	7439-96-5	0.309	0.176	0.164		0.169	1.3
Mercury	mg/L	7439-97-6	0.0014		0.0002			
Nickel	mg/L	7440-02-0			0.002		0.026	
Selenium	mg/L	7782-49-2	0.001	0.001				
Silver	mg/L	7440-22-4		0.003	0.004		0.003	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93	Apr-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	310,000	280,000	270,000	260,000	200,000	190,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.09					
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	2.4	0.95	0.66	1.24		
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.43	0.1	0.07		0.088	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	170,000	150,000	170,000	159,000	102,000	82,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						all bql
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	72,700	49,000	35,000	35,000	32,000	46,400
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		all bql				
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0			3.22	3.53	1.94	
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5			0.0948	0.118	0.0726	
Mercury	mg/L	7439-97-6	0.0007					
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99	Feb-00
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	39,700	31,300	36,350	25,700	15,800	9,780
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	all bql		all bql			
Barium	mg/L	7440-39-3					0.39	
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 4.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-3

Compound	Units	CAS #	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	4,960	2,350	1,475	1,100	1,100
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3		0.063	0.041		
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0		0.397	0.5		
Lead	mg/L	7439-92-1			0.021		
Manganese	mg/L	7439-96-5		0.024			
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 5.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-4

Compound	Units	CAS #	Sampling Dates					
			Sep-85	Dec-85	Mar-86	Jun-86	Nov-86	Mar-87
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2					200	53.4
Bromodichloromethane	µg/L	75-27-4				53.4	129	
Chloroform	µg/L	67-66-3		2,400		34.8	39.3	57.2
Dibromochloromethane	µg/L	124-48-1					490	
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3				5		
1,2-Dichloroethane	µg/L	107-06-2					7.2	
1,1-Dichloroethene	µg/L	75-35-4		490	55	5.8	17.6	1.68
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5			931	702		239
1,2-Dichloropropane	µg/L	78-87-5					250	
Methylene Chloride	µg/L	75-09-2	904					
Phenols	µg/L	64743-03-9	100	12	10	12	5	59
Tetrachloroethene	µg/L	127-18-4	50	35	2,076	218	1,120	182
Toluene	µg/L	108-88-3	59.6	111	31.2		155	1770
1,1,1-Trichloroethane	µg/L	71-55-6				14.2	12.2	22.5
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	13,900	29,324	13,700	12,400	17,100	26,700
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl Chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.0013	0.004	0.005	0.006	0.0004	0.024
Barium	mg/L	7440-39-3	0.05		0.12	0.48		0.76
Cadmium	mg/L	7740-43-9	0.004	0.017	0.006	0.002	0.01	
Chromium	mg/L	7440-47-3		0.072	0.893	0.065	0.014	0.079
Iron	mg/L	15438-31-0	2.4	39.7	210	39.6	0.655	40.4
Lead	mg/L	7439-92-1	0.036	0.011	0.023	0.022		
Manganese	mg/L	7439-96-5	6.6	17.3	6.1	12.7	11.9	10.5
Mercury	mg/L	7439-97-6	0.0002				0.0006	0.0008
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2	0.0013	0.002			0.0036	
Silver	mg/L	7440-22-4	0.008	0.008	0.034	0.002		0.009
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 5.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-4

Compound	Units	CAS #	Apr-87	Jun-87	Oct-87	Feb-88	Apr-88	Jun-88
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2			1040			
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5	186	692			1492	
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	76	101	548		103	
Toluene	µg/L	108-88-3		1400	130	58.3	57.5	
1,1,1-Trichloroethane	µg/L	71-55-6	34.2			38.5		
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	29,500	16,700	39,400	17,700	17,543	
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		0.024		0.002		
Barium	mg/L	7440-39-3		0.28	0.21	0.66	0.91	
Cadmium	mg/L	7740-43-9				0.014	0.001	
Chromium	mg/L	7440-47-3		0.056	0.01	0.146	0.157	
Iron	mg/L	15438-31-0		34	1.12	76.6	66	
Lead	mg/L	7439-92-1				0.04	0.017	
Manganese	mg/L	7439-96-5		6.25	5.4	6.38	0.286	
Mercury	mg/L	7439-97-6				0.0027	0.03	
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2				0.004		
Silver	mg/L	7440-22-4				0.004	0.007	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 5.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-4

Compound	Units	CAS #	Jul-88	Oct-88	Jan-89	Apr-89	May-89	May-89
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	18,200	16,000	15,200	2,900,000	14,300	380,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	0.024	0.002				
Barium	mg/L	7440-39-3	0.45	0.24	0.12		0.32	
Cadmium	mg/L	7740-43-9	0.007	0.005	0.001		0.01	
Chromium	mg/L	7440-47-3	0.1		0.007		0.03	
Iron	mg/L	15438-31-0	52.6	1.315	2.01		6	
Lead	mg/L	7439-92-1	0.014	0.001			0.002	
Manganese	mg/L	7439-96-5	5.59	4.26	1.74		2.18	
Mercury	mg/L	7439-97-6	0.0011	0.0006	0.0067		0.0044	
Nickel	mg/L	7440-02-0			0.021		0.053	
Selenium	mg/L	7782-49-2	0.001	0.001				
Silver	mg/L	7440-22-4	0.004	0.006	0.004		0.003	
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 5.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-4

Compound	Units	CAS #	May-89	Jun-89	Jun-89	Mar-97
Acetone	µg/L	67-64-1				NS
Benzene	µg/L	71-43-2				
Bromodichlormethane	µg/L	75-27-4				
Chloroform	µg/L	67-66-3	1.7			
Dibromochloromethane	µg/L	124-48-1				
Dichlorodifluoromethane	µg/L	75-71-8				
1,1-Dichloroethane	µg/L	75-34-3				
1,2-Dichloroethane	µg/L	107-06-2				
1,1-Dichloroethene	µg/L	75-35-4	3			
cis-1,2-Dichloroethene	µg/L	156-59-2				
trans-1,2-Dichloroethene	µg/L	156-60-5	275			
1,2-Dichloropropane	µg/L	78-87-5				
Methylene Chloride	µg/L	75-09-2				
Phenols	µg/L	64743-03-9				
Tetrachloroethene	µg/L	127-18-4	19			
Toluene	µg/L	108-88-3				
1,1,1-Trichloroethane	µg/L	71-55-6				
1,1,2-Trichloroethane	µg/L	79-00-5		13,000		
Trichloroethene	µg/L	79-01-6	14,300	270,000	250,000	
Trichlorofluoromethane	µg/L	75-69-4				
Vinyl chloride	µg/L	75-01-4				
Xylenes	µg/L	1330-20-7				
Arsenic	mg/L	7440-38-2				
Barium	mg/L	7440-39-3				
Cadmium	mg/L	7440-43-9				
Chromium	mg/L	7440-47-3				
Iron	mg/L	15438-31-0				
Lead	mg/L	7439-92-1				
Manganese	mg/L	7439-96-5				
Mercury	mg/L	7439-97-6				
Nickel	mg/L	7440-02-0				
Selenium	mg/L	7782-49-2				
Silver	mg/L	7440-22-4				
Zinc	mg/L	7440-66-6				

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 6.
HISTORICAL GROUNDWATER
RECOVERY WELL DATA RW-4

Compound	Units	CAS #	Sampling Date 1-97
Acetone	ug/l	67-64-1	5,300
Benzene	ug/l	71-43-2	
Bromodichloromethane	ug/l	75-27-4	
Bromoform	ug/l	75-25-2	
Bromomethane	ug/l	74-83-9	
Carbon disulfide	ug/l	75-15-0	
Chlorobenzene	ug/l	108-90-7	
Chloroethane	ug/l	75-00-3	
Chloroform	ug/l	67-66-3	
Chloromethane	ug/l	74-87-3	
cis-1,2-Dichloroethene	ug/l	156-59-2	
cis-1,3-Dichloropropene	ug/l	10061-01-5	
Dibromochloromethane	ug/l	124-48-1	
Methylene Chloride	ug/l	75-09-2	
Styrene	ug/l	100-42-5	
Tetrachloroethene	ug/l	127-18-4	
Toluene	ug/l	108-88-3	
trans-1,2-Dichloroethene	ug/l	156-60-5	
trans-1,3-Dichloropropene	ug/l	10061-02-6	
Trichloroethene	ug/l	79-01-6	
Trichlorofluoromethane	ug/l	75-69-4	
Vinyl acetate	ug/l	108-05-4	
Xylenes	ug/l	1330-20-7	
Arsenic	mg/l	7440-38-2	
Barium	mg/l	7440-39-3	
Cadmium	mg/l	7440-43-9	
Chromium	mg/l	7440-47-3	
Iron	mg/l	7439-89-6	
Lead	mg/l	7439-92-1	
Manganese	mg/l	7439-96-5	
Mercury	mg/l	7439-97-6	
Nickel	mg/l	7440-02-0	
Selenium	mg/l	7782-49-2	
Silver	mg/l	7440-22-4	
Zinc	mg/l	7440-66-6	

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 7.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-5

Compound	Units	CAS #	Sampling Dates					
			Jan-86	Feb-86	Mar-86	Jun-86	Nov-86	Mar-87
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2				1430		79.3
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3				31.2	68.7	
Dibromochloromethane	µg/L	124-48-1				103	63.3	
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3				2.6	1.6	
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4		37.3	104	3.2		20.5
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5			843	1240	343	304
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9				30	11	99
Tetrachloroethene	µg/L	127-18-4	2970	3100	497	3880	750	2576
Toluene	µg/L	108-88-3	104	67	52.3	354	15.8	1.08
1,1,1-Trichloroethane	µg/L	71-55-6				14.9	13.9	
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	12000	14300	16100	9050	11700	16500
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7				6.8		
Arsenic	mg/L	7440-38-2					0.0012	0.546
Barium	mg/L	7440-39-3				1.28	0.012	4.24
Cadmium	mg/L	7440-43-9				0.002	0.005	
Chromium	mg/L	7440-47-3			0.26	0.093	0.004	0.716
Iron	mg/L	15438-31-0			35	39.8	0.185	260
Lead	mg/L	7439-92-1			0.0071			0.047
Manganese	mg/L	7439-96-5			5.85	2.35	4.33	7.25
Mercury	mg/L	7439-97-6					0.0007	0.0002
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						0.013
Silver	mg/L	7440-22-4			0.022			0.078
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 7.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-5

Compound	Units	CAS #	Apr-87	Jun-87	Jun-88	Apr-89	Mar-97	Jan-02
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						dry
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2					4460	
trans-1,2-Dichloroethene	µg/L	156-60-5	251	886			214.3	
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	2460	2610		7200	2010	
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6	51.2					
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	18300	10100		58000	11700	
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4					33	
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 8.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6

Compound	Units	CAS #	Sampling Dates					
			Jan-86	Feb-86	Mar-86	Jun-86	Nov-86	Mar-87
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						3.6
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3				6		
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4			3.8	3.4		8.9
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5			12.9	8.3	1.1	8.43
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9			10	8	7	
Tetrachloroethene	µg/L	127-18-4				23.8		37.5
Toluene	µg/L	108-88-3	161	152	21.6			560
1,1,1-Trichloroethane	µg/L	71-55-6				2.6		7.94
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	7,170	6,400	8,840	5,200	1,830	13,700
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2					0.0015	0.008
Barium	mg/L	7440-39-3						0.1
Cadmium	mg/L	7740-43-9					0.006	
Chromium	mg/L	7440-47-3				0.006	0.002	0.02
Iron	mg/L	15438-31-0			0.276	5.02	0.153	8.05
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5			0.16	0.367	0.343	0.477
Mercury	mg/L	7439-97-6					0.0002	0.0011
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2					0.005	
Silver	mg/L	7440-22-4			0.017	0.003		0.01
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 8.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6

Compound	Units	CAS #	Apr-87	Jun-87	Jun-88	Apr-89	Jun-89	Nov-91
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5	5.4	11.4				
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	24.2					
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6	3.3					
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	10,200	3,880		32,000	10,000	11,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						0.1
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						0.7
Lead	mg/L	7439-92-1						0.002
Manganese	mg/L	7439-96-5						0.32
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 8.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6

Compound	Units	CAS #	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93	Apr-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5			46			51
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	8,200	5,800	1,800	6,000	1,800	1,100
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.08					
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	4.3	0.73		3.67		
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	1	0.35	0.17	0.238	0.151	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 8.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6

Compound	Units	CAS #	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						13.4
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5	54					133
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,600	1,800	1,900	1,110	656	396
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						0.934
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						0.14
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 8.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6

Compound	Units	CAS #	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2					200	
1,1-Dichloroethene	µg/L	75-35-4	10.9	9.7				20.3
cis-1,2-Dichloroethene	µg/L	156-59-2						730
trans-1,2-Dichloroethene	µg/L	156-60-5	116	133		52		214.3
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	173	265	3,400	1,600	620	715
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						33
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		all bql				
Barium	mg/L	7440-39-3				0.418		
Cadmium	mg/L	7740-43-9	0.01					
Chromium	mg/L	7440-47-3				0.0213		
Iron	mg/L	15438-31-0			7.24	18.7	1.39	
Lead	mg/L	7439-92-1			0.00382	0.0115		
Manganese	mg/L	7439-96-5	0.06		0.334	0.834	0.152	
Mercury	mg/L	7439-97-6	0.0006		0.000215	0.000632	0.00033	
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 8.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6

Compound	Units	CAS #	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99	Feb-00
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	1200		485.5		686	686
trans-1,2-Dichloroethene	µg/L	156-60-5	402.5		202		130	130
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	605	397	510	954	436	985
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4	55		57			
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3					0.046	
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	2.38					
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.199		0.103		0.085	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 8.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6

Compound	Units	CAS #	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02	Jan-03
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	828	540		900	770	480
trans-1,2-Dichloroethene	µg/L	156-60-5	153	68				
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	953	6,200	3,960	5,000	2,800	4,300
Trichlorofluoromethane	µg/L	75-69-4						
Vinylchloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.049	0.042	0.169			
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	0.036	0.073	0.331			
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.095	0.082	0.151		0.0649	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 9. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-6D

Compound	Units	CAS #	Sampling Dates				
			Aug-88	Apr-89	Jun-89	Mar-97	Jan-02
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2				304	210
trans-1,2-Dichloroethene	µg/L	156-60-5	47.9				
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	8.51				
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	15500	75000	24000	3280	910
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 10.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR

Compound	Units	CAS #	Sampling Dates					
			Jun-89	Nov-91	Jan-92	Apr-92	Jul-92	Oct-92
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2	980					
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	27,000	70,000	73,000	71,000	13,000	8,100
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3		0.1	0.07			
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3		0.01				
Iron	mg/L	15438-31-0						0.366
Lead	mg/L	7439-92-1		0.002				
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 10.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR

Compound	Units	CAS #	Jan-93	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	5,300	7,100	4,100	4,200	2,500	4,570
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.395					
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 10.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR

Compound	Units	CAS #	Jul-94	Oct-94	Jan-95	Jul-95	Jan-96	Jul-96
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	4,470	6,430	3,680	2,800	2,000	800
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		all bql		all bql		
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0					0.116	0.146
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6			0.0006			
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 10.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR

Compound	Units	CAS #	Jan-97	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99
Acetone	µg/L	67-64-1	300					
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2					1,130	
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6	100					
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,800	1,690	1,380	237	137	53
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2			all bql		all bql	
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	0.162					
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.0152					
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

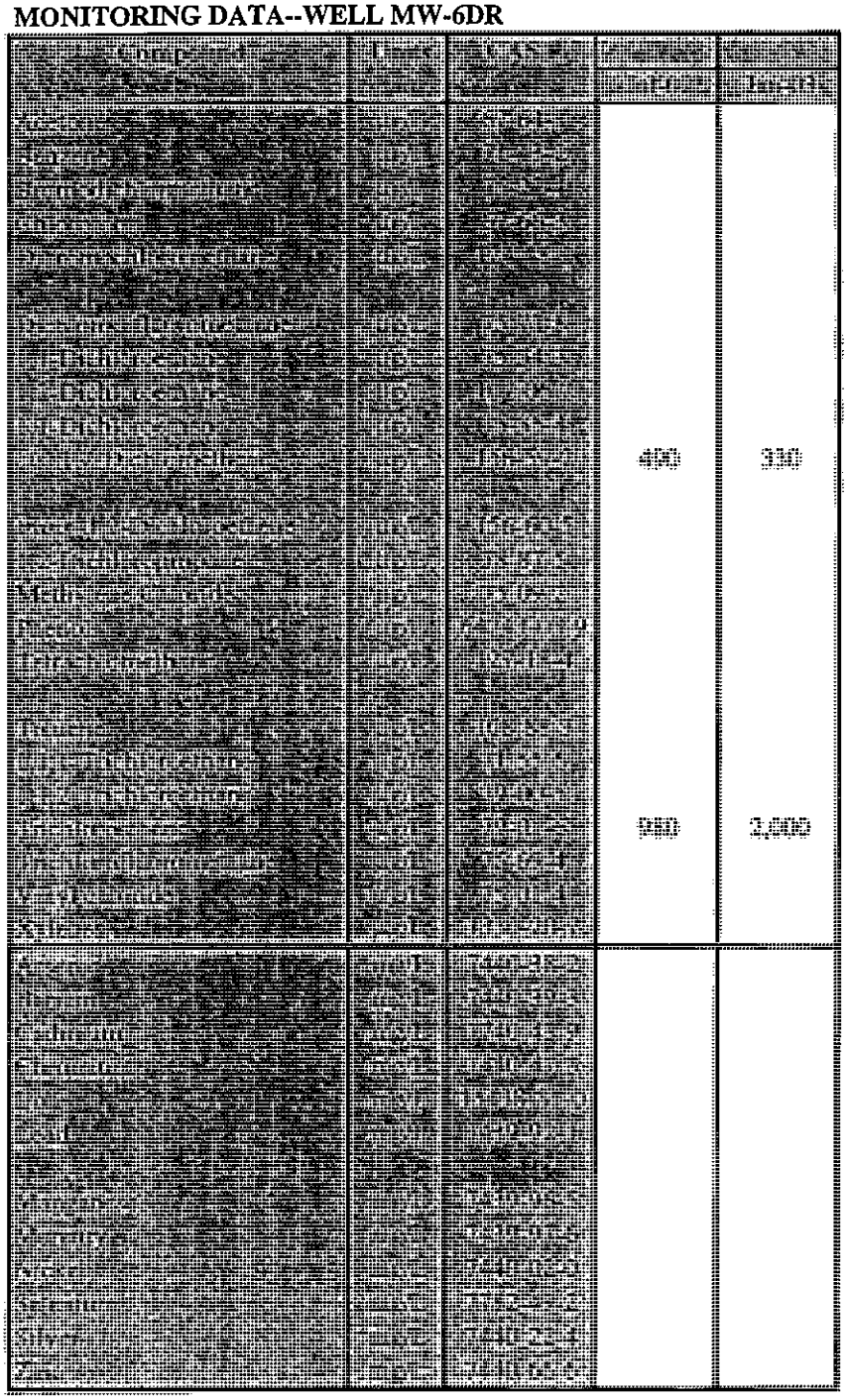
Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 10.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR

Compound	Units	CAS #	Jul-99	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02
Acetone	µg/L	67-64-1					ns	
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	777		907	850		340
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	79					880
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.054		0.066	0.07		
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0				0.04		
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 10.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR



Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 11.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR3

Compound	Units	CAS #	Sampling Dates					
			Feb-90	Mar-90	Nov-91	Jan-92	Apr-92	Jul-92
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	3,600	930	2,600	1,100	480	440
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3				0.16		
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0				14	0.4	
Lead	mg/L	7439-92-1				0.07		
Manganese	mg/L	7439-96-5				0.29	0.06	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 11.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR3

Compound	Units	CAS #	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93	Jan-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	390	310	170		95	100
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	all bql					
Barium	mg/L	7440-39-3		1.74				
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 11.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR3

Compound	Units	CAS #	Apr-94	Jul-94	Oct-94	Jan-95	Jul-95	Jan-96
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	60	56	71	63	101	120
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2			all bql			
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9					0.006	
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						0.409
Lead	mg/L	7439-92-1						0.0246
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6				0.0005		
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 11.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR3

Compound	Units	CAS #	Jul-96	Jan-97	Mar-97	Jul-97	Jan-98	Jul-98
Acetone	µg/L	67-64-1		14				
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	160	60	92	85	73	98
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	all bql					all bql
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3		0.0259				
Iron	mg/L	15438-31-0		0.368				
Lead	mg/L	7439-92-1				0.041		
Manganese	mg/L	7439-96-5		0.0158				
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

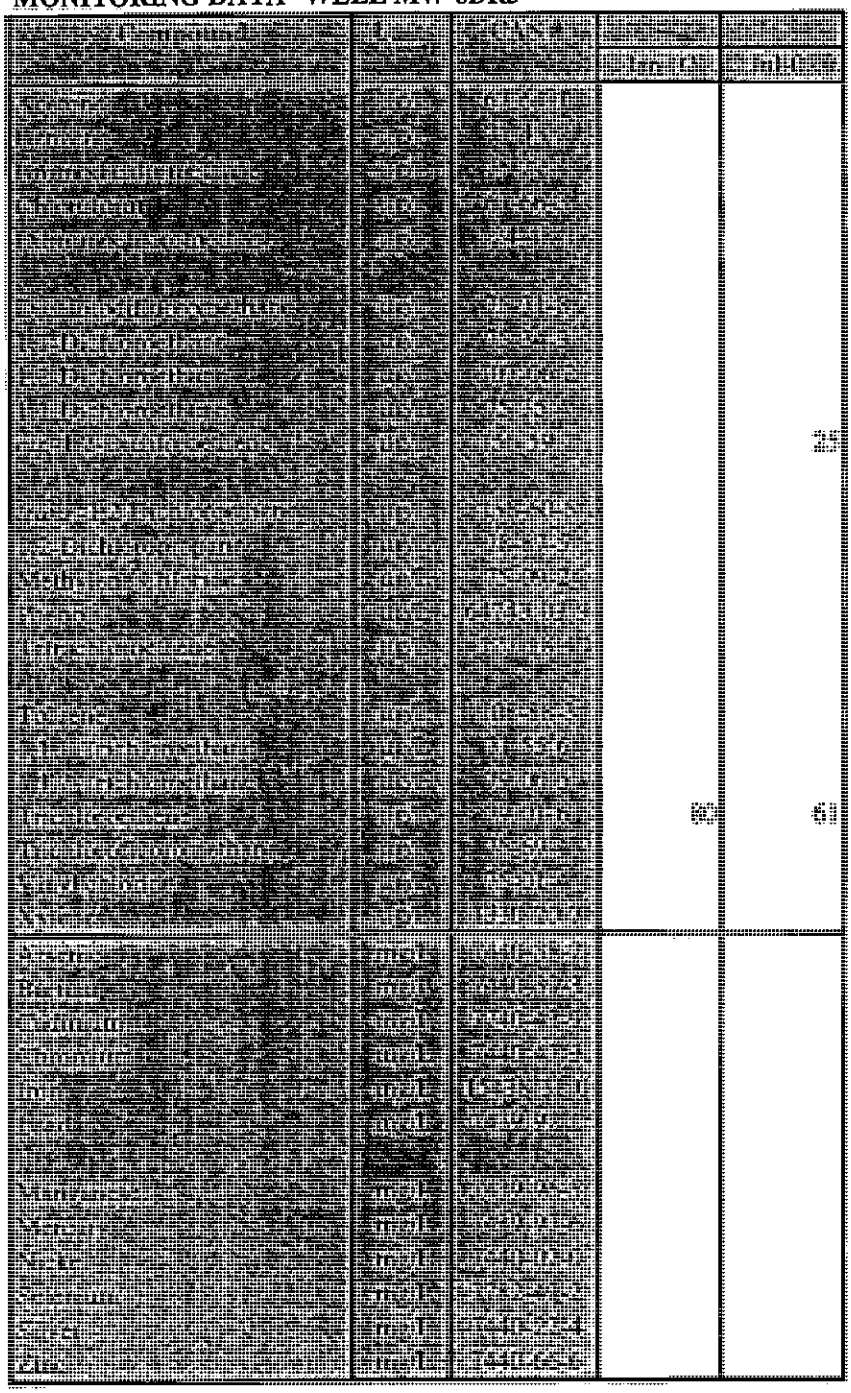
Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 11.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR3

Compound	Units	CAS #	Jan-99	Jul-99	Feb-00	Jun-00	Jan-01	Jul-01
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						5.2
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	101	80	101	97	92	102
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2		0.015				all bql
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0					0.144	
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5					0.011	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

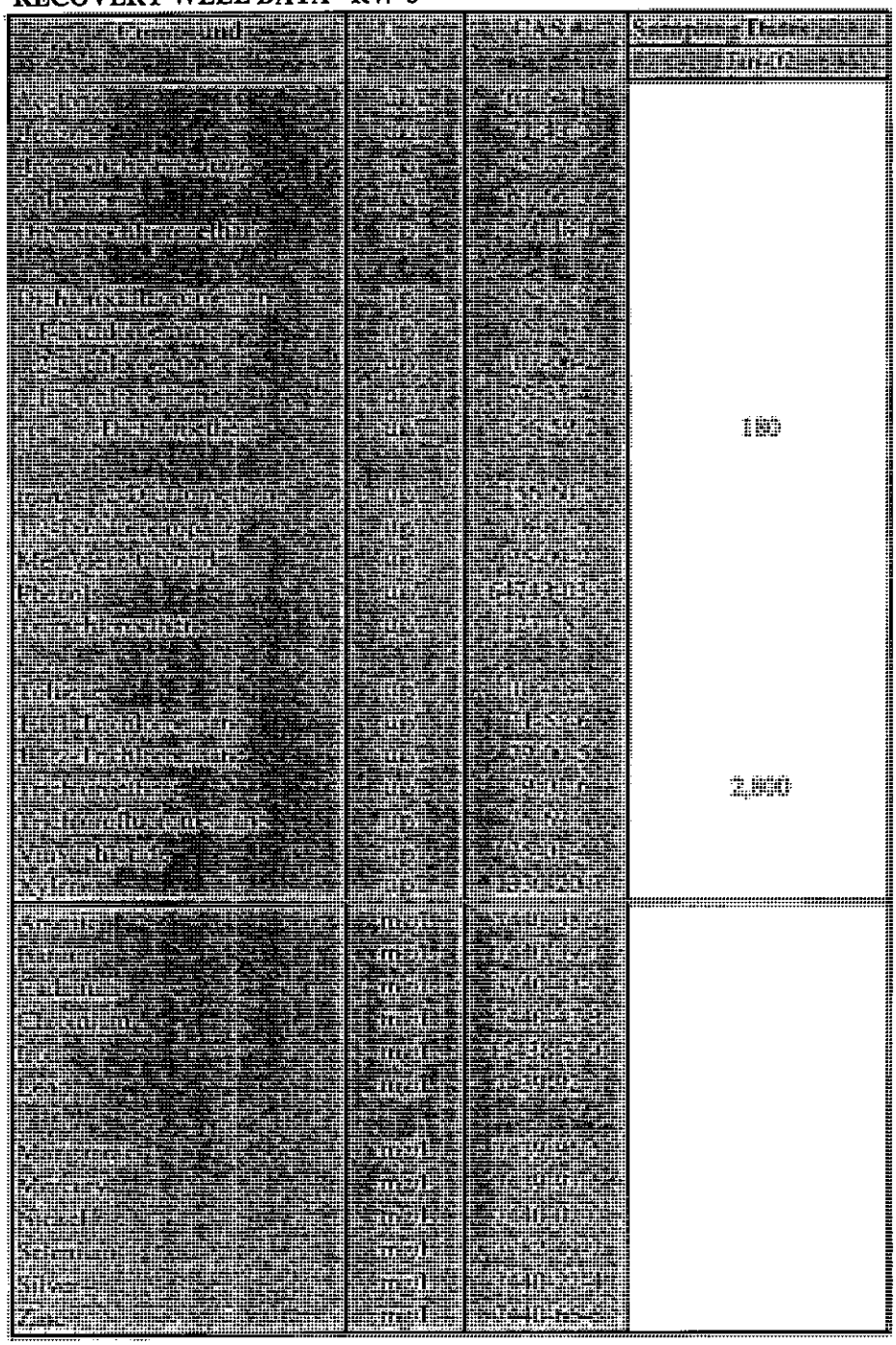
Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 11.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-6DR3



Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 12.
HISTORICAL GROUNDWATER
RECOVERY WELL DATA RW-6



Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 13. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-7

Compounds	Units	CAS #	Sampling Dates				
			Mar-87	Apr-87	Aug-87	Apr-89	Mar-97
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3	3.2				
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4				1	
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5	15.6	9.4	460		
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2				2	
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	107			2	
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6		106			
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	865	400	520	110	4
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4				6	
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 14.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8

Compound	Units	CAS #	Sampling Dates					
			Mar-87	Apr-87	Aug-87	Apr-89	Nov-91	Jan-92
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	42.4	15.6	28.7	21	15	17
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6		80.3				
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	7.3		15	19	14	16
Trichlorofluoromethane	µg/L	75-69-4				2		
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3					0.1	0.04
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3					0.01	
Iron	mg/L	15438-31-0					1	1.7
Lead	mg/L	7439-92-1					0.01	
Manganese	mg/L	7439-96-5					0.35	0.26
Mercury	mg/L	7439-97-6					0.001	
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 14.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8

Compound	Units	CAS #	Apr-92	Jul-92	Oct-92	Jan-93	Apr-93	Jul-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	15	19	16	12	21	16
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	14	17	17	18	11	8.1
Trichlorofluoromethane	µg/L	75-69-4		2.4		1.2		
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3			5.02			
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	6.8		13.9	9.6		
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.41	0.06	1.49	0.403		
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 14.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8

Compound	Units	CAS #	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94	Jan-95
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4					25.6	17.2
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	13	11	9.8	14	18.5	14.4
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2					all bql	
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						0.006
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						0.55
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						0.05
Mercury	mg/L	7439-97-6						0.0006
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 14.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8

Compound	Units	CAS #	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97	Jul-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2					33	
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2					23.4	34.8
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	17.7	25	21	21	17.3	14.5
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	21.2	20	15	10	6	10.8
Trichlorofluoromethane	µg/L	75-69-4						
Vinylchloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3		0.208	0.274			
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3		0.0117	0.0146			
Iron	mg/L	15438-31-0	0.386	13.4	16.5	3.53		0.641
Lead	mg/L	7439-92-1		0.0192	0.0287	0.0058		0.017
Manganese	mg/L	7439-96-5		0.881	1.12	0.298		0.094
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 14.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8

Compound	Units	CAS #	Jan-98	Jul-98	Jan-99	Jul-99	Feb-00	Jun-00
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	35.8	35.5		52.2		67.9
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	15.5	15.2		16.5		16.9
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	12.9	11.5	12.4	24.3	9.8	18.6
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3				0.018		
Cadmium	mg/L	7440-43-9		0.003				
Chromium	mg/L	7440-47-3				0.013		
Iron	mg/L	15438-31-0						0.025
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5				0.098		0.019
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 14.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8

Compound	Units	CAS #	Jan-01	Jul-01	Jan-02	Jul-02
Acetone	µg/L	67-64-1				
Benzene	µg/L	71-43-2				
Bromodichloromethane	µg/L	75-27-4				
Chloroform	µg/L	67-66-3				
Dibromochloromethane	µg/L	124-48-1				
Dichlorodifluoromethane	µg/L	75-71-8				
1,1-Dichloroethane	µg/L	75-34-3				
1,2-Dichloroethane	µg/L	107-06-2				
1,1-Dichloroethene	µg/L	75-35-4				
cis-1,2-Dichloroethene	µg/L	156-59-2	56.5	49.8	44	47
trans-1,2-Dichloroethene	µg/L	156-60-5			1	
1,2-Dichloropropane	µg/L	78-87-5				
Methylene Chloride	µg/L	75-09-2				
Phenols	µg/L	64743-03-9				
Tetrachloroethene	µg/L	127-18-4	6.8	16.5	14	18
Toluene	µg/L	108-88-3				
1,1,1-Trichloroethane	µg/L	71-55-6				
1,1,2-Trichloroethane	µg/L	79-00-5				
Trichloroethene	µg/L	79-01-6	15.1	20.1	20	27
Trichlorofluoromethane	µg/L	75-69-4				1
Vinyl chloride	µg/L	75-01-4				
Xylenes	µg/L	1330-20-7				
Arsenic	mg/L	7440-38-2				
Barium	mg/L	7440-39-3	0.039	0.146		
Cadmium	mg/L	7440-43-9				
Chromium	mg/L	7440-47-3				
Iron	mg/L	15438-31-0	0.117	0.252		
Lead	mg/L	7439-92-1		0.015		
Manganese	mg/L	7439-96-5	0.052	0.282		0.0778
Mercury	mg/L	7439-97-6				
Nickel	mg/L	7440-02-0				
Selenium	mg/L	7782-49-2				
Silver	mg/L	7440-22-4				
Zinc	mg/L	7440-66-6				

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 15. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-8D

Compound	Units	CAS #	Sampling Dates			
			Aug-88	Apr-89	Mar-97	Jan-02
Acetone	µg/L	67-64-1				all bql
Benzene	µg/L	71-43-2				
Bromodichloromethane	µg/L	75-27-4				
Chloroform	µg/L	67-66-3				
Dibromochloromethane	µg/L	124-48-1				
Dichlorodifluoromethane	µg/L	75-71-8				
1,1-Dichloroethane	µg/L	75-34-3				
1,2-Dichloroethane	µg/L	107-06-2				
1,1-Dichloroethene	µg/L	75-35-4				
cis-1,2-Dichloroethene	µg/L	156-59-2			9.8	
trans-1,2-Dichloroethene	µg/L	156-60-5	5.42			
1,2-Dichloropropane	µg/L	78-87-5				
Methylene Chloride	µg/L	75-09-2				
Phenols	µg/L	64743-03-9				
Tetrachloroethene	µg/L	127-18-4	7.65	5		
Toluene	µg/L	108-88-3				
1,1,1-Trichloroethane	µg/L	71-55-6		1		
1,1,2-Trichloroethane	µg/L	79-00-5				
Trichloroethene	µg/L	79-01-6	56.2	73	8.1	
Trichlorofluoromethane	µg/L	75-69-4		7		
Vinyl chloride	µg/L	75-01-4				
Xylenes	µg/L	1330-20-7				
Arsenic	mg/L	7440-38-2				
Barium	mg/L	7440-39-3				
Cadmium	mg/L	7440-43-9				
Chromium	mg/L	7440-47-3				
Iron	mg/L	15438-31-0				
Lead	mg/L	7439-92-1				
Manganese	mg/L	7439-96-5				
Mercury	mg/L	7439-97-6				
Nickel	mg/L	7440-02-0				
Selenium	mg/L	7782-49-2				
Silver	mg/L	7440-22-4				
Zinc	mg/L	7440-66-6				

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 16.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8DR

Compound	Units	CAS #	Sampling Dates				
			Apr-89	Jun-89	Nov-91	Jan-92	Apr-92
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3	3				
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5		2			
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2		5			
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	6	6		2.4	12
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	57	69	24	29	96
Trichlorofluoromethane	µg/L	75-69-4	4	6			
Vinylchloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3				0.07	
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0				13	2.6
Lead	mg/L	7439-92-1			0.004	0.14	
Manganese	mg/L	7439-96-5			0.1	0.14	0.09
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 16.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8DR

Compound	Units	CAS #	Jul-92	Oct-92	Jan-93	Apr-93	Jul-93
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	9.7	19	16	9.6	15
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	71	120	110	59	92
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2			all bql		
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0	0.36	0.685			
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 16.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8DR

Compound	Units	CAS #	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	76-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					6.9
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	67	76	56.1	59	53.8
Trichlorofluoromethane	µg/L	75-69-4					5.2
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					all bql
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 16.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8DR

Compound	Units	CAS #	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	7.7	5.5	10	7.7	5
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	56.8	42.4	63	48	42
Trichlorofluoromethane	µg/L	75-69-4	4.7		7.3		
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7440-43-9		0.014			
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0			0.857	3.36	0.563
Lead	mg/L	7439-92-1				0.0109	
Manganese	mg/L	7439-96-5			0.078	0.17	0.0432
Mercury	mg/L	7439-97-6	0.0005				
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 16.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8DR

Compound	Units	CAS #	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2	10				
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2	24.4	20.3		15.3	
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	13	7.7		9.9	
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	97	69.8	47.5	77.1	53.6
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2		all bql			
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7440-43-9				0.002	
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 16.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8DR

Compound	Units	CAS #	Jul-99	Feb-00	Jun-00	Jan-01	Jul-01
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2	8.7		7.2	17.3	17.1
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					5.8
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	40.2	27.6	27.8	41	37.6
Trichlorofluoromethane	µg/L	75-69-4					2.8
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					all bql
Barium	mg/L	7440-39-3	0.015			0.025	
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0				0.092	
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5				0.01	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 16.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-8DR

			16	14
			5	5
			40	35
			4	2

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 17. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-9

Compound	Units	CAS #	Sampling Dates					
			Mar-87	Apr-87	Aug-87	Apr-89	Jan-90	Mar-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3	12.2					
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						11.6
trans-1,2-Dichloroethene	µg/L	156-60-5		13.2	95.5			
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	45.5	68.1	65	52		14.4
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6	8.3	20.1				
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,090	1,120	1,790	2,000	890	1,060
Trichlorofluoromethane	µg/L	75-69-4						
Vinylchloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 18. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-10

Compound	Units	CAS #	Sampling Dates				
			Mar-87	Apr-87	Aug-87	Apr-89	Mar-97
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5	16.2	12.9	21.4	130	
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	97.6	15.7		11	
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6	24.2	59.2		12	
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	855	537	359	1100	8.2
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 19.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11

Compound	Units	CAS #	Sampling Dates					
			Mar-87	Apr-87	Aug-87	Apr-89	Jun-89	Jul-89
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5	9.5	7.4	17.7	26		
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2				27		
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	196	49.1	86.2	140		160
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6	6.5	17.9				
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,190	856	637	1,100		1,100
Trichlorofluoromethane	µg/L	75-69-4				47		59
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 19.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11

Compound	Units	CAS #	Nov-91	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	170	140	120	120	160	140
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,000	870	760	740	1,200	860
Trichlorofluoromethane	µg/L	75-69-4	63		39	49	45	34
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3		0.06				
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	2.7	4.7	11		4.97	3.01
Lead	mg/L	7439-92-1	0.005					
Manganese	mg/L	7439-96-5	0.08	0.13	0.32		0.098	0.163
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 19.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11

Compound	Units	CAS #	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	25	28				
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	130	150	1,300	860	554	702
Trichlorofluoromethane	µg/L	75-69-4	3.1	4				
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 19.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11

Compound	Units	CAS #	Oct-94	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						29
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	175	249	454	500	62	34
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,520	1,750	3,170	3,200	390	250
Trichlorofluoromethane	µg/L	75-69-4	15					
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3				0.668	0.242	
Cadmium	mg/L	7440-43-9	0.006		0.005			
Chromium	mg/L	7440-47-3				0.0638	0.018	
Iron	mg/L	15438-31-0	18.2	34.2	7.18	62.2	16.7	5.28
Lead	mg/L	7439-92-1		0.02		0.0248	0.00728	0.00323
Manganese	mg/L	7439-96-5				1.71	0.472	0.185
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 19.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11

Compound	Units	CAS #	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	31.3			24.6		
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	44.5	41		34.6		47
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	335	288	304	270	200	271
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						0.026
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0		12.55		2.75		
Lead	mg/L	7439-92-1		0.019				
Manganese	mg/L	7439-96-5		0.35		0.072		
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 19.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11

Compound	Units	CAS #	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2		10.3		4.5	1	3
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4		21.9	6.8	17.8	9	7
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	174	125	45	89	44	38
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3		0.035	0.271	0.157		
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0		0.026	2.28	0.413		
Lead	mg/L	7439-92-1				0.018		
Manganese	mg/L	7439-96-5		0.005	0.212	0.132		0.0193
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 20.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11D

Compound	Units	CAS #	Sampling Dates					
			Aug-88	Apr-89	Jun-89	Jun-89	Jul-89	Nov-91
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2				61		
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	30.2	45			99	81
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	712	860			620	950
Trichlorofluoromethane	µg/L	75-69-4		54			25	130
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						0.003
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 20.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11D

Compound	Units	CAS #	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93	Apr-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	88	76	72	81	98	73
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,000	990	820	980	1,000	730
Trichlorofluoromethane	µg/L	75-69-4	120	110	120	110	130	
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0				0.82		
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.11				0.05	
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 20.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11D

Compound	Units	CAS #	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	110					79
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,200	1,200	1,200	1,210	1,280	905
Trichlorofluoromethane	µg/L	75-69-4	140					
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						all bql
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 20.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11D

Compound	Units	CAS #	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97
Acetone	µg/L	67-64-1					52	
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2					46	
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						57
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	76.6	57.6	140	130	110	129
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	799	620	1,100	1,000	940	1,200
Trichlorofluoromethane	µg/L	75-69-4			130	110		
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2				all bql	all bql	
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9		0.009				
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0			0.106			
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5			0.0156			
Mercury	mg/L	7439-97-6	0.0007					
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 20.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11D

Compound	Units	CAS #	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99	Feb-00
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2			40			
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	91		97			
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	931	715	1,070	477	444	379
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	all bql					
Barium	mg/L	7440-39-3					0.031	
Cadmium	mg/L	7740-43-9			0.001			
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0			0.394			
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5			0.085			
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 20.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-11D

Compound	Units	CAS #	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2		68	470	770	770
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4		76	42		
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	283	1,900	805	270	150
Trichlorofluoromethane	µg/L	75-69-4		16.8			
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3	0.035		0.028		
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0	0.061	0.064	0.049		0.124
Lead	mg/L	7439-92-1			0.02		
Manganese	mg/L	7439-96-5	0.005	0.012	0.015		0.0447
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 19. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-12

Compound	Units	CAS #	Sampling Dates				
			Mar-87	Apr-87	Aug-87	Apr-89	Mar-97
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3				2	
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					30.8
trans-1,2-Dichloroethene	µg/L	156-60-5	8.4	5.3	27.6		
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	122	15	20.6	28	13.6
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6	4.5	40.5			
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	103	97.7	106	140	45.6
Trichlorofluoromethane	µg/L	75-69-4				19	
Vinyl Chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 21.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-13

Compound	Units	CAS #	Sampling Dates					
			Aug-88	Apr-89	Nov-91	Jan-92	Apr-92	Jul-92
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2		1				
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	76	28	10	11	16	4
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	40.4	42	32	39	34	11
Trichlorofluoromethane	µg/L	75-69-4		1				
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3				0.24		
Cadmium	mg/L	7440-43-9			0.002			
Chromium	mg/L	7440-47-3			0.01			
Iron	mg/L	15438-31-0			7	19	9.8	4.22
Lead	mg/L	7439-92-1			0.025	0.1		
Manganese	mg/L	7439-96-5			3.5	1.6	0.62	0.27
Mercury	mg/L	7439-97-6			0.002			
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 21.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-13

Compound	Units	CAS #	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93	Jan-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4		0.9				
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	13	25	33	46		
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6		1.1				
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	48	44	37	34	33	29
Trichlorofluoromethane	µg/L	75-69-4		0.7				
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	all bql					
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0		1.29				
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5		0.168				
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 21.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-13

Compound	Units	CAS #	Apr-94	Jul-94	Oct-94	Jan-95	Jul-95	Jan-96
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4			19.5	11.6	19	14
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	27.5	27.6	29.7	42.3	25.9	27
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3				0.6		0.3
Cadmium	mg/L	7740-43-9			0.006	0.018		
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0			14.6	18.6	0.703	22.4
Lead	mg/L	7439-92-1			0.016	0.034		0.026
Manganese	mg/L	7439-96-5			0.7	0.96		1.3
Mercury	mg/L	7439-97-6				0.0008		0.000423
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 21.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-13

Compound	Units	CAS #	Jul-96	Jan-97	Mar-97	Jul-97	Jan-98	Jul-98
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2		170				
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2			325	328		199
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	17	30	57.2	51.5		35.4
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	9.1	19	17	15	13.2	12.8
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.61					
Cadmium	mg/L	7440-43-9						0.001
Chromium	mg/L	7440-47-3	0.015					
Iron	mg/L	15438-31-0	44.7	4.18		7.5		
Lead	mg/L	7439-92-1	0.0643	0.00648		0.032		
Manganese	mg/L	7439-96-5	2.7	0.297		0.386		0.07
Mercury	mg/L	7439-97-6	0.00129	0.00036		0.002		
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 21.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-13

Compound	Units	CAS #	Jan-99	Jul-99	Feb-00	Jun-00	Jan-01	Jul-01
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2		91.1		190	107	52.4
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4		18.7		36.3	17.1	11.2
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	14.6	18.7	14.6	12.9	13.1	22.2
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3		0.039		0.04	0.047	0.073
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0				0.061	0.056	0.13
Lead	mg/L	7439-92-1						0.114
Manganese	mg/L	7439-96-5				0.036	0.02	0.011
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 21.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-13

			45	39
			1	
			11	9
			17	16

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 22.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-14

Compound	Units	CAS #	Sampling Dates				
			Jun-88	Apr-89	Nov-91	Jan-92	Apr-92
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	1,150	2,000	530	810	890
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	6,060	15,000	1,800	3,800	4,800
Trichlorofluoromethane	µg/L	75-69-4	165		51		98
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3			0.4	0.32	
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3			0.03		
Iron	mg/L	15438-31-0			27	46	42
Lead	mg/L	7439-92-1			0.017	0.05	
Manganese	mg/L	7439-96-5			0.2	2.4	1.6
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 22.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-14

Compound	Units	CAS #	Jul-92	Oct-92	Jan-93	Apr-93	Jul-93
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	850	530	1,100	840	160
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	4,400	2,400	6,000	4,200	770
Trichlorofluoromethane	µg/L	75-69-4	110	62	120	70	
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3		13.2			
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0	0.41	18	18		
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5		3.28	0.163		
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 22.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-14

Compound	Units	CAS #	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					169
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	260	530	1,730		651
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					1.05
Cadmium	mg/L	7440-43-9					0.006
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					78.1
Lead	mg/L	7439-92-1					0.017
Manganese	mg/L	7439-96-5					3.18
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 22.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-14

Compound	Units	CAS #	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97
Acetone	µg/L	67-64-1					22
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					6
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	167	215	320	110	51
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	744	859	1,800	430	120
Trichlorofluoromethane	µg/L	75-69-4	5.7				
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3	3.3		0.536	1.04	0.223
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3	0.09		0.0195	0.0372	
Iron	mg/L	15438-31-0	243	0.394	64.2	116	13.3
Lead	mg/L	7439-92-1	0.042		0.00791	0.0206	
Manganese	mg/L	7439-96-5	12		2.62	4.91	0.719
Mercury	mg/L	7439-97-6	0.0007				
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 22.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-14

Compound	Units	CAS #	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2	77.4	67.5		15.3	
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4	15	19		49	
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	119	99		98	
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9				0.003	
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0		3.6		8.45	
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5		0.151		0.776	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 22.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-14

Compound	Units	CAS #	Jul-99	Feb-00	Jun-00	Jan-01	Jul-01
Acetone	µg/L	67-64-1				DRY	DRY
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4			63		
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6		381	207		
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3			0.186		
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0			4.14		
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5			0.47		
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 22.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-14

Compound	Units	CAS #	Date
			DAY
Acetone	ug/L	67-64-1	
Benzene	ug/L	71-43-2	
Bromodichloromethane	ug/L	75-27-4	
Chloroform	ug/L	67-66-3	
Ethylbenzene	ug/L	100-41-4	
Dichlorodifluoromethane	ug/L	75-71-8	
1,1-Dichloroethane	ug/L	75-34-3	
1,2-Dichloroethane	ug/L	107-06-2	
1,1-Dichloroethene	ug/L	75-35-4	
cis-1,2-Dichloroethene	ug/L	156-59-2	
trans-1,2-Dichloroethene	ug/L	156-60-5	
1,2-Dichloropropane	ug/L	78-87-5	
Methylene chloride	ug/L	75-09-2	
Toluene	ug/L	108-88-3	
Trichloroethene	ug/L	79-01-6	
Vinyl acetate	ug/L	108-05-4	
Xylenes	ug/L	1330-20-7	
Arsenic	ug/L	7440-38-2	
Barium	ug/L	7440-39-3	
Cadmium	ug/L	7440-43-9	
Chromium	ug/L	7440-47-3	
Iron	ug/L	7439-89-6	
Lead	ug/L	7439-92-1	
Manganese	ug/L	7439-96-5	
Mercury	ug/L	7439-97-6	
Nickel	ug/L	7440-02-0	
Selenium	ug/L	7782-49-2	
Silver	ug/L	7440-22-4	
Zinc	ug/L	7440-66-6	

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 23. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-15

Compound	Units	CAS #	Sampling Dates			
			Jun-88	Apr-89	Mar-97	Jan-02
Acetone	µg/L	67-64-1				
Benzene	µg/L	71-43-2				
Bromodichloromethane	µg/L	75-27-4				
Chloroform	µg/L	67-66-3				
Dibromochloromethane	µg/L	124-48-1				
Dichlorodifluoromethane	µg/L	75-71-8				
1,1-Dichloroethane	µg/L	75-34-3				
1,2-Dichloroethane	µg/L	107-06-2				
1,1-Dichloroethene	µg/L	75-35-4				
cis-1,2-Dichloroethene	µg/L	156-59-2			7.9	
trans-1,2-Dichloroethene	µg/L	156-60-5				
1,2-Dichloropropane	µg/L	78-87-5				
Methylene Chloride	µg/L	75-09-2				
Phenols	µg/L	64743-03-9				
Tetrachloroethene	µg/L	127-18-4	50.4		3.3	
Toluene	µg/L	108-88-3				
1,1,1-Trichloroethane	µg/L	71-55-6				
1,1,2-Trichloroethane	µg/L	79-00-5				
Trichloroethene	µg/L	79-01-6	1,040	330	283	1100
Trichlorofluoromethane	µg/L	75-69-4				
Vinyl chloride	µg/L	75-01-4				
Xylenes	µg/L	1330-20-7				
Arsenic	mg/L	7440-38-2				
Barium	mg/L	7440-39-3				
Cadmium	mg/L	7740-43-9				
Chromium	mg/L	7440-47-3				
Iron	mg/L	15438-31-0				
Lead	mg/L	7439-92-1				
Manganese	mg/L	7439-96-5				
Mercury	mg/L	7439-97-6				
Nickel	mg/L	7440-02-0				
Selenium	mg/L	7782-49-2				
Silver	mg/L	7440-22-4				
Zinc	mg/L	7440-66-6				

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 24. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-16

Compound	Units	CAS #	Sampling Dates		
			Apr-89	Mar-97	Jan-02
Acetone	µg/L	67-64-1			DRY
Benzene	µg/L	71-43-2			
Bromodichlormethane	µg/L	75-27-4			
Chloroform	µg/L	67-66-3			
Dibromochloromethane	µg/L	124-48-1			
Dichlorodifluoromethane	µg/L	75-71-8			
1,1-Dichloroethane	µg/L	75-34-3			
1,2-Dichloroethane	µg/L	107-06-2			
1,1-Dichloroethene	µg/L	75-35-4			
cis-1,2-Dichloroethene	µg/L	156-59-2			
trans-1,2-Dichloroethene	µg/L	156-60-5			
1,2-Dichloropropane	µg/L	78-87-5			
Methylene Chloride	µg/L	75-09-2	3		
Phenols	µg/L	64743-03-9			
Tetrachloroethene	µg/L	127-18-4	4		
Toluene	µg/L	108-88-3			
1,1,1-Trichloroethane	µg/L	71-55-6			
1,1,2-Trichloroethane	µg/L	79-00-5			
Trichloroethene	µg/L	79-01-6			
Trichlorofluoromethane	µg/L	75-69-4			
Vinyl chloride	µg/L	75-01-4			
Xylenes	µg/L	1330-20-7			
Arsenic	mg/L	7440-38-2			
Barium	mg/L	7440-39-3			
Cadmium	mg/L	7740-43-9			
Chromium	mg/L	7440-47-3			
Iron	mg/L	15438-31-0			
Lead	mg/L	7439-92-1			
Manganese	mg/L	7439-96-5			
Mercury	mg/L	7439-97-6			
Nickel	mg/L	7440-02-0			
Selenium	mg/L	7782-49-2			
Silver	mg/L	7440-22-4			
Zinc	mg/L	7440-66-6			

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 25. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-17

Compound	Units	CAS #	Sampling Dates		
			Apr-89	Mar-97	Jan-02
Acetone	µg/L	67-64-1			
Benzene	µg/L	71-43-2			
Bromodichlormethane	µg/L	75-27-4			
Chloroform	µg/L	67-66-3			
Dibromochloromethane	µg/L	124-48-1			
Dichlorodifluoromethane	µg/L	75-71-8			
1,1-Dichloroethane	µg/L	75-34-3			
1,2-Dichloroethane	µg/L	107-06-2			
1,1-Dichloroethene	µg/L	75-35-4			
cis-1,2-Dichloroethene	µg/L	156-59-2			180
trans-1,2-Dichloroethene	µg/L	156-60-5			
1,2-Dichloropropane	µg/L	78-87-5			
Methylene Chloride	µg/L	75-09-2			
Phenols	µg/L	64743-03-9			
Tetrachloroethene	µg/L	127-18-4	20	5	12
Toluene	µg/L	108-88-3			
1,1,1-Trichloroethane	µg/L	71-55-6			
1,1,2-Trichloroethane	µg/L	79-00-5			
Trichloroethene	µg/L	79-01-6	1		5
Trichlorofluoromethane	µg/L	75-69-4	2		
Vinyl chloride	µg/L	75-01-4			
Xylenes	µg/L	1330-20-7			
Arsenic	mg/L	7440-38-2			
Barium	mg/L	7440-39-3			
Cadmium	mg/L	7740-43-9			
Chromium	mg/L	7440-47-3			
Iron	mg/L	15438-31-0			
Lead	mg/L	7439-92-1			
Manganese	mg/L	7439-96-5			
Mercury	mg/L	7439-97-6			
Nickel	mg/L	7440-02-0			
Selenium	mg/L	7782-49-2			
Silver	mg/L	7440-22-4			
Zinc	mg/L	7440-66-6			

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 26.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18

Compound	Units	CAS #	Sampling Dates					
			Apr-89	Jan-90	Nov-91	Jan-92	Apr-92	Jul-92
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2	130					
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6	77					
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	5,100	1,200	2,100	2,300	2,400	1,500
Trichlorofluoromethane	µg/L	75-69-4	2,100					
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3				0.08		
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3			0.01			
Iron	mg/L	15438-31-0			3.2	22	5.5	3.63
Lead	mg/L	7439-92-1			0.004			
Manganese	mg/L	7439-96-5			0.6	0.24	0.39	0.11
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 26.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18

Compound	Units	CAS #	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93	Jan-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4				8.6		
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6				113		
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,700	1,500	940	1,100	1,100	1,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0	11	1.73				
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.731	0.2				
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 26.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18

Compound	Units	CAS #	Apr-94	Jul-94	Oct-94	Jan-95	Jul-95	Jan-96
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	764	1,030	486	363	584	820
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2			all bql			
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9				0.006		
Chromium	mg/L	7440-47-3					0.011	
Iron	mg/L	15438-31-0				17.3	31.8	14.4
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5				0.71	0.773	0.482
Mercury	mg/L	7439-97-6				0.0006		
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 26.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18

Compound	Units	CAS #	Jul-96	Jan-97	Mar-97	Jul-97	Jan-98	Jul-98
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4			5.3			
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6		36	6.2			
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	780	910	840	658	625	472
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						0.002
Chromium	mg/L	7440-47-3	0.0211	12.2		7.35		
Iron	mg/L	15438-31-0	37					1.39
Lead	mg/L	7439-92-1	0.00642					
Manganese	mg/L	7439-96-5	1.37	0.447		0.253		0.19
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 26.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18

Compound	Units	CAS #	Jan-99	Jul-99	Feb-00	Jun-00	Jan-01	Jul-01
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	435	274	204	134	61	52
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						0.011
Barium	mg/L	7440-39-3		0.014				0.038
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0				1.34	0.471	1.5
Lead	mg/L	7439-92-1						0.012
Manganese	mg/L	7439-96-5		0.053		0.074	0.052	0.017
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 26.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18

Compound	Units	CAS #	Jan-02	Jul-02

TABLE 27.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18D

Compound	Units	CAS #	Sampling Dates					
			Nov-91	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7440-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 27.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18D

Compound	Units	CAS #	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 27.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18D

Compound	Units	CAS #	Oct-94	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 27.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18D

Compound	Units	CAS #	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	4.8					
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 27.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-18D

Compound	Units	CAS #	Feb-00	Jun-00	Jan-02
Acetone	µg/L	67-64-1			
Benzene	µg/L	71-43-2			
Bromodichlormethane	µg/L	75-27-4			
Chloroform	µg/L	67-66-3			
Dibromochloromethane	µg/L	124-48-1			
Dichlorodifluoromethane	µg/L	75-71-8			
1,1-Dichloroethane	µg/L	75-34-3			
1,2-Dichloroethane	µg/L	107-06-2			
1,1-Dichloroethene	µg/L	75-35-4			
cis-1,2-Dichloroethene	µg/L	156-59-2			
trans-1,2-Dichloroethene	µg/L	156-60-5			
1,2-Dichloropropane	µg/L	78-87-5			
Methylene Chloride	µg/L	75-09-2			
Phenols	µg/L	64743-03-9			
Tetrachloroethene	µg/L	127-18-4			
Toluene	µg/L	108-88-3			
1,1,1-Trichloroethane	µg/L	71-55-6			
1,1,2-Trichloroethane	µg/L	79-00-5			
Trichloroethene	µg/L	79-01-6			5
Trichlorofluoromethane	µg/L	75-69-4			
Vinyl chloride	µg/L	75-01-4			
Xylenes	µg/L	1330-20-7			
Arsenic	mg/L	7440-38-2			
Barium	mg/L	7440-39-3			
Cadmium	mg/L	7740-43-9			
Chromium	mg/L	7440-47-3			
Iron	mg/L	15438-31-0			
Lead	mg/L	7439-92-1			
Manganese	mg/L	7439-96-5			
Mercury	mg/L	7439-97-6			
Nickel	mg/L	7440-02-0			
Selenium	mg/L	7782-49-2			
Silver	mg/L	7440-22-4			
Zinc	mg/L	7440-66-6			

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 28.
HISTORICAL GROUNDWATER
RECOVERY WELL DATA RW-19

Compound	Units	CAS #	Sampling Dates
			Jun-02

TABLE 29. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-20

Component	Units	CAS #	Sampling Dates		
			Apr-94	Mar-97	Jan-00
Acetone	ug/L	[illegible]	64		
Benzene	ug/L	[illegible]			
Bromodichloromethane	ug/L	[illegible]			
Carbon Disulfide	ug/L	[illegible]			
Chloroethane (Ethyl Chloride)	ug/L	[illegible]			
2-Chloroethyl vinyl ether	ug/L	[illegible]			
Chloroform	ug/L	[illegible]			
Dibromochloromethane	ug/L	[illegible]			
1,1-Dichloroethane	ug/L	[illegible]			
1,2-Dichloroethane	ug/L	[illegible]			
1,1-Dichloroethene	ug/L	[illegible]			
trans-1,2-Dichloroethene	ug/L	[illegible]			
1,2-Dichloropropane	ug/L	[illegible]			
cis-1,3-Dichloropropene	ug/L	[illegible]			
Methylene Chloride	ug/L	[illegible]	2		
Phenol	ug/L	[illegible]			
Tetrachloroethene	ug/L	[illegible]			
Toluene	ug/L	[illegible]			
trans-1,3-Dichloropropene	ug/L	[illegible]			
1,1,1-Trichloroethane	ug/L	[illegible]			
1,1,2-Trichloroethane	ug/L	[illegible]			
Trichloroethene	ug/L	[illegible]		14	17
Trichlorofluoromethane	ug/L	[illegible]			
Vinyl acetate	ug/L	[illegible]			
Xylenes	ug/L	[illegible]			
Arsenic	mg/L	[illegible]			
Barium	mg/L	[illegible]			
Cadmium	mg/L	[illegible]			
Chromium	mg/L	[illegible]			
Iron	mg/L	[illegible]			
Lead	mg/L	[illegible]			
Manganese	mg/L	[illegible]			
Mercury	mg/L	[illegible]			
Nickel	mg/L	[illegible]			
Selenium	mg/L	[illegible]			
Silver	mg/L	[illegible]			
Zinc	mg/L	[illegible]			

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 30. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-21

Compound	Units	CAS #	Sampling Dates		
			Apr-90	Mar-97	Jan-02
Acetone	µg/L	67-64-1		all bqe	all bql
Benzene	µg/L	71-43-2			
Bromodichlormethane	µg/L	75-27-4			
Chloroform	µg/L	67-66-3	4		
Dibromochloromethane	µg/L	124-48-1			
				bqls	
Dichlorodifluoromethane	µg/L	75-71-8			
1,1-Dichloroethane	µg/L	75-34-3			
1,2-Dichloroethane	µg/L	107-06-2			
1,1-Dichloroethene	µg/L	75-35-4			
cis-1,2-Dichloroethene	µg/L	156-59-2			
trans-1,2-Dichloroethene	µg/L	156-60-5			
1,2-Dichloropropane	µg/L	78-87-5			
Methylene Chloride	µg/L	75-09-2	1		
Phenols	µg/L	64743-03-9			
Tetrachloroethene	µg/L	127-18-4	4		
Toluene	µg/L	108-88-3			
1,1,1-Trichloroethane	µg/L	71-55-6			
1,1,2-Trichloroethane	µg/L	79-00-5			
Trichloroethene	µg/L	79-01-6	42		
Trichlorofluoromethane	µg/L	75-69-4	3		
Vinyl chloride	µg/L	75-01-4			
Xylenes	µg/L	1330-20-7			
Arsenic	mg/L	7440-38-2			
Barium	mg/L	7440-39-3			
Cadmium	mg/L	7740-43-9			
Chromium	mg/L	7440-47-3			
Iron	mg/L	15438-31-0			
Lead	mg/L	7439-92-1			
Manganese	mg/L	7439-96-5			
Mercury	mg/L	7439-97-6			
Nickel	mg/L	7440-02-0			
Selenium	mg/L	7782-49-2			
Silver	mg/L	7440-22-4			
Zinc	mg/L	7440-66-6			

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 31. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-21D

Compound	Units	CAS-#	Sampling Dates			
			Apr-90	Jun-90	Mar-97	Jan-02
Acetone	µg/L	67-64-1		all bql	all bql	
Benzene	µg/L	71-43-2				
Bromodichlormethane	µg/L	75-27-4				
Chloroform	µg/L	67-66-3	4			
Dibromochloromethane	µg/L	124-48-1				
Dichlorodifluoromethane	µg/L	75-71-8				
1,1-Dichloroethane	µg/L	75-34-3				
1,2-Dichloroethane	µg/L	107-06-2				
1,1-Dichloroethene	µg/L	75-35-4				
cis-1,2-Dichloroethene	µg/L	156-59-2				
trans-1,2-Dichloroethene	µg/L	156-60-5				
1,2-Dichloropropane	µg/L	78-87-5				
Methylene Chloride	µg/L	75-09-2	1			
Phenols	µg/L	64743-03-9				
Tetrachloroethene	µg/L	127-18-4	4			
Toluene	µg/L	108-88-3				4
1,1,1-Trichloroethane	µg/L	71-55-6				
1,1,2-Trichloroethane	µg/L	79-00-5				
Trichloroethene	µg/L	79-01-6	42			
Trichlorofluoromethane	µg/L	75-69-4	3			
Vinyl chloride	µg/L	75-01-4				
Xylenes	µg/L	1330-20-7				
Arsenic	mg/L	7440-38-2				
Barium	mg/L	7440-39-3				
Cadmium	mg/L	7740-43-9				
Chromium	mg/L	7440-47-3				
Iron	mg/L	15438-31-0				
Lead	mg/L	7439-92-1				
Manganese	mg/L	7439-96-5				
Mercury	mg/L	7439-97-6				
Nickel	mg/L	7440-02-0				
Selenium	mg/L	7782-49-2				
Silver	mg/L	7440-22-4				
Zinc	mg/L	7440-66-6				

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 32.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-22

Compound	Units	CAS #	Sampling Dates					
			Nov-91	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						19
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						15
Toluene	µg/L	108-88-3						6.4
1,1,1-Trichloroethane	µg/L	71-55-6						8.5
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,200	1,300	1,400	1,100	1,300	1,600
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.2	0.17			3.96	
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3	0.01					
Iron	mg/L	15438-31-0	1.7	4.7	15	0.97	11.4	
Lead	mg/L	7439-92-1	0.005	0.05				
Manganese	mg/L	7439-96-5	0.3	0.55	0.54	0.07	0.465	0.087
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 32.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-22

Compound	Units	CAS #	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4	15					
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	13	11				
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,600	1,600	1,200	150	1,550	1,300
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 32.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-22

Compound	Units	CAS #	Oct-94	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,110	275	738	820	580	780
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2	all bql		all bql			
Barium	mg/L	7440-39-3					0.301	
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3					0.0175	
Iron	mg/L	15438-31-0				6.14	15.1	1.3
Lead	mg/L	7439-92-1					0.00528	
Manganese	mg/L	7439-96-5				0.217	0.593	0.0482
Mercury	mg/L	7439-97-6		0.0007				
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 32.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-22

Compound	Units	CAS #	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2	68					
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	80	99		83	84	85
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	1,100	1,080	847	965	434	245
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						0.067
Cadmium	mg/L	7440-43-9				0.001		
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0		20.65				
Lead	mg/L	7439-92-1		0.02				
Manganese	mg/L	7439-96-5		0.081				0.04
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 32.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-22

Compound	Units	CAS #	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4		10				
cis-1,2-Dichloroethene	µg/L	156-59-2		91	78	42	21	5
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4		8				
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	198	836	760	386	230	57
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3		0.068	0.077	0.082		
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3				0.013		
Iron	mg/L	15438-31-0		0.038	0.06	0.15		
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5			0.052	0.016		
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 33.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-23

Compound	Units	CAS #	Sampling Dates					
			Nov-91	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	13			18	18	1.2
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	35			37	40	3.5
Trichlorofluoromethane	µg/L	75-69-4					4.3	
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.3	0.73			4.29	
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3	0.08	0.4	0.047			
Iron	mg/L	15438-31-0	12	240	120	4.67	16	4.05
Lead	mg/L	7439-92-1	0.11	0.52				
Manganese	mg/L	7439-96-5	3.2	6.4	3.9	0.48	1.3	0.302
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 33.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-23

Compound	Units	CAS #	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4		5.1				
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6		14	35	20	3.3	33.3
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 33.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-23

Compound	Units	CAS #	Oct-94	Jan-95	Jul-95	Jan-96	Jul-96	Jan-97
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4	20.1	21.7	6.1			
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	43.5	46	15.7		15	
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3				0.306	0.764	
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3				0.0382	0.0838	0.0118
Iron	mg/L	15438-31-0	0.471		7.34	44.4	97.9	11.8
Lead	mg/L	7439-92-1				0.0272	0.0674	0.01
Manganese	mg/L	7439-96-5			0.185	1.54	3.63	0.548
Mercury	mg/L	7439-97-6		0.0006				
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 33.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-23

Compound	Units	CAS #	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						42.1
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						8.5
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6						26.6
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2				all bql		
Barium	mg/L	7440-39-3						0.056
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0		8.85				
Lead	mg/L	7439-92-1		0.021				
Manganese	mg/L	7439-96-5		0.276				0.161
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 33.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL MW-23

Compound	Units	CAS #	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Acetone	µg/L	67-64-1			bqls			
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2				27.9	39	65
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4				4.3	5	9
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6				16.3	18	29
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3		0.029	0.067	0.068		
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0		0.025	0.607	1.04		
Lead	mg/L	7439-92-1				0.018		
Manganese	mg/L	7439-96-5			0.081	0.104		
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 34. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-24

Compound	Units	CAS #	Sampling Dates	
			Mar-97	Jan-05
Acetone	ug/L	67-64-1		
Benzene	ug/L	71-43-2		
Bromodichloromethane	ug/L	75-27-4		
Bromoform	ug/L	75-25-2		
Bromomethane	ug/L	74-83-9		
2-Butanone (MEK)	ug/L	78-93-3		
Carbon disulfide	ug/L	75-15-0		
Carbon tetrachloride	ug/L	56-23-5		
Chlorobenzene	ug/L	108-90-7		
Chloroethane	ug/L	75-00-3		
Chloroform	ug/L	67-66-3		
Chloromethane	ug/L	74-87-3		
Dibromochloromethane	ug/L	124-48-1		
1,1-Dichloroethane	ug/L	75-34-3		
1,2-Dichloroethane	ug/L	107-06-2		
1,1-Dichloroethene	ug/L	75-35-4		
cis-1,2-Dichloroethene	ug/L	156-59-2		
trans-1,2-Dichloroethene	ug/L	156-60-5		
1,2-Dichloropropane	ug/L	78-87-5		
cis-1,3-Dichloropropene	ug/L	10061-01-5		
trans-1,3-Dichloropropene	ug/L	10061-02-6		
Ethanol	ug/L	64-17-5		
Ethylbenzene	ug/L	100-41-4		
2-Hexanone	ug/L	591-78-6		
Methylene chloride	ug/L	75-09-2		
4-Methyl-2-pentanone	ug/L	108-10-1		
Styrene	ug/L	100-42-5		
1,1,2,2-Tetrachloroethane	ug/L	79-34-5		
Tetrachloroethene	ug/L	127-18-4	161	89
Toluene	ug/L	108-88-3		
1,1,1-Trichloroethane	ug/L	71-55-6		
1,1,2-Trichloroethane	ug/L	79-00-5		
Trichloroethene	ug/L	79-01-6		
Trichlorofluoromethane	ug/L	75-69-4		
Vinyl acetate	ug/L	108-05-4		
Vinyl chloride	ug/L	75-01-4		
Xylenes	ug/L	1330-20-7		
Aluminum	mg/L	7429-90-5		
Barium	mg/L	7440-39-3		
Cadmium	mg/L	7440-43-9		
Chromium	mg/L	7440-47-3		
Iron	mg/L	7439-89-6		
Lead	mg/L	7439-92-1		
Manganese	mg/L	7439-96-5		
Mercury	mg/L	7439-97-6		
Nickel	mg/L	7440-02-0		
Selenium	mg/L	7782-49-2		
Silver	mg/L	7440-22-4		
Zinc	mg/L	7440-66-6		

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 35. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-25

Constituent	Units	CAS #	Sampling Dates	
			Mar-95	Jan-12
			440	18
			385	32
			2360	330

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 36. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-26

Compound	Units	CASRN	Sample Dates	
			Nov-87	Jan-92
Acetone	ug/L	67-64-1		
Benzene	ug/L	71-43-2		
Bromodichloromethane	ug/L	75-27-4		
Bromoform	ug/L	75-25-2		
Bromomethane	ug/L	74-83-9		
2-Butanone	ug/L	78-93-3		
Carbon disulfide	ug/L	75-15-0		
Carbon tetrachloride	ug/L	56-23-5		
Chlorobenzene	ug/L	108-90-7	6.4	
Chloroethane	ug/L	75-00-3		
2-Chloroethyl vinyl ether	ug/L	110-75-8		
Chloroform	ug/L	67-66-3		
Chloromethane	ug/L	74-87-3		
Dibromochloromethane	ug/L	124-48-1		
1,2-Dichlorobenzene	ug/L	95-50-1		
1,3-Dichlorobenzene	ug/L	541-73-1		
1,4-Dichlorobenzene	ug/L	106-46-7		
Dichlorodifluoromethane	ug/L	75-71-8		
1,1-Dichloroethane	ug/L	75-34-3		
1,2-Dichloroethane	ug/L	107-06-2	4.6	8
1,1-Dichloroethene	ug/L	75-35-4		
cis-1,2-Dichloroethene	ug/L	156-59-2		
trans-1,2-Dichloroethene	ug/L	156-60-5		
1,2-Dichloropropane	ug/L	78-87-5		
cis-1,3-Dichloropropene	ug/L	10061-01-5		
trans-1,3-Dichloropropene	ug/L	10061-02-6		
Ethylbenzene	ug/L	100-41-4		
2-Hexanone	ug/L	591-78-6		
Methylene chloride	ug/L	75-09-2		
4-Methyl-2-pentanone	ug/L	108-10-1		
Styrene	ug/L	100-42-5		
1,1,2,2-Tetrachloroethane	ug/L	79-34-5		
Tetrachloroethene	ug/L	127-18-4	1612	
Toluene	ug/L	108-88-3		
1,1,1-Trichloroethane	ug/L	71-55-6		
1,1,2-Trichloroethane	ug/L	79-00-5		
Trichloroethene	ug/L	79-01-6		
Trichlorofluoromethane	ug/L	75-69-4		
Vinyl acetate	ug/L	108-05-4		
Vinyl chloride	ug/L	75-01-4		
Xylenes	ug/L	1330-20-7		
Arsenic	mg/L	7440-38-2		
Barium	mg/L	7440-39-3		
Cadmium	mg/L	7440-43-9		
Chromium	mg/L	7440-47-3		
Iron	mg/L	7439-89-6		
Lead	mg/L	7439-92-1		
Manganese	mg/L	7439-96-5		
Mercury	mg/L	7439-97-6		
Nickel	mg/L	7440-02-0		
Selenium	mg/L	7782-49-2		
Silver	mg/L	7440-22-4		
Zinc	mg/L	7440-66-6		

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 37. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-27

Compound	Units	CAS #	Sampling Dates					
			5-Oct-99	11-Oct-99	15-Oct-99	Feb-00	May-00	Jul-00
Acetone	µg/L	67-64-1			54			
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3	7.2		6			
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4			8			6.2
cis-1,2-Dichloroethene	µg/L	156-59-2	90.8	109	66	132	85	127
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4			31			23.1
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6	10.8	11.6	14			8.9
1,1,2-Trichloroethane	µg/L	79-00-5			12			7.2
Trichloroethene	µg/L	79-01-6	2410	2500	2300	2080	1340	1722
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 37. HISTORICAL GROUNDWATER

			169.8	
				67
			2169.4	1200

TABLE 38. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-28

Compound	Units	CAS #	Sampling Dates					
			Oct-99	Oct-99	Feb-00	Jul-00	Nov-00	Jan-02
Acetone	µg/L	67-64-1		66				
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	20.6	26		6.2	41.5	33
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4		6			5.5	
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	429	390	88	91	668.1	530
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 39. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-29

Compound	Units	CAS #	Sampling Dates					
			Oct-99	Oct-99	Oct-99	Feb-00	May-00	Jul-00
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	97	90.1	46	39.2	35.2	20
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						5.4
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	56.5	49.7	33	22.4	19.6	24.6
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 39. HISTORICAL GROUNDWATER M

Compound	Units	CAS #		
			[illegible]	[illegible]
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]	19.5	15
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		1
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]	25.6	9
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	ug/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		
[illegible]	mg/L	[illegible]		

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 40. HISTORICAL GROUNDWATER MONITORING DATA--WELL MW-30

Compound	Units	CAS #	Sampling Dates					
			Oct-99	Oct-99	Oct-99	Feb-00	May-00	Jul-00
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2	37.9	40.5	47	27	20	33.2
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4			14	7.2		23.1
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						8.9
1,1,2-Trichloroethane	µg/L	79-00-5						7.2
Trichloroethene	µg/L	79-01-6	57.3	63.2	68	37.3	25.8	17.2
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3						
Iron	mg/L	15438-31-0						
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5						
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 40. HISTORICAL GROUNDWATER MONITORING DATA-

Compound	Units	CAS #	Sampling Dates			
			Oct-99	Oct-99	Nov-00	Jan-02
Acetone	µg/L	67-64-1				
Benzene	µg/L	71-43-2				
Bromodichlormethane	µg/L	75-27-4				
Chloroform	µg/L	67-66-3				
Dibromochloromethane	µg/L	124-48-1				
Dichlorodifluoromethane	µg/L	75-71-8				
1,1-Dichloroethane	µg/L	75-34-3				
1,2-Dichloroethane	µg/L	107-06-2				
1,1-Dichloroethene	µg/L	75-35-4				
cis-1,2-Dichloroethene	µg/L	156-59-2	37.9	40.5	23.8	14
trans-1,2-Dichloroethene	µg/L	156-60-5				
1,2-Dichloropropane	µg/L	78-87-5				
Methylene Chloride	µg/L	75-09-2				
Phenols	µg/L	64743-03-9				
Tetrachloroethene	µg/L	127-18-4				5
Toluene	µg/L	108-88-3				
1,1,1-Trichloroethane	µg/L	71-55-6				
1,1,2-Trichloroethane	µg/L	79-00-5				
Trichloroethene	µg/L	79-01-6	57.3	63.2	13.4	19
Trichlorofluoromethane	µg/L	75-69-4				1
Vinyl chloride	µg/L	75-01-4				
Xylenes	µg/L	1330-20-7				
Arsenic	mg/L	7440-38-2				
Barium	mg/L	7440-39-3				
Cadmium	mg/L	7740-43-9				
Chromium	mg/L	7440-47-3				
Iron	mg/L	15438-31-0				
Lead	mg/L	7439-92-1				
Manganese	mg/L	7439-96-5				
Mercury	mg/L	7439-97-6				
Nickel	mg/L	7440-02-0				
Selenium	mg/L	7782-49-2				
Silver	mg/L	7440-22-4				
Zinc	mg/L	7440-66-6				

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 41.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1A

Compound	Units	CAS #	Sampling Dates					
			Nov-91	Jan-92	Apr-92	Jul-92	Jul-92	Oct-92
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	160,000	150,000	110,000	150,000	160,000	170,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.4	0.16				18
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3	0.01					
Copper								
Iron	mg/L	15438-31-0	3.7	12	8.5	0.6		16.3
Lead	mg/L	7439-92-1	0.008					
Manganese	mg/L	7439-96-5	1.2	2.4	0.67	0.08		2.58
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6					0.071	

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 41.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1A

Compound	Units	CAS #	Jan-93	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochlorormethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	180,000	180,000	150,000	140,000	99,000	74,300
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						0.817
Cadmium	mg/L	7740-43-9				0.015		0.006
Chromium	mg/L	7440-47-3						0.06
Copper								
Iron	mg/L	15438-31-0	1.8			12.1	6.53	29.42
Lead	mg/L	7439-92-1				0.2		
Manganese	mg/L	7439-96-5	0.18			0.763	0.374	1.67
Mercury	mg/L	7439-97-6						
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 41.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1A

Compound	Units	CAS #	Jul-94	Oct-94	Jan-95	Jul-95	Jan-96	Jul-96
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2						
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	60,300	44,500	30,900		28,000	25,000
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2				ns		
Barium	mg/L	7440-39-3	0.8	2.03	2.8			0.322
Cadmium	mg/L	7740-43-9		0.01	0.03			
Chromium	mg/L	7440-47-3		0.15	0.39		0.0326	0.0207
Copper								
Iron	mg/L	15438-31-0	63.6	77.2	131		6.14	11.3
Lead	mg/L	7439-92-1	0.016	0.024	0.043			0.00476
Manganese	mg/L	7439-96-5	3.6	4.12	6.9		0.393	0.79
Mercury	mg/L	7439-97-6	0.001		0.0011		0.000375	0.000417
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 41.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1A

Compound	Units	CAS #	Jan-97	Mar-97	Jul-97	Jan-98	Jul-98	Jan-99
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichloromethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2	2600					
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2		3575				
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4		1575				
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	15,000	38,000	27,400	37,000	34,400	10,500
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3						
Cadmium	mg/L	7740-43-9			0.001			
Chromium	mg/L	7440-47-3			0.016			
Copper								
Iron	mg/L	15438-31-0	7.81			3.74	3.74	
Lead	mg/L	7439-92-1			0.007			
Manganese	mg/L	7439-96-5	0.532			0.28	0.28	
Mercury	mg/L	7439-97-6	0.000207					
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 41.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1A

Compound	Units	CAS #	Jul-99	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02
Acetone	µg/L	67-64-1						
Benzene	µg/L	71-43-2						
Bromodichlormethane	µg/L	75-27-4						
Chloroform	µg/L	67-66-3						
Dibromochloromethane	µg/L	124-48-1						
Dichlorodifluoromethane	µg/L	75-71-8						
1,1-Dichloroethane	µg/L	75-34-3						
1,2-Dichloroethane	µg/L	107-06-2						
1,1-Dichloroethene	µg/L	75-35-4						
cis-1,2-Dichloroethene	µg/L	156-59-2					39	
trans-1,2-Dichloroethene	µg/L	156-60-5						
1,2-Dichloropropane	µg/L	78-87-5						
Methylene Chloride	µg/L	75-09-2						
Phenols	µg/L	64743-03-9						
Tetrachloroethene	µg/L	127-18-4						
Toluene	µg/L	108-88-3						
1,1,1-Trichloroethane	µg/L	71-55-6						
1,1,2-Trichloroethane	µg/L	79-00-5						
Trichloroethene	µg/L	79-01-6	5,200	4,100	2,065	1,380	600	540
Trichlorofluoromethane	µg/L	75-69-4						
Vinyl chloride	µg/L	75-01-4						
Xylenes	µg/L	1330-20-7						
Arsenic	mg/L	7440-38-2						
Barium	mg/L	7440-39-3	0.119		0.032	0.341	0.795	
Cadmium	mg/L	7740-43-9						
Chromium	mg/L	7440-47-3				0.013	0.012	
Copper								
Iron	mg/L	15438-31-0	0.36		0.418	5.74	1.73	
Lead	mg/L	7439-92-1						
Manganese	mg/L	7439-96-5	0.3		0.018	0.747	0.254	
Mercury	mg/L	7439-97-6				0.001	0.002	
Nickel	mg/L	7440-02-0						
Selenium	mg/L	7782-49-2						
Silver	mg/L	7440-22-4						
Zinc	mg/L	7440-66-6						

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 41.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1A

Compound	Units	CAS #		
			[illegible]	[illegible]

TABLE 42.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1B

Compound	Units	CAS #	Sampling Dates				
			Nov-91	Jan-92	Apr-92	Jul-92	Jul-92
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	310,000	300,000	280,000	240,000	230,000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3		0.1			
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0	0.4	1.3			
Lead	mg/L	7439-92-1	0.004	0.04			
Manganese	mg/L	7439-96-5	0.18	0.8	0.21	0.17	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					0.87

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 42.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1B

Compound	Units	CAS #	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	250,000	230,000	180,000	240,000	160,000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					0.017
Chromium	mg/L	7440-47-3					0.067
Iron	mg/L	15438-31-0	4.42				6.48
Lead	mg/L	7439-92-1					0.292
Manganese	mg/L	7439-96-5	0.144	0.118			0.259
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 42.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1B

Compound	Units	CAS #	Jan-94	Apr-94	Jul-94	Oct-94	Jan-95
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	150,000	172,000	160,000	92,400	136,000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3			0.007		
Iron	mg/L	15438-31-0	0.834	4.54	1.55		
Lead	mg/L	7439-92-1		0.034		0.028	
Manganese	mg/L	7439-96-5	0.515	0.379	0.138		
Mercury	mg/L	7439-97-6					0.0007
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 42.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1B

Compound	Units	CAS #	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	129,000	12,000	90,000	74000	142000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3		0.332			
Cadmium	mg/L	7740-43-9	0.019				
Chromium	mg/L	7440-47-3		0.544	0.0848	0.0288	
Iron	mg/L	15438-31-0	1.14	24.1	5.49	2.83	
Lead	mg/L	7439-92-1		0.148	0.0322	0.0179	
Manganese	mg/L	7439-96-5		0.978	0.221	0.117	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 42.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1B

Compound	Units	CAS #	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	66500	115000	206000	35000	20225
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2			all bql		
Barium	mg/L	7440-39-3					0.012
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1	0.006				
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 42.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1B

Compound	Units	CAS #	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	11240	6380	5450	2090	2,200
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0		0.043	0.9	0.483	
Lead	mg/L	7439-92-1				0.021	
Manganese	mg/L	7439-96-5		0.005	0.044	0.034	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 42.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-1B

Compound	Units	CAS #	Jul-02	Jan-03
Acetone	µg/L	67-64-1		
Benzene	µg/L	71-43-2		
Bromodichlormethane	µg/L	75-27-4		
Chloroform	µg/L	67-66-3		
Dibromochloromethane	µg/L	124-48-1		
Dichlorodifluoromethane	µg/L	75-71-8		
1,1-Dichloroethane	µg/L	75-34-3		
1,2-Dichloroethane	µg/L	107-06-2		
1,1-Dichloroethene	µg/L	75-35-4		
cis-1,2-Dichloroethene	µg/L	156-59-2		
trans-1,2-Dichloroethene	µg/L	156-60-5		
1,2-Dichloropropane	µg/L	78-87-5		
Methylene Chloride	µg/L	75-09-2		
Phenols	µg/L	64743-03-9		
Tetrachloroethene	µg/L	127-18-4		
Toluene	µg/L	108-88-3		
1,1,1-Trichloroethane	µg/L	71-55-6		
1,1,2-Trichloroethane	µg/L	79-00-5		
Trichloroethene	µg/L	79-01-6	2,500	2,000
Trichlorofluoromethane	µg/L	75-69-4		
Vinyl chloride	µg/L	75-01-4		
Xylenes	µg/L	1330-20-7		
Arsenic	mg/L	7440-38-2		
Barium	mg/L	7440-39-3		
Cadmium	mg/L	7740-43-9		
Chromium	mg/L	7440-47-3		
Iron	mg/L	15438-31-0		
Lead	mg/L	7439-92-1		
Manganese	mg/L	7439-96-5		
Mercury	mg/L	7439-97-6		
Nickel	mg/L	7440-02-0		
Selenium	mg/L	7782-49-2		
Silver	mg/L	7440-22-4		
Zinc	mg/L	7440-66-6	0.0225	

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 43.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2A

Compound	Units	CAS #	Sampling Dates				
			Nov-91	Jan-92	Apr-92	Jul-92	Jul-92
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis -1,2-Dichloroethene	µg/L	156-59-2					
trans -1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	180,000	220,000	240,000	310,000	290,000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3		0.18			
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3	0.01				
Iron	mg/L	15438-31-0	7.3	40	53	1.74	
Lead	mg/L	7439-92-1	0.005	0.05			
Manganese	mg/L	7439-96-5	4.5	21	5.7	3.5	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					0.07

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 43.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2A

Compound	Units	CAS #	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93
Acetone	µg/L	67-64-1					DRY
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	280,000	200,000	160,000	130,000	
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					dry
Barium	mg/L	7440-39-3	17.7				
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0	18.3	4.46			
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5	7.09	4.36			
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 43.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2A

Compound	Units	CAS #	Jan-94	Apr-94	Jul-94	Oct-94	Jan-95
Acetone	µg/L	67-64-1	DRY	DRY	DRY		
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6					
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2	dry	dry	dry	ns	ns
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 43.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2A

Compound	Units	CAS #	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis -1,2-Dichloroethene	µg/L	156-59-2					
trans -1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6					60,200
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2	ns	ns	ns	ns	ns
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 43.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2A

Compound	Units	CAS #	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	20,100		9,200	46,700	38,500
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2			all bql		
Barium	mg/L	7440-39-3	0.84				0.127
Cadmium	mg/L	7740-43-9	0.002				
Chromium	mg/L	7440-47-3	0.174				
Iron	mg/L	15438-31-0					2.26
Lead	mg/L	7439-92-1	0.03				
Manganese	mg/L	7439-96-5					0.236
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 43.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2A

Compound	Units	CAS #	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02
Acetone	µg/L	67-64-1				dry	
Benzene	µg/L	71-43-2					
Bromodichlormethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					32
Trichloroethene	µg/L	79-01-6	21,200	9,940	11,200		340
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3		0.11	0.278		
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3			0.016		
Iron	mg/L	15438-31-0		0.79	15.4		
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5		0.118	0.637		
Mercury	mg/L	7439-97-6			0.001		
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 43.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2A

Compound	Unit	CAS #	
Acetone	ug/L	[illegible]	
Benzene	ug/L	[illegible]	
Bromodichloromethane	ug/L	[illegible]	
Chloroform	ug/L	[illegible]	
Dibromochloromethane	ug/L	[illegible]	
Dichlorodifluoromethane	ug/L	[illegible]	
Ethylbenzene	ug/L	[illegible]	
Methylene Chloride	ug/L	[illegible]	
Styrene	ug/L	[illegible]	
Tetrachloroethene	ug/L	[illegible]	
Toluene	ug/L	[illegible]	
Trichloroethene	ug/L	[illegible]	
Trichlorofluoromethane	ug/L	[illegible]	
Xylenes	ug/L	[illegible]	
Arsenic	mg/L	[illegible]	
Barium	mg/L	[illegible]	
Cadmium	mg/L	[illegible]	
Chromium	mg/L	[illegible]	
Iron	mg/L	[illegible]	
Lead	mg/L	[illegible]	
Manganese	mg/L	[illegible]	
Mercury	ug/L	[illegible]	
Nickel	mg/L	[illegible]	
Selenium	mg/L	[illegible]	
Silver	ug/L	[illegible]	
Zinc	mg/L	[illegible]	

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 44.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B

Compound	Units	CAS #	Sampling Dates				
			Nov-91	Jan-92	Apr-92	Jul-92	Jul-92
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	260,000	280,000	280,000	280,000	250,000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3		0.2			
Cadmium	mg/L	7740-43-9	0.003				0.0012
Chromium	mg/L	7440-47-3					
Iron	mg/L	15438-31-0		2.1	0.62		
Lead	mg/L	7439-92-1	0.004	0.09			
Manganese	mg/L	7439-96-5	0.08	0.35	0.16	0.12	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					0.88

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 44.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B

Compound	Units	CAS #	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	340,000	350,000	250,000	190,000	100,000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3					0.56
Iron	mg/L	15438-31-0	1.19				1.03
Lead	mg/L	7439-92-1					0.258
Manganese	mg/L	7439-96-5	0.065	0.124			0.088
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 44.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B

Compound	Units	CAS #	Jan-94	Apr-94	Jul-94	Oct-94	Jan-95
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	120,000	108,000	114,000	137,000	77,500
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3	0.042	METALS			
Iron	mg/L	15438-31-0	0.692	BQL	0.987		
Lead	mg/L	7439-92-1					
Manganese	mg/L	7439-96-5					
Mercury	mg/L	7439-97-6					0.0008
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 44.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B

Compound	Units	CAS #	Jul-95	Jan-96	Jul-96	Jan-97	Mar-97
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	77,000	55,000	79,000	57,000	62,000
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3					
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3	0.011	0.0235	0.0422	0.012	
Iron	mg/L	15438-31-0		0.551	0.94	0.187	
Lead	mg/L	7439-92-1		0.00566	0.012		
Manganese	mg/L	7439-96-5		0.0252	0.046		
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 44.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B

Compound	Units	CAS #	Jul-97	Jan-98	Jul-98	Jan-99	Jul-99
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	47,850	48,450	48,150	35,100	22,500
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2			all bql		
Barium	mg/L	7440-39-3					0.024
Cadmium	mg/L	7440-43-9					
Chromium	mg/L	7440-47-3	0.013				
Iron	mg/L	15438-31-0					
Lead	mg/L	7439-92-1	0.012				
Manganese	mg/L	7439-96-5					0.044
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 44.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B

Compound	Units	CAS #	Feb-00	Jun-00	Jan-01	Jul-01	Jan-02
Acetone	µg/L	67-64-1					
Benzene	µg/L	71-43-2					
Bromodichloromethane	µg/L	75-27-4					
Chloroform	µg/L	67-66-3					3
Dibromochloromethane	µg/L	124-48-1					
Dichlorodifluoromethane	µg/L	75-71-8					
1,1-Dichloroethane	µg/L	75-34-3					
1,2-Dichloroethane	µg/L	107-06-2					
1,1-Dichloroethene	µg/L	75-35-4					
cis-1,2-Dichloroethene	µg/L	156-59-2					27
trans-1,2-Dichloroethene	µg/L	156-60-5					
1,2-Dichloropropane	µg/L	78-87-5					
Methylene Chloride	µg/L	75-09-2					
Phenols	µg/L	64743-03-9					
Tetrachloroethene	µg/L	127-18-4					6
Toluene	µg/L	108-88-3					
1,1,1-Trichloroethane	µg/L	71-55-6					
1,1,2-Trichloroethane	µg/L	79-00-5					
Trichloroethene	µg/L	79-01-6	15,900	12,360	7,700	6,825	1,300
Trichlorofluoromethane	µg/L	75-69-4					
Vinyl chloride	µg/L	75-01-4					
Xylenes	µg/L	1330-20-7					
Arsenic	mg/L	7440-38-2					
Barium	mg/L	7440-39-3				0.032	
Cadmium	mg/L	7740-43-9					
Chromium	mg/L	7440-47-3				0.016	
Iron	mg/L	15438-31-0		0.028	0.1	0.465	
Lead	mg/L	7439-92-1				0.02	
Manganese	mg/L	7439-96-5		0.009	0.007	0.021	
Mercury	mg/L	7439-97-6					
Nickel	mg/L	7440-02-0					
Selenium	mg/L	7782-49-2					
Silver	mg/L	7440-22-4					
Zinc	mg/L	7440-66-6					

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE 44.
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B

Constituent	Units	CAS #	[illegible]	[illegible]
[illegible]	ug/L	[illegible]		
Benzene	ug/L	[illegible]		
Bromodichloromethane	ug/L	[illegible]		
Bromoform	ug/L	[illegible]		
Bromomethane	ug/L	[illegible]		
Carbon disulfide	ug/L	[illegible]		
Chlorobenzene	ug/L	[illegible]		
Chloroethane	ug/L	[illegible]		
Chloroform	ug/L	[illegible]		
Chloromethane	ug/L	[illegible]		
cis-1,2-Dichloroethene	ug/L	[illegible]		
cis-1,3-Dichloropropene	ug/L	[illegible]		
Dibromochloromethane	ug/L	[illegible]		
Ethanol	ug/L	[illegible]		
Ethylbenzene	ug/L	[illegible]		
Methylene Chloride	ug/L	[illegible]		
Styrene	ug/L	[illegible]		
Tetrachloroethene	ug/L	[illegible]	5,300	7,400
Tetrachloromethane	ug/L	[illegible]		
Toluene	ug/L	[illegible]		
trans-1,2-Dichloroethene	ug/L	[illegible]		
trans-1,3-Dichloropropene	ug/L	[illegible]		
Trichloroethene	ug/L	[illegible]		
Trichlorofluoromethane	ug/L	[illegible]		
Vinyl chloride	ug/L	[illegible]		
Xylenes	ug/L	[illegible]		
Arsenic	mg/L	[illegible]		
Ba	mg/L	[illegible]		
Cadmium	mg/L	[illegible]		
Chromium	mg/L	[illegible]		
Cu	mg/L	[illegible]		
Lead	mg/L	[illegible]		
Mercury	mg/L	[illegible]		
Mo	mg/L	[illegible]		
Nickel	mg/L	[illegible]		
Se	mg/L	[illegible]		
Silver	mg/L	[illegible]		
Zn	mg/L	[illegible]	0.0216	

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

TABLE
HISTORICAL GROUNDWATER
MONITORING DATA--WELL POC-2B-a

Compound	Units	CAS #	Jul-12	Dec-12
Acetone	ug/L	67-64-1		
Benzene	ug/L	71-43-2		
Bromodichloromethane	ug/L	75-27-4		
Chloroform	ug/L	67-66-3		
Dibromochloromethane	ug/L	124-48-1		
Dichlorodifluoromethane	ug/L	75-71-8		
1,1-Dichloroethane	ug/L	75-34-3		
1,2-Dichloroethane	ug/L	107-06-2		
1,1-Dichloroethene	ug/L	75-35-4		
cis-1,2-Dichloroethene	ug/L	156-59-2		
trans-1,2-Dichloroethene	ug/L	156-60-5		
1,2-Dichloropropane	ug/L	78-87-5		
Methylene chloride	ug/L	75-09-2		
Styrene	ug/L	100-42-5		
Tetrachloroethene	ug/L	127-18-4		
Toluene	ug/L	108-88-3		
1,1,1-Trichloroethane	ug/L	71-55-6		
1,1,2-Trichloroethane	ug/L	79-00-5		
Trichloroethene	ug/L	79-01-6	5,200	7,100
Trichlorofluoromethane	ug/L	75-69-4		
Vinyl chloride	ug/L	75-01-4		
Xylenes	ug/L	1330-20-7		
Arsenic	mg/L	7440-38-2		
Barium	mg/L	7440-39-3		
Cadmium	mg/L	7440-43-9		
Chromium	mg/L	7440-47-3		
Lead	mg/L	7439-92-1		
Mercury	mg/L	7439-97-6		
Nickel	mg/L	7440-02-0		
Selenium	mg/L	7782-49-2		
Silver	mg/L	7440-22-4		
Zinc	mg/L	7440-66-6		

Blanks represent values that are either below detection limits (BDL), below quantitation limits (BQL), or otherwise not sampled/reported.

Appendix I.
Well Abandonment and Replacement Workplan (March 7, 2008)

Prepared for:
Parker Hannifin Corporation
Cleveland, Ohio

Well Abandonment & Replacement Workplan
Former Parker Hannifin Facility
Wake Forest, North Carolina
EPA ID No. NCD 002 591 014

ENSR Engineering and Consulting (NC), Inc.
February 2008
Document No.: 05303-025-200

ENSR | AECOM

Prepared for:
Parker Hannifin Corporation
Cleveland, Ohio

Well Abandonment & Replacement Workplan
Former Parker Hannifin Facility
Wake Forest, North Carolina
EPA ID No. NCD 002 591 014

_____
Prepared by:

Matt Allen, PG
Project Geologist

_____
Reviewed by:

David H. Simpson, PG
Project Manager

ENSR Consulting and Engineering (NC), Inc.
February 2008
Document No.: 05303-025-200

ENSR | AECOM

Contents

1.0 Introduction 1-1
1.1 Basis for Workplan 1-1
1.2 Facility History 1-1

2.0 Current Monitoring Well / Extraction Well Networks 2-1
2.1 Groundwater Monitoring Wells 2-1
2.2 Extraction Well Network 2-1

3.0 Well Abandonment Program 3-1
3.1 RCRA Permit Wells to be Abandoned 3-1
3.2 Non-Permit Groundwater Monitoring Wells to be Abandoned 3-1
3.3 Field Procedures for Well Abandonment 3-2

4.0 Well Replacement Program 4-1
4.1 Monitoring Well Decommissioning 4-1
4.1.1 Decommissioning Non-Permit Wells 4-1
4.1.2 Decommissioning Permit Wells 4-1
4.2 Monitoring Well Replacement 4-2
4.2.1 Shallow Saprolite/Partially Weathered Rock Monitoring Wells 4-2
4.2.2 Bedrock Monitoring Wells 4-3
4.2.3 Well Completion 4-3
4.2.4 Well Development 4-3
4.2.5 Investigation Derived Waste 4-3
4.2.6 Location and Elevation Survey 4-3
4.3 Monitoring Well Permits 4-4

5.0 Post-Development Groundwater Monitoring Well Network 5-1

6.0 Scheduling and Reporting 6-1

Tables

Table 1 Summary of Monitoring Well Abandonment

Table 2 Summary of Monitoring Well Decommissioning

Table 3 Summary of Monitoring Well Replacement

Figures

Figure 1 Site Location

Figure 2 Existing and Proposed Well Locations

Figure 3 Post Development GW Monitoring Network

Figure 4 Cross Section A – A'

Figure 5 Cross Section B – B'

Appendices

Appendix A Well Abandonment Record

Appendix B Monitoring Well Permit Application

1.0 Introduction

ENSR Consulting and Engineering (NC) Inc. (ENSR) has prepared this Workplan on behalf of Parker Hannifin Corporation (Parker), to specify activities for the abandonment and replacement of wells at the former Parker Facility (Site) located at 12415 Capital Boulevard, Wake Forest, North Carolina (**Figure 1**). As part of the facility's RCRA Hazardous Waste Management Permit (Permit) issued by the North Carolina Department of Environment and Natural Resources (NCDENR), Parker maintains point of compliance wells (POC), corrective action system effectiveness monitoring wells, and corrective action system extraction wells. A network of non-Permit monitoring wells are also maintained at the facility in order to adequately characterize site hydrogeology.

1.1 Basis for Workplan

Due to upcoming redevelopment and construction activities at the site, it will be necessary to abandon a large number of monitoring wells. Wells will be abandoned to prevent disturbance to the hydrogeologic conditions that exist within the subsurface. Upon completion of the site redevelopment and construction, a monitoring well replacement program will be implemented. The location and construction (total depth and screened interval) required for each of the replacement wells has been carefully evaluated so as to provide an optimal monitoring well network after the redevelopment activities are completed.

This workplan is being submitted to the NCDENR Hazardous Waste Section (HWS) to present the methods to complete the well abandonment and well replacement activities. Section 2.0 of this plan contains a description of the Parker Facility and the current groundwater monitoring well and extraction well systems. Section 3.0 of this plan provides a summary of monitoring well abandonment procedures. Section 4.0 of this plan provides a discussion of the well replacement program, including decommissioning of some well locations, permitting, and installation procedures for replacement wells. Section 5.0 includes a summary of the post-development groundwater monitoring network. Section 6.0 will address scheduling and reporting activities.

1.2 Facility History

The Site is located at 12415 Capital Boulevard in Wake Forest, Wake County, North Carolina as illustrated on **Figure 1**. The Site currently consists of the concrete slab and foundation of the former manufacturing building located on an approximately 30 acre parcel. The current property owner has demolished the building and is working to remove portions of the concrete slab and asphalt surfaces not related to active SWMUs/AOCs. No concrete pads or asphalt will be removed from SWMUs/AOCs until the implementation of this workplan.

The plant was constructed in 1964 for the manufacture and distribution of air control devices. The property was owned by the Industrial Development Corporation (IDC) of the Town of Wake Forest and the site was leased to Scovill Manufacturing Company, a company later purchased by Parker in 1986. Site manufacturing operations used chlorinated solvents, primarily trichloroethene (TCE), to degrease machined parts. Manufacturing operations ceased in January 2002, after which remaining process materials and equipment were removed. The property was purchased by St. Ives Commercial 220, LLC (St. Ives) from the IDC in 2006.

Parker operated a wastewater treatment system at the Site used to treat wastewater from metal plating and cleaning operations. Two sand filter beds were used for collecting metal hydroxide sludge generated by the treatment system. The filter beds were taken out of service in November 1985 and subsequently closed in accordance with an approved Closure Plan in October 1986. In 1985 Parker agreed to implement a groundwater monitoring program for the sand filter beds. In August 1991, the EPA and North Carolina Department of Environment and Natural Resources (NCDENR) Hazardous Waste Section issued Parker a RCRA Hazardous Waste Management Permit. In May 2001, Parker submitted a RCRA Part B Permit Renewal Application (with a revised submittal in June 2005), and the final Permit was issued in June 2006.

2.0 Current Monitoring Well / Extraction Well Networks

This workplan focuses primarily on the groundwater monitoring well network, components of which will be abandoned and/or decommissioned. It is Parker's intent to protect the existing extraction wells during the development process so that they will not be damaged and, therefore, no abandonment or replacement will be required.

2.1 Groundwater Monitoring Wells

The installation of the groundwater monitoring network began in August 1985 with the installation of wells MW-1 through MW-4. To date, a total of 57 wells have been installed both on and off the facility property. **Figure 2** shows current well locations. The RCRA permit wells include thirteen corrective action system effectiveness wells, four point-of-compliance (POC) wells, and three groundwater extraction wells. Monitoring of these twenty wells fulfills the RCRA Part B Permit requirement to demonstrate the state of corrective action efforts. The Permit states that the following wells shall maintain point of compliance monitoring: POC-1A, POC-1B, POC-2A, and POC-2B. The Permit also requires that the following corrective action system effectiveness monitoring, (MW-3, MW-4, MW-6, MW-6D, MW-6DR, MW-6DR3, MW-7, MW-8, MW-8D, MW-8DR, MW-9, MW-21, and MW-21D) and extraction wells (RW-4, RW-6, RW-19) be maintained. An additional thirty-seven Facility monitoring wells exist, but are not required to be monitored under the current permit.

2.2 Extraction Well Network

Parker and ENSR understand that it is important to maintain the integrity of the Groundwater Treatment System (GWTS) and corrective action groundwater extraction wells (RW-4, RW-6, and RW-19) in order to sustain the zone of hydraulic capture. Parker and ENSR have informed the current property owner and proposed developer that it is important that the GWTS operate uninterrupted to the extent possible during site redevelopment and construction. Measures will be taken to protect the GWTS and groundwater extraction wells during redevelopment activities as outlined in this Workplan. In the event that any of the system wells are damaged or destroyed during redevelopment construction activities at the site, they will be properly abandoned in accordance with North Carolina regulation 15A NCAC 2C .0113.

During the construction phases of the redevelopment project, Parker and ENSR will request that the developer erect barriers surrounding the surface structures associated with each of the extraction wells. In addition, the surface locations above the underground extraction well piping will be located and flagged.

During the construction phases of the redevelopment project, Parker and ENSR will implement inspection and monitoring procedures to monitor the extraction wells for damage. All three of the extraction wells and associated piping connections will be inspected on a weekly basis as part of the regular weekly groundwater treatment system inspections currently required by the Permit. The extraction wells will be inspected for signs of damage, vandalism, attempted opening of well vaults, settling or other structural distortions, or other damage that could lead to a breach in integrity of the piping systems.

Should evidence of damage be identified, the GWTS will be shut-down and the piping system will be drained, and the entire system will be inspected. The NCDENR-HWS will be notified that the GWTS has been shut-down for inspection and evaluation. If necessary, the damaged equipment will be replaced or repaired in order to bring the system back on line as soon as practicable.

A report of the findings of the inspections will be maintained on-site as part of the Permit Operating Record, along with the other Permit required documents. The inspection reports will be available for review during the annual RCRA inspection conducted by the NCDENR-HWS.

3.0 Well Abandonment Program

Due to upcoming redevelopment and construction activities at the site, it will be necessary to abandon a number of site monitoring wells. **Figure 2** presents the location of all POC, extraction, and monitoring wells included in the current network. This figure also shows the proposed re-development site plan. Almost all of the Site wells will be abandoned. Well locations where replacement wells will be installed at the same location are color-coded red. Well locations where no replacement well will be installed are colored-coded blue. Well locations that represent new locations (no well was previously installed at that location) are color-coded magenta. The location and construction (total depth and screened interval) required for each of the replacement wells has been carefully evaluated so as to provide an optimal monitoring well network after the development activities are completed. **Table 1** includes a list of wells to be abandoned (including well construction information) prior to site redevelopment and construction activities.

3.1 RCRA Permit Wells to be Abandoned

Based on their location, all of the POC wells (POC-1A, POC-1B, POC-2A, POC-2B) are likely to be damaged or destroyed during redevelopment construction activities at the site. Therefore, Parker plans to properly abandon these wells prior to redevelopment in accordance with North Carolina regulation 15A NCAC 2C .0113.

Eleven of the thirteen corrective action system effectiveness monitoring wells (MW-3, MW-4, MW-6, MW-6D, MW-6DR, MW-6DR3, MW-7, MW-8, MW-8D, MW-8DR, and MW-9) are likely to be damaged or destroyed during redevelopment construction activities at the site based on their location. Therefore, Parker plans to properly abandon these wells prior to redevelopment in accordance with North Carolina regulation 15A NCAC 2C.0113.

Parker and ENSR understand that it is important to maintain the integrity of the Groundwater Treatment System (GWTS) and corrective action groundwater extraction wells (RW-4, RW-6, and RW-19) in order to sustain the zone of hydraulic capture. Parker and ENSR have informed the current property owner and proposed developer that it is important that the GWTS operate uninterrupted to the extent possible during site redevelopment and construction. Measures will be taken to protect the GWTS and groundwater extraction wells during redevelopment activities as outlined in Section 2.2 of this Workplan. In the event that any of the system wells are damaged or destroyed during redevelopment construction activities at the site, they will be properly abandoned in accordance with North Carolina regulation 15A NCAC 2C .0113.

3.2 Non-Permit Groundwater Monitoring Wells to be Abandoned

Twenty-six of the thirty-seven non-permit groundwater monitoring wells (MW-1, MW-2, MW-5, MW-10, MW-11, MW-11D, MW-12, MW-13, MW-14, MW-15, MW-16, MW-18, MW-18D, MW-20, MW-22, MW-24, MW-25, MW-26, MW-27, MW-29, MW-30, MW-31, MW-33, MW-34, MW-36, and MW-37) are likely to be damaged or destroyed during redevelopment construction activities at the site. Therefore, Parker plans to properly abandon these wells prior to redevelopment in accordance with North Carolina regulation 15A NCAC 2C .0113.

3.3 Field Procedures for Well Abandonment

As outlined in EPA and North Carolina Protocols, the objectives of well abandonment are: 1) to eliminate physical hazards; 2) prevent groundwater contamination; 3) conserve aquifer yield and hydrostatic head; and 4) prevent intermixing of subsurface water. The purpose of sealing an abandoned well is to prevent any further disturbance to the pre-existing hydrogeologic conditions within the subsurface. The plug should prevent vertical groundwater movement within the borehole and confine the water to the original zone of occurrence (U.S. EPA, 1991).

The following procedures are in accordance with North Carolina regulation 15A NCAC 2C .0113 and will be used to abandon the wells:

- The entire depth of the well will be sounded before sealing to ensure there are no obstructions that could interfere with sealing operations;
- Neat cement or bentonite grout will be pumped into the well using a tremie pipe. The well will be filled completely from the bottom of the casing to the top;
- The surface installation (protective cover or manhole) will be removed;
- A North Carolina licensed well driller will perform all abandonments; and,
- A record of abandonment will be submitted within 30 days to the NCDENR Division of Water Quality. A copy of the NCDENR Well Abandonment Record form is included in **Appendix A.**

4.0 Well Replacement Program

The well replacement program has two main components, well decommissioning and well replacement. The following sections describe the proposed well replacement program and its components.

Some of the abandoned wells are in locations where direct replacement is not possible due to proposed redevelopment activities (e.g.; under a proposed building). In addition, many of the existing wells do not provided additional information above and beyond what is provided by nearby wells (e.g.; two or more wells with a similar screened interval located close together). The wells in these categories will be decommissioned, that is, the wells will be abandoned and no direct replacement well will be installed in that location. Decommissioning of wells is discussed in Section 4.1.

Most of the monitoring wells will be replaced by new wells in approximately the same location after redevelopment is complete. In addition, four new wells (MW-42, MW-43, MW-44, MW-45) will be installed. A discussion of well replacement and new installation is provided in Section 4.2. All new and replaced wells will require well permitting, and this is discussed in Section 4.3.

4.1 Monitoring Well Decommissioning

Parker plans to decommission wells that are located such that the replacement cost would be prohibitive or no replacement would be possible following redevelopment of the site. Parker will also decommission wells that do not provide significant additional information concerning groundwater flow and dissolved phase plume movement.

4.1.1 Decommissioning Non-Permit Wells

Parker plans to decommission seventeen non-permit monitoring wells (MW-1, MW-2, MW-5, MW-10, MW-11, MW-11D, MW-12, MW-13, MW-16, MW-20, MW-22, MW-24, MW-25, MW-27, MW-30, MW-36, and MW-37). A complete list of monitoring wells proposed for decommissioning is contained in **Table 2** and depicted on **Figure 2**.

Monitoring well MW-1 had previously been identified as the Background Well, based on its location topographically above and upgradient from the identified dissolved phase plume. After completion of the Well Replacement portion of this workplan, monitoring well MW-44 will be identified as the replacement Background Well.

4.1.2 Decommissioning Permit Wells

After a review of placement of the current RCRA permit wells, Parker proposes removal of two corrective action system effectiveness monitoring wells. Justification for removal from the RCRA permit is provided below: POC wells will be replaced in approximately the same locations after site redevelopment and construction are complete.

Removal of MW-6DR - The monitoring well cluster which contains MW-6DR currently contains four wells screened at different elevations in the surficial, intermediate, and bedrock aquifers. Adequate information

concerning contaminant concentrations and vertical hydraulic gradients can be determined with monitoring wells MW-6, MW-6D, and MW-6DR3, which will be replaced in approximately the same locations after site redevelopment and construction are complete.

Removal of MW-8 - Monitoring well MW-8 is currently located in an area with adequate well coverage. Permit monitoring well MW-7 in this area provides adequate information concerning contaminant concentrations as well as hydrologic control of groundwater by the GWTS. Monitoring well MW-7 will be replaced in approximately the same location, after site redevelopment and construction activities are complete. MW-7 will be screened at a slightly lower elevation due to the decrease in the groundwater elevation in this area.

4.2 Monitoring Well Replacement

After completion of site redevelopment activities, 28 monitoring wells will be installed. The four RCRA permit POC wells (POC-1A, POC-1B, POC-2A, and POC-2B) will be replaced in their approximate previous locations. RCRA corrective action system effectiveness monitoring wells ("-R" differentiates the new well from the abandoned well at the same location) MW-3-R, MW-4-R, MW-6-R, MW-6D-R, MW-6DR3-R, MW-7-R, MW-8D-R, MW-8DR-R, and MW-9-R will be replaced in their approximate previous locations. Non-permit monitoring wells MW-14-R, MW-15-R, MW-18-R, MW-18D-R, MW-26-R, MW-29-R, MW-31-R, MW-33-R, and MW-34-R will be replaced in their approximate previous locations. Replacement well locations will be determined based on a combination of GPS locating and surveying by a North Carolina Licensed Surveyor, based on permanent benchmarks in the area.

All replaced wells are designated on **Table 3** with "-R" to distinguish them from the previous well at each location. Two new non-permit monitoring wells (MW-26S, MW-29S) will be added to fill data gaps in areas where two or more monitoring wells have been abandoned and decommissioned. In addition, four new wells (MW-42, MW-43, MW-44, and MW-45) will be installed at locations where no well existed previously to fill gaps in the monitoring network.

In the event that any of the corrective action groundwater extraction wells are damaged or destroyed during redevelopment construction activities at the site, they will be replaced in their approximate previous locations. **Figure 2** presents the locations of monitoring wells that will be replaced. **Table 3** includes a list of wells to be replaced. A description of well installation procedures is included in the following section.

4.2.1 Shallow Saprolite/Partially Weathered Rock Monitoring Wells

Monitoring wells completed in saprolite or partially weathered rock (PWR) will be installed using hollow-stem auger techniques by advancing to current well construction specifications. The final depth and construction of each well will be determined in the field by a geologist supervising the well installation. Wells will be constructed using two-inch inside diameter (ID) polyvinyl chloride (PVC) well casing with a ten-foot section of 0.01-inch slot screen. Clean sand will be used to backfill the screened zone to approximately two feet above the top of screen. A two-foot thick bentonite seal will be placed above the sand and cement grout will fill the remaining annular space to the surface. Proposed well construction specifications are included in **Table 3.**

4.2.2 Bedrock Monitoring Wells

Monitoring wells completed in bedrock will be installed using hollow stem auger and air-rotary techniques by advancing to current well construction specifications. The final depth and construction of each well will be determined in the field by a geologist supervising the well installation. A six-inch steel or PVC outer casing will be installed approximately five-feet into bedrock and grouted in-place. After the grout has cured for approximately 24-hours, the boring will be advanced using air rotary techniques to current well construction specifications. Wells will be constructed using two-inch ID PVC well casing with a five-foot section of 0.01-inch slot screen. Clean sand will be used to backfill the screened zone to approximately two feet above the top of screen. A two-foot thick bentonite seal will be placed above the sand and cement grout will fill the remaining annular space to the surface. Proposed well construction specifications are included in **Table 3.**

4.2.3 Well Completion

Surface completion for the new wells will consist of a steel, flush mounted, watertight manhole set in cement. The well casings will be fitted with a locking well cap to prevent unauthorized access. Identification tags listing the well construction details will be completed for each well.

4.2.4 Well Development

Monitoring wells will be developed to remove silt/clay materials introduced into the well or sand pack during construction and to establish a hydraulic connection with the surrounding aquifer. Depending on aquifer recharge, a submersible pump, peristaltic pump, or a new (unused) dedicated PVC bailer will be used to develop the well. Development water will be containerized in drums on-site for disposal in the groundwater treatment system.

4.2.5 Investigation Derived Waste

Soil cuttings will be temporarily staged in a roll-off box(es) on-site pending waste characterization and an evaluation of disposal options. Soil cuttings derived from above the water table in each well will be segregated from cuttings derived below the water table. Composite samples from the containers of soil cuttings will be submitted for analysis for VOCs by EPA Method 8260/5035, 1,4-dioxane by EPA Method 8270C, and metals by EPA Method 6010B, and EPA Method 7470 (Arsenic, Barium, Cadmium, total Chromium, Copper, Nickel, Selenium, Silver, Zinc, and Mercury). If the analyses indicate the concentration of hazardous waste constituents exceed regulatory action levels, the containers will be transported off-site for disposal. Development water and groundwater sampling purge water will be containerized in Department of Transportation (DOT) approved 55-gallon drums. Development and purge water generated during well development and sampling, will be disposed in the on-site groundwater treatment system.

4.2.6 Location and Elevation Survey

The horizontal and vertical coordinates of the top of well casing and ground surface will be surveyed by a North Carolina licensed surveyor. Additionally, the new wells will be tied into a site survey after redevelopment activities have been completed.

4.3 Monitoring Well Permits

North Carolina requires both a well permit and written approval from third party property owners to install monitoring wells on their property. Because Parker does not own the property but will be the owner of proposed monitoring wells, well installation permits will be required and a representative from the current property owner must sign the well permit applications as the property owner. ENSR will prepare the well permit applications and will contact the current property owner and coordinate obtaining their signature on the applications. The completed applications will then be sent to the NCDENR for processing. A copy of the Monitoring Well System Permit Application is included in **Appendix B**.

5.0 Post-Development Groundwater Monitoring Well Network

Once construction activities associated with redevelopment are complete, a new groundwater monitoring network will be in place. The new network will be adequate to monitor the groundwater flow at the site along with the occurrence and movement of the dissolved phase groundwater plume. **Figure 3** is a plan view map which shows the elements of the groundwater monitoring network along with the proposed redevelopment plan and the most recent dissolved phase plume map. **Figures 4 and 5** are cross sections, showing the groundwater potentiometric contours and isoconcentration contours along the direction of groundwater movement (Line A – A') and perpendicular to groundwater movement (Line B – B'). These three figures demonstrate that the proposed groundwater monitoring network will be adequate to monitor the groundwater flow at the site along with the occurrence and movement of the dissolved phase groundwater plume.

6.0 Scheduling and Reporting

Parker will begin abandoning select site monitoring wells 30 days prior to the beginning of site redevelopment and construction activities. It is estimated that the work will required approximately one week to complete. Well abandonment records will be submitted to the state within 30 days of the completion of the work.

It is estimated that the site redevelopment and construction activities will require approximately one year to complete. Upon completion of redevelopment activities, Parker will begin installing wells as discussed in Section 4.0. It is estimated that the work will require approximately one month to complete. In addition, the general timeframe for completion of these tasks has been included in the Master Project Schedule for this facility.

After completion of the well abandonment and replacement as outlined herein, ENSR will prepare a Summary Report. The Summary Report will be submitted to NCDENR within 60 days following completion of the well replacement activities. The report will include an executive summary, introduction, and a presentation and discussion of the field work performed. The report will include figures and tables necessary to present the results. Figures will include an updated site map indicating the locations of new monitoring wells. The tables will include monitoring well construction information.

Tables

TABLE 1
Summary of Monitoring Well Abandonment
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Diameter (inch)	Water Level Below TOC (feet)	Measuring Point Elevation at TOC (feet, MSL)	Groundwater Elevation (feet, MSL)	Total Well Depth (feet)	Outer Casing Depth (feet)	Outer Casing Diameter (inch)	Screened Interval
MW-1	2	37.88	398.30	360.42	44.23	NA	NA	32-42
MW-2	2	37.46	394.01	356.55	44.2	NA	NA	33.5-43.5
MW-3	2	38.80	393.58	354.78	55.85	NA	NA	44-54
MW-4	2	*DRY	395.65	*DRY	40	NA	NA	28-38
MW-5	2	*DRY	394.61	*DRY	39.66	NA	NA	28-38
MW-6	2	36.10	385.47	349.37	49.38	NA	NA	38-48
MW-6D	2	48.03	385.58	337.55	69.25	NA	NA	62-67
MW-6DR	2	45.78	387.07	341.29	103.22	71	6	91-101
MW-6DR3	2	41.48	387.95	346.47	155.05	54.5	6	143-153
MW-7	2	9.88	354.45	344.57	10.01	NA	NA	5-10
MW-8	2	13.49	357.87	344.38	17	NA	NA	5-15
MW-8D	2	13.09	358.14	345.05	67	NA	NA	60-65
MW-8DR	2	15.37	358.41	343.04	91.79	45	6	80-90
MW-9	2	15.91	362.38	346.47	16.04	NA	NA	3-13
MW-10	2	*DRY	389.10	*DRY	31.36	NA	NA	21-31
MW-11	2	31.56	384.69	353.13	35.02	NA	NA	24-34
MW-11D	2	31.81	384.79	352.98	67	NA	NA	60-65
MW-12	2	36.26	386.75	350.49	36.2	NA	NA	24-34
MW-13	2	27.36	377.93	350.57	35.5	NA	NA	23.5-33.5
MW-14	2	*DRY	377.93	*DRY	30.3	NA	NA	18-28
MW-15	2	21.74	369.88	348.14	30	NA	NA	18-28
MW-16	2	21.87	372.94	351.07	23.84	NA	NA	12-22
MW-18	2	36.11	394.33	358.22	40.04	NA	NA	28-38
MW-18D	2	NS	397.04	NS	104.22	23.5	6	92-102
MW-20	2	37.90	396.11	358.21	46.37	NA	NA	34.5-44.5
MW-22	2	28.38	382.10	353.72	38.33	NA	NA	33-43
MW-24	4	38.51	**395.12**	356.61	122.27	81	6	110-120
MW-25	4	NS	395.42	NS	47.2	NA	NA	37.5-47.5
MW-26	4	NS	394.01	NS	120	58	6	73.5-83.5
MW-27	2	35.36	390.56	355.20	43.75	NA	NA	32-42
MW-29	2	26.30	376.32	350.02	92.6	48	6	45-90
MW-30	2	38.93	389.92	350.99	48.41	NA	NA	36.5-46.5
MW-31	2	33.97	391.26	357.29	49.34	NA	NA	34.34-49.34
MW-33	2	33.42	382.54	349.12	40.15	NA	NA	30-40
MW-34	6	34.05	383.07	349.02	82.1	50	6	79-84
MW-36	2	30.79	391.26	360.47	40.05	NA	NA	30-40
MW-37	2	36.30	395.01	358.71	39.46	NA	NA	29.5-39.5
POC-1A	2	37.41	393.72	356.31	41.98	NA	NA	30-40
POC-1B	2	38.47	393.44	354.97	44.55	50	6	53-63
POC-2A	2	43.83	395.30	351.47	45.6	NA	NA	34-44
POC-2B	2	46.85	395.67	348.82	65.38	40.5	6	54-64

Notes:
MSL = Mean Sea Level
TOC = Top of Casing
*DRY = dry as of sampling date 8/20/2007
Wells denoted in bold indicate RCRA permit wells

TABLE 2
Summary of Monitoring Well Decommissioning
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Diameter (inch)	Water Level Below TOC (feet)	Measuring Point Elevation at TOC (feet, MSL)	Groundwater Elevation (feet, MSL)	Total Well Depth (feet)	Outer Casing Depth (feet)	Outer Casing Diameter (inch)	Screened Interval
MW-1	2	37.88	398.30	360.42	44.23	NA	NA	32-42
MW-2	2	37.46	394.01	356.55	44.2	NA	NA	33.5-43.5
MW-5	2	*DRY	394.61	*DRY	39.66	NA	NA	28-38
MW-6DR	2	45.78	387.07	341.29	103.22	71	6	91-101
MW-8	2	13.49	357.87	344.38	17	NA	NA	5-15
MW-10	2	*DRY	389.10	*DRY	31.36	NA	NA	21-31
MW-11	2	31.56	384.69	353.13	35.02	NA	NA	24-34
MW-11D	2	31.81	384.79	352.98	67	NA	NA	60-65
MW-12	2	36.26	386.75	350.49	36.2	NA	NA	24-34
MW-13	2	27.36	377.93	350.57	35.5	NA	NA	23.5-33.5
MW-16	2	21.87	372.94	351.07	23.84	NA	NA	12-22
MW-20	2	37.90	396.11	358.21	46.37	NA	NA	34.5-44.5
MW-22	2	28.38	382.10	353.72	38.33	NA	NA	33-43
MW-24	4	38.51	395.12	356.61	122.27	81	6	110-120
MW-25	4	NS	395.42	NS	47.2	NA	NA	37.5-47.5
MW-27	2	35.36	390.56	355.20	43.75	NA	NA	32-42
MW-30	2	38.93	389.92	350.99	48.41	NA	NA	36.5-46.5
MW-36	2	30.79	391.26	360.47	40.05	NA	NA	30-40
MW-37	2	36.30	395.01	358.71	39.46	NA	NA	29.5-39.5

Notes:

MSL = Mean Sea Level

TOC = Top of Casing

NA - Not Applicable

*DRY = dry as of sampling date 8/20/2007

Wells denoted in Bold indicate RCRA permit wells

TABLE 3
Summary of Monitoring Well Replacement
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Diameter (inch)	Assumed Depth To Water (feet)	Proposed Total Well Depth (feet)	Proposed Outer Casing Depth (feet)	Proposed Outer Casing Diameter (inch)	Proposed Screened Interval
MW-3-R	2	40.50	55	NA	NA	45-55
MW-4-R	2	> 40	50.00	NA	NA	40-50
MW-6-R	2	38.46	50	NA	NA	40-50
MW-6D-R	2	46.75	70	NA	NA	65-70
MW-6DR3-R	2	39.63	155	55	6	150-155
MW-7-R	2	9.98	15	NA	NA	5-15
MW-8D-R	2	13.09	65	NA	NA	60-65
MW-8DR-R	2	17.11	90	45	6	80-90
MW-9-R	2	15.94	25	NA	NA	15-25
MW-14-R	2	> 30	40	NA	NA	30-40
MW-15-R	2	25.53	30	NA	NA	20-30
MW-18-R	2	36.35	45	NA	NA	35-45
MW-18D-R	2	48.12	105	25	6	95-105
MW-26-R	2	38.19	85	60	6	80-85
MW-26S	2	38.19	50	NA	NA	40-50
MW-29-R	2	29.34	90	48	6	80-90
MW-29S	2	29.34	50	NA	NA	40-50
MW-31-R		35.35	50	NA	NA	40-50
MW-33-R	2	35.10	45	NA	NA	35-45
MW-34-R	2	33.75	85	50	6	80-85
MW-42	2	38.00	50	NA	NA	40-50
MW-43	2	38.00	50	NA	NA	40-50
MW-44	2	36.50	45	NA	NA	35-45
MW-45	2	32.00	40	NA	NA	30-40
POC-1A	2	39.29	45	NA	NA	35-45
POC-1B	2	40.20	50	40	6	40-50
POC-2A	2	45.15	50	NA	NA	40-50
POC-2B	2	48.05	55	40	6	45-55

Notes:

MSL = Mean Sea Level

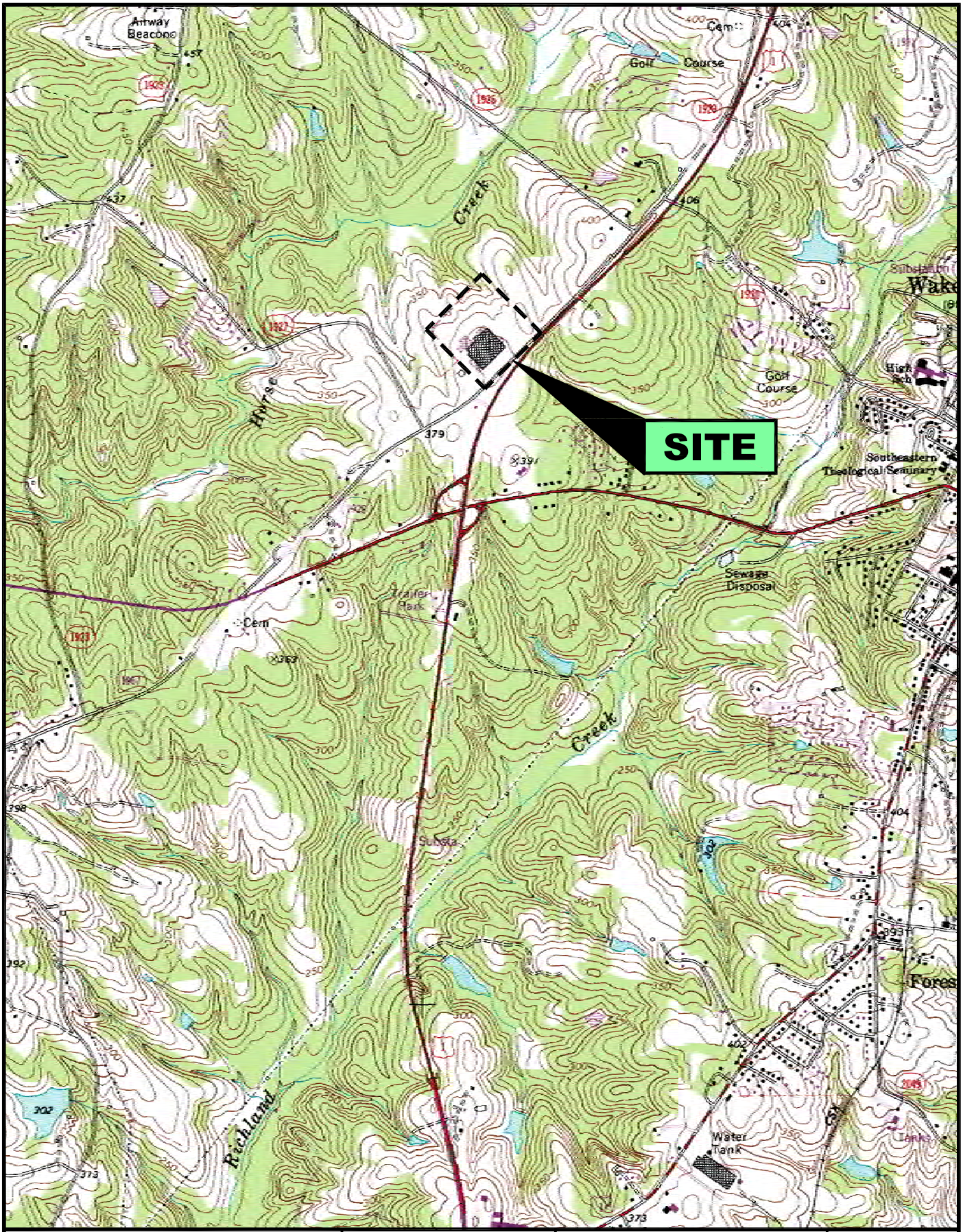
TOC = Top of Casing

Wells denoted in bold indicate RCRA permit wells

Yellow Shading: brand new wells

-R = well that will be replaced

Figures



ENSR | AECOM

ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.ENSR.AECOM.COM

USGS 7-1/2 MINUTE SERIES MAP
Wake Forest, NC
1987
TOPOGRAPHIC QUADRANGLE

SCALE 1:24000

SITE LOCATION MAP

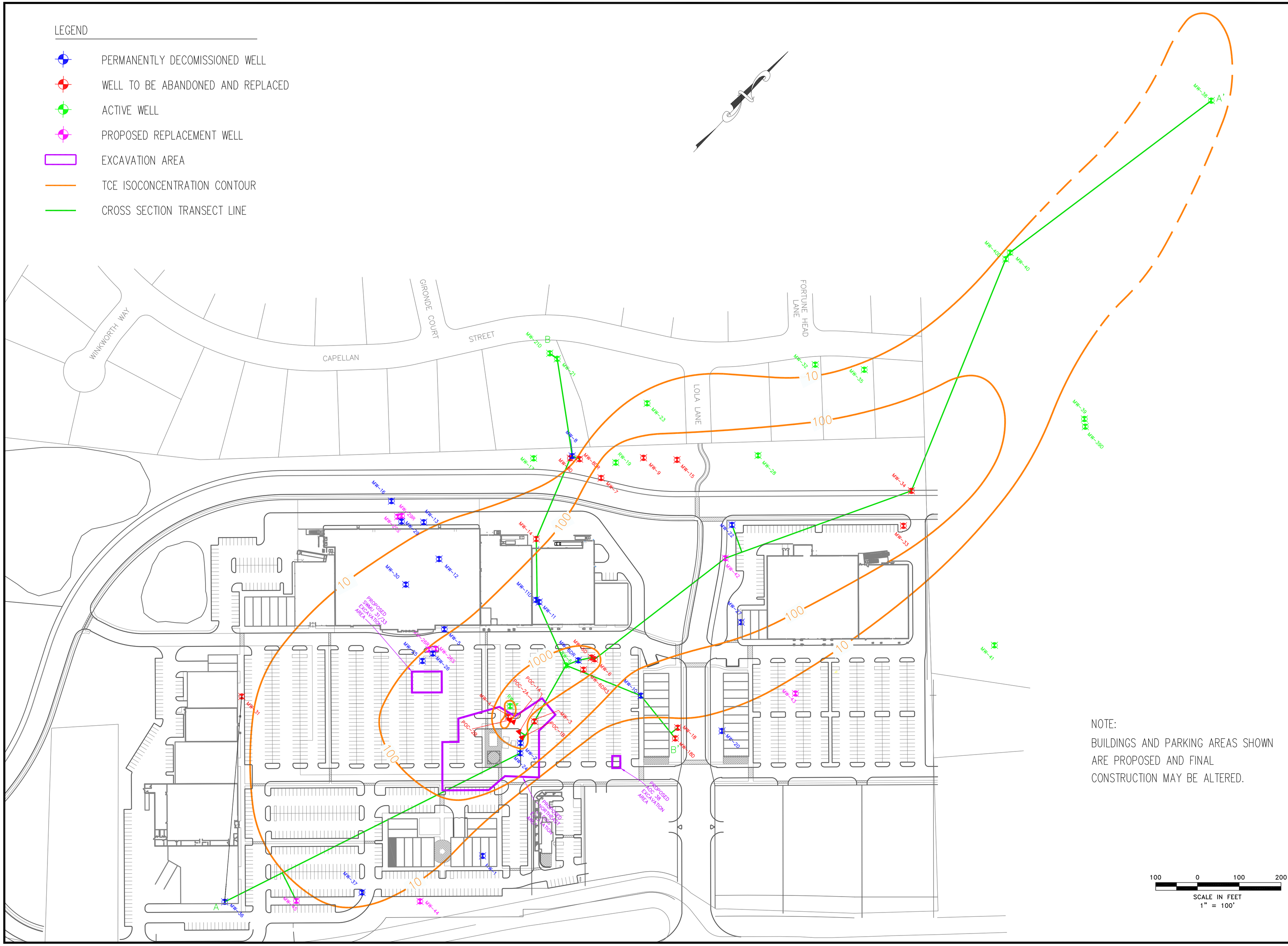
Former Parker-Hannifin Facility
Wake Forest, North Carolina

FIGURE NUMBER: 1

DRAWN BY:	DATE:	PROJECT NUMBER:	DRAWING NUMBER:
KLR	6/15/07	05303-026	A70384A

LEGEND

- PERMANENTLY DECOMISSIONED WELL
- WELL TO BE ABANDONED AND REPLACED
- ACTIVE WELL
- PROPOSED REPLACEMENT WELL
- EXCAVATION AREA
- TCE ISOCONCENTRATION CONTOUR
- CROSS SECTION TRANSECT LINE



NOTE:
BUILDINGS AND PARKING AREAS SHOWN ARE PROPOSED AND FINAL CONSTRUCTION MAY BE ALTERED.

100 0 100 200
SCALE IN FEET
1" = 100'

REVISIONS

NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: JLD
CHECKED BY:
APPROVED BY:

ENSR | AECOM
ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7986
WEB: HTTP://WWW.ENSR.AECOM.COM

EXISTING AND PROPOSED WELL LOCATIONS (WITH PROPOSED DEVELOPMENT PLAN OVERLAY)

Former Parker-Hannifin Facility
Wake Forest, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1" = 100'	8/21/07	05303-025

FIGURE NUMBER: 2

DRAWING NUMBER: B70465D

LEGEND

EXISTING AND PROPOSED MONITORING WELLS

EXTRACTION WELLS

EXCAVATION AREA

TCE ISOCONCENTRATION CONTOUR

WINKWORTH WAY

CAPELLAN STREET

GIRONDE COURT

LOLA LANE

FORTUNE HEAD LANE

MW-1R, MW-2R, MW-2S, MW-3R, MW-4R, MW-4S, MW-4, MW-5R, MW-5S, MW-6R, MW-6SR, MW-6DR, MW-7R, MW-9R, MW-13R, MW-14R, MW-15R, MW-17, MW-18DR, MW-21, MW-21D, MW-23, MW-28, MW-32, MW-33R, MW-34R, MW-35, MW-36, MW-37, MW-38, MW-39, MW-39D, MW-40, MW-40D, MW-41, MW-42, MW-43

RW-1, RW-2, RW-3, RW-4, RW-5, RW-6, RW-7, RW-8, RW-9

PROPOSED EXCAVATION AREA

PROPOSED SVMO 31/33 EXCAVATION AREA

PROPOSED MONITORING WELL NETWORK EXCAVATION AREA

10

100

1000

SCALE IN FEET
1" = 100'
100 0 100 200

DRAWING NUMBER: B70651D	FIGURE NUMBER: 3	

POST DEVELOPMENT GROUNDWATER MONITORING NETWORK

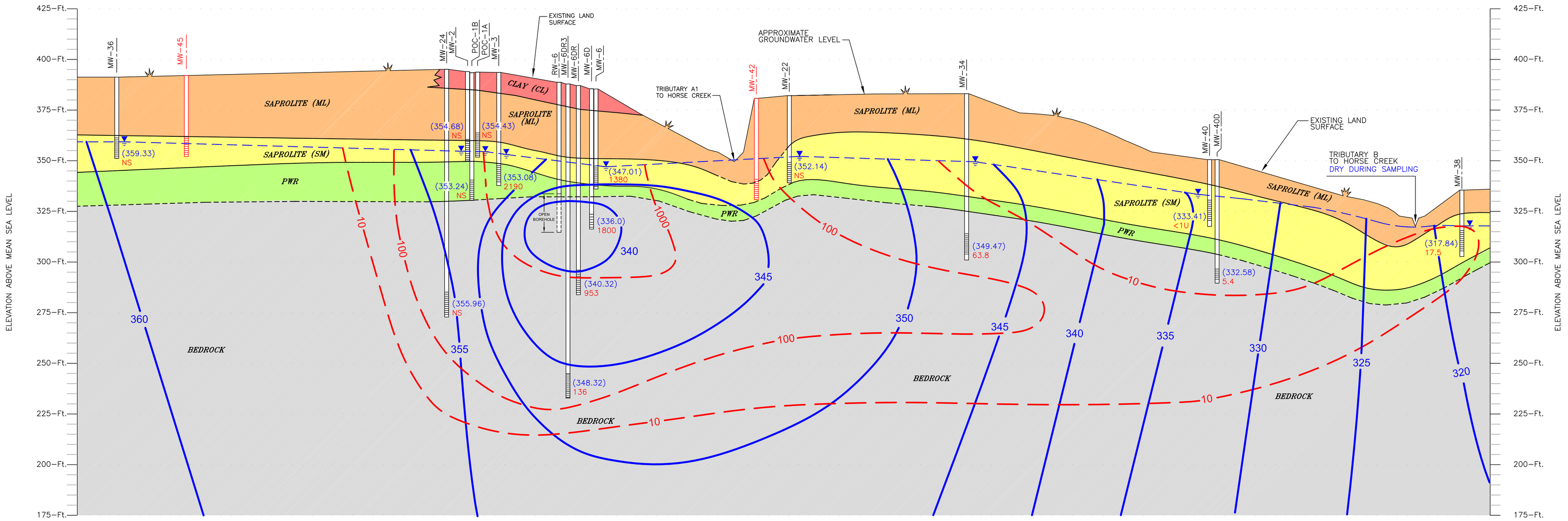
Former Parker-Hannifin Facility
Wake Forest, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1" =100'	2/13/08	05303-025

ENSR | AECOM

ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.ENSR.AECOM.COM

DESIGNED BY:	REVISIONS			
	NO.:	DESCRIPTION:	DATE:	BY:
DRAWN BY: JLD				
CHECKED BY:				
APPROVED BY:				



LEGEND

- GROUNDWATER LEVEL (ft, msl) (DASHED WHERE INFERRED)
- EXISTING MONITORING WELL/ WELL SCREEN INTERVAL
- PROPOSED MONITORING WELL/ WELL SCREEN INTERVAL
- (359.49) GROUNDWATER ELEVATION
- 136 TCE CONCENTRATION (ug/L)
- 340 GROUNDWATER CONTOUR (ft, msl)
- 10 TCE CONTOUR (ug/L)

LITHOLOGY LEGEND

- CLAY (CL): RED BROWN MICACEOUS CLAY AND FILL MATERIAL
- SAPROLITE (ML): CLAYEY TO SANDY RED BROWN MICACEOUS SILT WITH RELICT ROCK FABRIC
- SAPROLITE (SM): SILTY TO FINE BROWN MICACEOUS SAND WITH RELICT ROCK FABRIC
- PWR: PARTIALLY WEATHERED ROCK
- BEDROCK: FELSIC GNEISS AND SCHIST WITH SOME PEGMATITE VEINS

NOTES:

1. GROUNDWATER ELEVATIONS RECORDED ON AUGUST 20, 2007.
2. ANALYTICAL RESULTS FROM THE 2nd 2007 GROUNDWATER MONITORING EVENT.

VERTICAL SCALE: 1"=25'
HORIZONTAL SCALE: 1"=125'
VERTICAL EXAGGERATION: 5X

REVISIONS

NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: JLD
CHECKED BY:
APPROVED BY:

ENSR | AECOM
ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7096
WEB: HTTP://WWW.ENSR.AECOM.COM

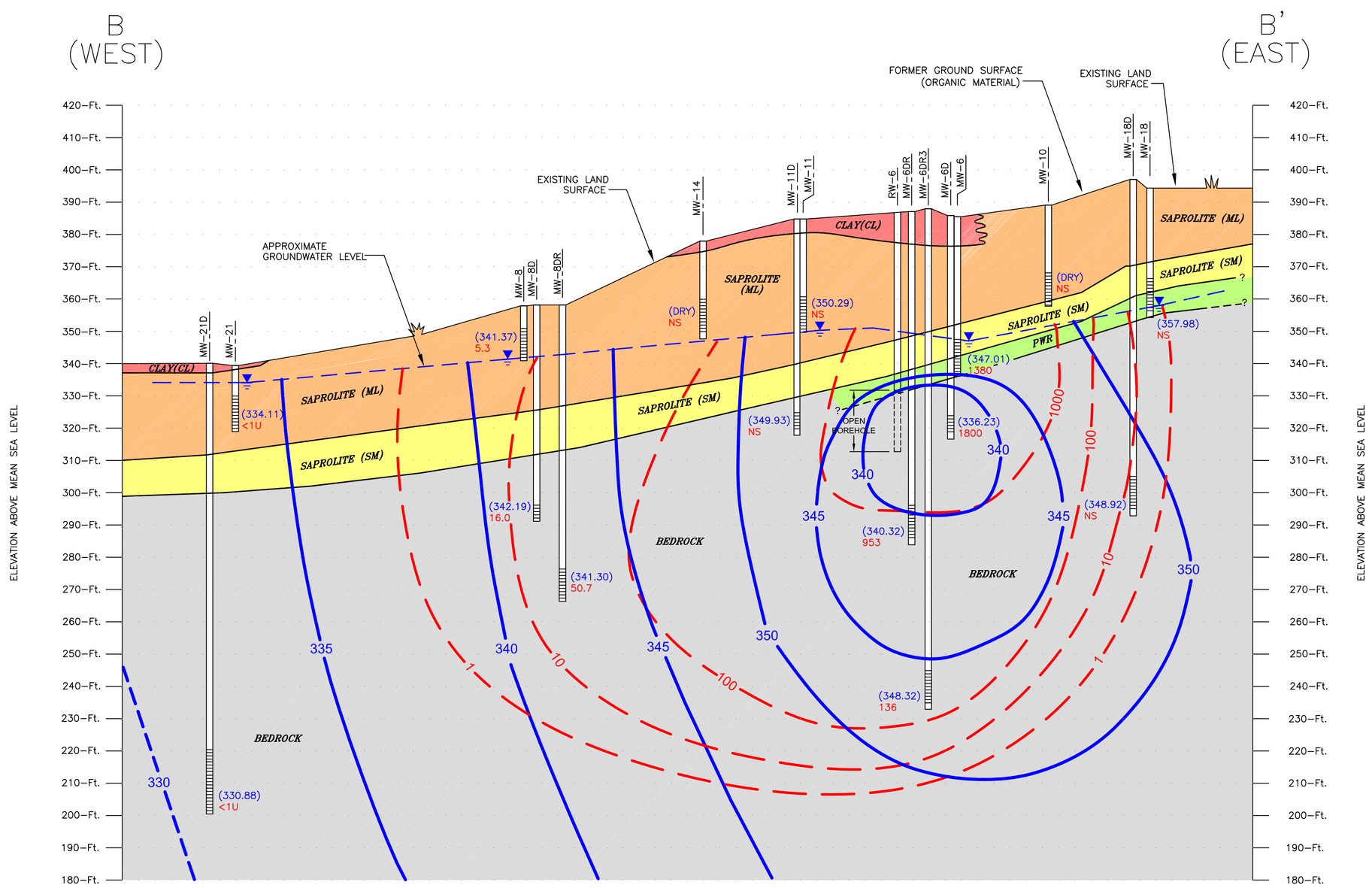
AUGUST 2007 GROUNDWATER POTENTIOMETRIC SURFACE MAP CROSS SECTION A–A'

Former Parker-Hannifin Facility
Wake Forest, North Carolina

PROJECT NUMBER: 05303-035-402R
DATE: 2/1/08
SCALE: AS SHOWN

FIGURE NUMBER: 4
REVISED 2/1/08

DRAWING NUMBER: D80091D



LEGEND

- GROUNDWATER LEVEL (ft, msl) (DASHED WHERE INFERRED)
- EXISTING MONITORING WELL/ WELL SCREEN INTERVAL
- PROPOSED MONITORING WELL/ WELL SCREEN INTERVAL
- (359.49) GROUNDWATER ELEVATION
- 136 TCE CONCENTRATION (ug/L)
- 340 GROUNDWATER CONTOUR (ft, msl)
- 10 TCE CONTOUR (ug/L)

LITHOLOGY LEGEND

- CLAY (CL): RED BROWN MICACEOUS CLAY AND FILL MATERIAL
- SAPROLITE (ML): CLAYEY TO SANDY RED BROWN MICACEOUS SILT WITH RELICT ROCK FABRIC
- SAPROLITE (SM): SILTY TO FINE BROWN MICACEOUS SAND WITH RELICT ROCK FABRIC
- PWR: PARTIALLY WEATHERED ROCK
- BEDROCK: FELSIC GNEISS AND SCHIST WITH SOME PEGMATITE VEINS

NOTES:

1. GROUNDWATER ELEVATIONS RECORDED ON AUGUST 20, 2007.
2. ANALYTICAL RESULTS FROM THE 2nd 2007 GROUNDWATER MONITORING EVENT.

VERTICAL SCALE: 1"=25'
HORIZONTAL SCALE: 1"=125'
VERTICAL EXAGGERATION: 5X

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: JLD
CHECKED BY:
APPROVED BY:

ENSR | AECOM
ENSR CONSULTING AND ENGINEERING (NC), INC.
RALEIGH, NORTH CAROLINA 27616
PHONE: (919) 872-6600
FAX: (919) 872-7096
WEB: HTTP://WWW.ENSR.AECOM.COM

AUGUST 2007 GROUNDWATER POTENTIOMETRIC SURFACE MAP CROSS SECTION B-B'

Former Parker-Hannifin Facility
Wake Forest, North Carolina

SCALE: AS SHOWN
DATE: 2/1/08
PROJECT NUMBER: 05303-035-402R

FIGURE NUMBER: 5
REVISED 2/1/08

DRAWING NUMBER: D80092D

Appendix A

Well Abandonment Record

WELL ABANDONMENT RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality

WELL CONTRACTOR CERTIFICATION #_____

1. WELL CONTRACTOR:

_____
Well Contractor (Individual) Name

_____
Well Contractor Company Name

STREET ADDRESS _____

_____
City or Town State Zip Code

(_____) - _____
Area code - Phone number

2. WELL INFORMATION:

SITE WELL ID # (if applicable)_____

STATE WELL PERMIT # (if applicable)_____

COUNTY WELL PERMIT # (if applicable)_____

DWQ or OTHER PERMIT # (if applicable)_____

WELL USE (Circle applicable use): **Monitoring Residential Municipal/Public Industrial/Commercial Agricultural Recovery Injection Irrigation**

Other (list use) _____

3. WELL LOCATION:

COUNTY_____ QUADRANGLE NAME _____

NEAREST TOWN: _____

_____
(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:
Slope Valley Flat Ridge Other_____
(Circle appropriate setting)

LATITUDE ___ ___ _____

LONGITUDE ___ ___ _____

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: GPS Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) _____

NAME OF FACILITY_____

STREET ADDRESS _____

_____
City or Town State Zip Code

4b. CONTACT PERSON/WELL OWNER:

NAME _____

STREET ADDRESS_____

_____
City or Town State Zip Code

(_____) - _____
Area code - Phone number

5. WELL DETAILS:

a. Total Depth**:**_____ ft. Diameter:_____in.
b. Water Level (Below Measuring Point): _____ ft.
Measuring point is _____ ft. above land surface.

6. CASING: Length Diameter

a. Casing Depth (if known): _____ ft. _____ in.
b. Casing Removed: _____ ft. _____ in.

7. DISINFECTION: _____

(Amount of 65%-75% calcium hypochlorite used)

8. SEALING MATERIAL:

Neat Cement

Cement _____ lb.
Water_____ gal.

Sand Cement

Cement_____lb.
Water_____ gal.

Bentonite

Bentonite _____ lb.
Type: Slurry__ Pellets__
Water_____ gal.

Other

Type material _____

Amount _____

9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

_____
_____
_____
_____

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED_____

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

_____ _____
SIGNATURE OF CERTIFIED WELL CONTRACTOR **DATE**

_____
SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

_____
PRINTED NAME OF PERSON ABANDONING THE WELL

Submit a copy to the owner and the original to the Division of Water Quality within 30 days.
Attn: Information Management, 1617 Mail Service Center – Raleigh, NC 27699-1617, Phone No. (919) 733-7015 ext 568.

Form GW-30
Rev. 5/06

Appendix B

Monitoring Well Permit Application

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES
DIVISION OF WATER QUALITY - GROUNDWATER SECTION

APPLICATION FOR PERMIT TO CONSTRUCT A MONITORING WELL SYSTEM

(Please Type or Print Clearly)

Date: _____ , _____ County _____

In accordance with the provisions of Article 7, Chapter 87, General Statutes of North Carolina and regulations pursuant thereto, application is hereby made for a permit to construct monitoring wells.

1. Name of Applicant: _____ (Telephone: _____)

   Applicant's Mailing Address: _____

2. Name of Property Owner (if different from Well Owner): _____

   Owner's Mailing Address: _____

3. Contact Person: _____ (Telephone: _____)

4. Location of Property: _____

5. Reason for Monitoring Well(s): _____
   (ex: nondischarge permit requirements, suspected contamination, environmental assessment, etc.)

6. Type of facility or site for which the monitoring well(s) is needed: _____
   (ex: nondischarge facility, waste disposal site, landfill, underground storage tank, etc.)

7. Type of contamination being monitored (if applicable): _____
   (ex: nutrients, organics, heavy metals, etc.)

8. Are any existing recovery wells associated with the monitoring well(s)? _____ If yes, how many? _____

   Recovery Well Construction Permit No. _____

9. Distance to a known waste or pollution source: _____ feet

10. Are any water supply wells located less than 500 feet from the proposed monitoring wells? _____

    If yes, give distance: _____ feet

11. Well Contractor: _____

12. Well Contractor Certification #: _____

13. Well Contractor's Address: _____

PROPOSED MONITORING WELL CONSTRUCTION INFORMATION

1. Total Number of Wells to be constructed: _____ ; (A) Number to be completed in bedrock? _____

   (B) Number to be completed in unconsolidated material? _____

2. Estimated depth of well(s): _____ feet

3. Gravel or sand pack interval (if appropriate)
   From _____ feet To _____ feet

4. Type of casing used: _____
   (ex: PVC, stainless steel, galvanized steel, etc.)

5. Diameter of casing: _____ inches

FOR OFFICE USE ONLY

___ PERMITTED ACTIVITY
___ U.S.T. LEAK DETECTION
___ GROUNDWATER QUALITY STANDARDS VIOLATIONS SUSPECTED FROM UNPERMITTED ACTIVITIES
___ NOTICE OF NON-COMPLIANCE AT UNPERMITTED FACILITIES

PERMIT NO. _____ ISSUED _____ 19 _____

INCIDENT # _____

(Continued on Reverse)

6. Thickness of casing: _____ inches

7. How will the well(s) be secured? _____

8. Estimated beginning construction date: _____

9. Estimated completion date:_____

ADDITIONAL INFORMATION

1. ATTACH A SITE MAP SHOWING THE LOCATIONS OF THE FOLLOWING:

    1 - PROPOSED MONITORING WELL(S)

    2 - ALL EXISTING MONITORING AND RECOVERY WELLS OR TEST BORINGS WITH THE PROPERTY BOUNDARY

    3 - ALL WATER SUPPLY WELLS WITHIN 500 FEET OF THE WASTE SOURCES

    4 - AT LEAST TWO REFERENCE POINTS (NUMBERED ROADS, INTERSECTIONS, STREAMS, ETC.)

2. PROVIDE A WELL CONSTRUCTION DIAGRAM OF EACH WELL SHOWING DIAMETER, ESTIMATED DEPTH, SCREEN INTERVALS, SAND/GRAVEL PACKS, TYPE OF CASING MATERIAL, CASING WALL THICKNESS, WELL HEAD COMPLETION DETAILS, ETC.)

The Applicant hereby agrees the proposed well(s) will be constructed in accordance with approved specifications and conditions of the Well Construction Permit as regulated under the Well Construction Standards (Title 15A North Carolina Administrative Code, Subchapter 2C) and accepts full responsibility for compliance with these rules.

_____
Signature of Applicant or Agent

_____
Title (if applicable)

If the property is owned by someone other than the applicant, the property owner hereby consents to allow the applicant to construct monitoring wells as outlined in this application and that it shall be the responsibility of the applicant to ensure that these monitoring wells conform to the Well Construction Standards (Title 15A North Carolina Administrative Code, Subchapter 2C).

_____
Signature of Property Owner (if different from applicant)

Appendix J.
September 2015 Laboratory Analytical Report

ANALYTICAL REPORT

September 17, 2015

AECOM, Inc - Raleigh, NC

Sample Delivery Group:	L787282
Samples Received:	09/05/2015
Project Number:	60341618.2
Description:	Parker Wake Forest
Site:	WAKE FOREST, NC
Report To:	Mr. Bob Wyrick 701 Corporate Center Drive, Suite 475 Raleigh, NC 27607

Entire Report Reviewed By:

Terrie Fudge

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

[1]Cp: Cover Page 1

[2]Tc: Table of Contents 2

[3]Ss: Sample Summary 4

[4]Cn: Case Narrative 11

[5]Sr: Sample Results 12

MW-3 L787282-01 12

MW-6 L787282-02 14

MW-6 L787282-03 16

MW-6DR3 L787282-04 17

MW-6DR3 L787282-05 19

MW-8 L787282-06 20

MW-8D L787282-07 22

MW-8DR L787282-08 24

MW-13 L787282-09 26

MW-13 L787282-10 28

MW-21 L787282-11 29

MW-21D L787282-12 31

MW-29 L787282-13 33

MW-29 L787282-14 35

MW-32 L787282-15 36

MW-32 L787282-16 38

MW-33 L787282-17 39

MW-33 L787282-18 41

MW-34 L787282-19 42

MW-34 L787282-20 44

MW-36 L787282-21 45

MW-38 L787282-22 47

MW-39D L787282-23 49

MW-40D L787282-24 51

RW-4 L787282-25 53

RW-4 L787282-26 55

RW-6 L787282-27 56

RW-6 L787282-28 58

RW-19 L787282-29 59

RW-19 L787282-30 61

POC-1A L787282-31 62

POC-1A L787282-32 64

POC-1B L787282-33 65

POC-1B L787282-34 67

POC-2A L787282-35 68
POC-2A L787282-36 70
POC-2B L787282-37 71
POC-2B L787282-38 73
ANDREWS-WSW L787282-39 74
ANDREWS-WSW L787282-40 76
PERRY-WSW L787282-41 77
PERRY-WSW L787282-42 79
DUP-01-09022015 L787282-43 80
DUP-02-09032015 L787282-44 82
DUP-02-09032015 L787282-45 84
EB-01-09022015 L787282-46 85
EB-01-09022015 L787282-47 87
TRIP BLANK L787282-48 88

[6]Qc: Quality Control Summary **90**
Metals (ICP) by Method 6010C 90
Volatile Organic Compounds (GC/MS) by Method 8260B 91

[7]Gl: Glossary of Terms **117**

[8]Al: Accreditations & Locations **118**

[9]Sc: Chain of Custody **119**

MW-3 L787282-01 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 09:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 16:52	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 14:05	09/12/15 14:05	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	10	09/15/15 16:49	09/15/15 16:49	KLO

MW-6 L787282-02 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 14:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 14:25	09/12/15 14:25	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	50	09/15/15 17:09	09/15/15 17:09	KLO

MW-6 L787282-03 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 14:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 16:43	09/06/15 16:43	JC

MW-6DR3 L787282-04 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 13:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	1	09/15/15 14:49	09/15/15 14:49	KLO

MW-6DR3 L787282-05 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 13:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 18:44	09/06/15 18:44	JC

MW-8 L787282-06 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 13:35 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 15:05	09/12/15 15:05	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	1	09/15/15 17:29	09/15/15 17:29	KLO

MW-8D L787282-07 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 14:40 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 15:25	09/12/15 15:25	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	1	09/15/15 17:49	09/15/15 17:49	KLO

MW-8DR L787282-08 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 14:10 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 15:46	09/12/15 15:46	MCB

MW-13 L787282-09 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 13:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 16:06	09/12/15 16:06	MCB

MW-13 L787282-10 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 13:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 19:08	09/06/15 19:08	JC

MW-21 L787282-11 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 12:35 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 16:26	09/12/15 16:26	MCB

MW-21D L787282-12 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 12:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 16:46	09/12/15 16:46	MCB

MW-29 L787282-13 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 12:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 17:06	09/12/15 17:06	MCB

MW-29 L787282-14 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 12:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 19:32	09/06/15 19:32	JC

MW-32 L787282-15 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 10:55 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 17:26	09/12/15 17:26	MCB

MW-32 L787282-16 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 10:55 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 19:56	09/06/15 19:56	JC

MW-33 L787282-17 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 12:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 17:46	09/12/15 17:46	MCB

MW-33 L787282-18 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 12:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 20:21	09/06/15 20:21	JC

MW-34 L787282-19 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 13:45 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 18:06	09/12/15 18:06	MCB

MW-34 L787282-20 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 13:45 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 20:45	09/06/15 20:45	JC

MW-36 L787282-21 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 08:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 18:26	09/12/15 18:26	MCB

MW-38 L787282-22 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 10:50 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 18:46	09/12/15 18:46	MCB

MW-39D L787282-23 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 09:55 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 19:06	09/12/15 19:06	MCB

MW-40D L787282-24 GW

Collected by: A. C. Whieherd | Collected date/time: 09/01/15 10:20 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 19:26	09/12/15 19:26	MCB

RW-4 L787282-25 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 15:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 16:55	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 19:46	09/12/15 19:46	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	100	09/15/15 18:08	09/15/15 18:08	KLO

RW-4 L787282-26 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 15:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814728	1	09/11/15 17:53	09/11/15 17:53	JC

RW-6 L787282-27 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 14:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 16:58	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 20:07	09/12/15 20:07	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	25	09/15/15 18:28	09/15/15 18:28	KLO

RW-6 L787282-28 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 14:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815066	1	09/14/15 15:04	09/14/15 15:04	JC

RW-19 L787282-29 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 13:50 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 17:01	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813810	1	09/12/15 20:27	09/12/15 20:27	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815223	5	09/15/15 18:47	09/15/15 18:47	KLO

RW-19 L787282-30 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 13:50 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 21:57	09/06/15 21:57	JC

POC-1A L787282-31 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 11:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 17:04	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 04:29	09/09/15 04:29	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	10	09/10/15 21:25	09/10/15 21:25	MCB

POC-1A L787282-32 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 11:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 22:21	09/06/15 22:21	JC

POC-1B L787282-33 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 10:10 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 17:07	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 04:50	09/09/15 04:50	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	100	09/10/15 21:45	09/10/15 21:45	MCB

POC-1B L787282-34 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 10:10 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815066	1	09/14/15 15:43	09/14/15 15:43	JC

POC-2A L787282-35 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 11:45 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 17:10	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 05:11	09/09/15 05:11	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	100	09/10/15 19:25	09/10/15 19:25	MCB

POC-2A L787282-36 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 11:45 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815066	1	09/14/15 16:07	09/14/15 16:07	JC

POC-2B L787282-37 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 12:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 17:13	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	5	09/09/15 05:32	09/09/15 05:32	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	500	09/10/15 19:45	09/10/15 19:45	MCB

POC-2B L787282-38 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 12:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815066	10	09/14/15 16:31	09/14/15 16:31	JC

ANDREWS-WSW L787282-39 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 11:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 05:52	09/09/15 05:52	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	1	09/10/15 20:05	09/10/15 20:05	MCB

ANDREWS-WSW L787282-40 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 11:15 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/06/15 23:57	09/06/15 23:57	JC

PERRY-WSW L787282-41 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 11:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 06:13	09/09/15 06:13	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	1	09/10/15 20:25	09/10/15 20:25	MCB

PERRY-WSW L787282-42 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 11:30 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813827	1	09/07/15 00:21	09/07/15 00:21	JC

DUP-01-09022015 L787282-43 GW

Collected by: A. C. Whieherd | Collected date/time: 09/02/15 00:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 06:34	09/09/15 06:34	MCB

DUP-02-09032015 L787282-44 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 00:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 17:22	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 06:55	09/09/15 06:55	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	100	09/10/15 20:45	09/10/15 20:45	MCB

DUP-02-09032015 L787282-45 GW

Collected by: A. C. Whieherd | Collected date/time: 09/03/15 00:00 | Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815066	1	09/14/15 16:55	09/14/15 16:55	JC

EB-01-09022015 L787282-46 GW

Collected by: A. C. Whieherd
Collected date/time: 09/02/15 07:30
Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010C	WG814626	1	09/11/15 10:36	09/11/15 17:25	RDS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 07:16	09/09/15 07:16	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814394	1	09/10/15 21:05	09/10/15 21:05	MCB

EB-01-09022015 L787282-47 GW

Collected by: A. C. Whieherd
Collected date/time: 09/02/15 07:30
Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815312	1	09/15/15 14:16	09/15/15 14:16	JC

TRIP BLANK L787282-48 GW

Collected by: A. C. Whieherd
Collected date/time: 09/02/15 00:00
Received date/time: 09/05/15 07:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG814108	1	09/09/15 01:22	09/09/15 01:22	MCB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Terrie Fudge
Technical Service Representative

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	4.21	J	1.40	10.0	1	09/11/2015 16:52	WG814626
Nickel	6.29	J	4.90	10.0	1	09/11/2015 16:52	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J3	1.05	25.0	1	09/12/2015 14:05	WG813810
Acrylonitrile	U	J3 J5	0.873	2.50	1	09/12/2015 14:05	WG813810
Benzene	U	J5	0.0896	0.500	1	09/12/2015 14:05	WG813810
Bromobenzene	U	J5	0.133	0.500	1	09/12/2015 14:05	WG813810
Bromodichloromethane	U	J5	0.0800	0.500	1	09/12/2015 14:05	WG813810
Bromochloromethane	U	J5	0.145	0.500	1	09/12/2015 14:05	WG813810
Bromoform	U	J5	0.186	0.500	1	09/12/2015 14:05	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 14:05	WG813810
n-Butylbenzene	U	J5	0.143	0.500	1	09/12/2015 14:05	WG813810
sec-Butylbenzene	U	J5	0.134	0.500	1	09/12/2015 14:05	WG813810
tert-Butylbenzene	U	J5	0.183	0.500	1	09/12/2015 14:05	WG813810
Carbon disulfide	U	J5	0.101	0.500	1	09/12/2015 14:05	WG813810
Carbon tetrachloride	U	J5	0.159	0.500	1	09/12/2015 14:05	WG813810
Chlorobenzene	U	J5	0.140	0.500	1	09/12/2015 14:05	WG813810
Chlorodibromomethane	U	J5	0.128	0.500	1	09/12/2015 14:05	WG813810
Chloroethane	U	J5	0.141	0.500	1	09/12/2015 14:05	WG813810
2-Chloroethyl vinyl ether	U	J3 J6	0.877	2.50	1	09/12/2015 14:05	WG813810
Chloroform	0.499	J J5	0.0860	0.500	1	09/12/2015 14:05	WG813810
Chloromethane	U	J5	0.153	0.500	1	09/12/2015 14:05	WG813810
2-Chlorotoluene	U	J5	0.111	0.500	1	09/12/2015 14:05	WG813810
4-Chlorotoluene	U	J5	0.0972	0.500	1	09/12/2015 14:05	WG813810
1,2-Dibromo-3-Chloropropane	U	J5	0.325	1.00	1	09/12/2015 14:05	WG813810
1,2-Dibromoethane	U	J5	0.193	0.500	1	09/12/2015 14:05	WG813810
Dibromomethane	U	J5	0.117	0.500	1	09/12/2015 14:05	WG813810
1,2-Dichlorobenzene	U	J5	0.101	0.500	1	09/12/2015 14:05	WG813810
1,3-Dichlorobenzene	U	J5	0.130	0.500	1	09/12/2015 14:05	WG813810
1,4-Dichlorobenzene	U	J5	0.121	0.500	1	09/12/2015 14:05	WG813810
Dichlorodifluoromethane	U	J5	0.127	0.500	1	09/12/2015 14:05	WG813810
1,1-Dichloroethane	U	J5	0.114	0.500	1	09/12/2015 14:05	WG813810
1,2-Dichloroethane	U	J5	0.108	0.500	1	09/12/2015 14:05	WG813810
1,1-Dichloroethene	U	J5	0.188	0.500	1	09/12/2015 14:05	WG813810
cis-1,2-Dichloroethene	20.4	J5	0.0933	0.500	1	09/12/2015 14:05	WG813810
trans-1,2-Dichloroethene	0.513	J5	0.152	0.500	1	09/12/2015 14:05	WG813810
1,2-Dichloropropane	U	J5	0.190	0.500	1	09/12/2015 14:05	WG813810
1,1-Dichloropropene	U	J5	0.128	0.500	1	09/12/2015 14:05	WG813810
1,3-Dichloropropane	U	J5	0.147	0.500	1	09/12/2015 14:05	WG813810
cis-1,3-Dichloropropene	U	J5	0.0976	0.500	1	09/12/2015 14:05	WG813810
trans-1,3-Dichloropropene	U	J5	0.222	0.500	1	09/12/2015 14:05	WG813810
trans-1,4-Dichloro-2-butene	U	J5	0.257	5.00	1	09/12/2015 14:05	WG813810
2,2-Dichloropropane	U	J5	0.0929	0.500	1	09/12/2015 14:05	WG813810
Di-isopropyl ether	U	J5	0.0924	0.500	1	09/12/2015 14:05	WG813810
Ethylbenzene	U	J5	0.158	0.500	1	09/12/2015 14:05	WG813810
Hexachloro-1,3-butadiene	U	J5	0.157	1.00	1	09/12/2015 14:05	WG813810
2-Hexanone	U	J5	0.757	2.50	1	09/12/2015 14:05	WG813810
n-Hexane	U	J5	0.305	1.00	1	09/12/2015 14:05	WG813810
Iodomethane	U	J5	0.377	10.0	1	09/12/2015 14:05	WG813810
Isopropylbenzene	U	J5	0.126	0.500	1	09/12/2015 14:05	WG813810
p-Isopropyltoluene	U	J5	0.138	0.500	1	09/12/2015 14:05	WG813810
2-Butanone (MEK)	U	J3 J5	1.28	2.50	1	09/12/2015 14:05	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	J5	1.07	2.50	1	09/12/2015 14:05	WG813810
4-Methyl-2-pentanone (MIBK)	U	J5	0.823	2.50	1	09/12/2015 14:05	WG813810
Methyl tert-butyl ether	U	J5	0.102	0.500	1	09/12/2015 14:05	WG813810
Naphthalene	0.430	J J5	0.174	0.500	1	09/12/2015 14:05	WG813810
n-Propylbenzene	U	J5	0.162	0.500	1	09/12/2015 14:05	WG813810
Styrene	U	J5	0.117	0.500	1	09/12/2015 14:05	WG813810
1,1,1,2-Tetrachloroethane	U	J5	0.120	0.500	1	09/12/2015 14:05	WG813810
1,1,2,2-Tetrachloroethane	U	J5	0.130	0.500	1	09/12/2015 14:05	WG813810
1,1,2-Trichlorotrifluoroethane	U	J5	0.164	0.500	1	09/12/2015 14:05	WG813810
Tetrachloroethene	0.886	J5	0.199	0.500	1	09/12/2015 14:05	WG813810
Toluene	U	J5	0.102	0.500	1	09/12/2015 14:05	WG813810
1,2,3-Trichlorobenzene	U	J5	0.164	0.500	1	09/12/2015 14:05	WG813810
1,2,4-Trichlorobenzene	U	J5	0.355	0.500	1	09/12/2015 14:05	WG813810
1,1,1-Trichloroethane	U	J5	0.0940	0.500	1	09/12/2015 14:05	WG813810
1,1,2-Trichloroethane	U	J5	0.186	0.500	1	09/12/2015 14:05	WG813810
Trichloroethene	386		1.53	5.00	10	09/15/2015 16:49	WG815223
Trichlorofluoromethane	U	J5	0.130	0.500	1	09/12/2015 14:05	WG813810
1,2,3-Trichloropropane	U	J5	0.247	2.50	1	09/12/2015 14:05	WG813810
1,2,4-Trimethylbenzene	U	J5	0.123	0.500	1	09/12/2015 14:05	WG813810
1,2,3-Trimethylbenzene	U	J5	0.0739	0.500	1	09/12/2015 14:05	WG813810
1,3,5-Trimethylbenzene	U	J5	0.124	0.500	1	09/12/2015 14:05	WG813810
Vinyl acetate	U	J5	0.645	2.50	1	09/12/2015 14:05	WG813810
Vinyl chloride	U	J5	0.118	0.500	1	09/12/2015 14:05	WG813810
Xylenes, Total	U	J5	0.316	1.50	1	09/12/2015 14:05	WG813810
(S) Toluene-d8	*97.7*			*90.0-115*		*09/12/2015 14:05*	WG813810
(S) Dibromofluoromethane	*94.8*			*79.0-121*		*09/12/2015 14:05*	WG813810
(S) 4-Bromofluorobenzene	*98.1*			*80.1-120*		*09/12/2015 14:05*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 14:25	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 14:25	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 14:25	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 14:25	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 14:25	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 14:25	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 14:25	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 14:25	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 14:25	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 14:25	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 14:25	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 14:25	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 14:25	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 14:25	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 14:25	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 14:25	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 14:25	WG813810
Chloroform	1.28		0.0860	0.500	1	09/12/2015 14:25	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 14:25	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 14:25	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 14:25	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 14:25	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 14:25	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 14:25	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 14:25	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 14:25	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 14:25	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 14:25	WG813810
1,1-Dichloroethane	0.401	J	0.114	0.500	1	09/12/2015 14:25	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 14:25	WG813810
1,1-Dichloroethene	1.21		0.188	0.500	1	09/12/2015 14:25	WG813810
cis-1,2-Dichloroethene	440		4.66	25.0	50	09/15/2015 17:09	WG815223
trans-1,2-Dichloroethene	19.4		0.152	0.500	1	09/12/2015 14:25	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 14:25	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 14:25	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 14:25	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 14:25	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 14:25	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 14:25	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 14:25	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 14:25	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 14:25	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 14:25	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 14:25	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 14:25	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 14:25	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 14:25	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 14:25	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 14:25	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 14:25	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 14:25	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 14:25	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 14:25	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 14:25	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 14:25	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 14:25	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 14:25	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 14:25	WG813810
Tetrachloroethene	4.12		0.199	0.500	1	09/12/2015 14:25	WG813810
Toluene	0.301	J	0.102	0.500	1	09/12/2015 14:25	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 14:25	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 14:25	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 14:25	WG813810
1,1,2-Trichloroethane	2.11		0.186	0.500	1	09/12/2015 14:25	WG813810
Trichloroethene	1720		7.65	25.0	50	09/15/2015 17:09	WG815223
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 14:25	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 14:25	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 14:25	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 14:25	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 14:25	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 14:25	WG813810
Vinyl chloride	0.765		0.118	0.500	1	09/12/2015 14:25	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 14:25	WG813810
(S) Toluene-d8	*100*			*90.0-115*		*09/12/2015 14:25*	WG813810
(S) Dibromofluoromethane	*94.3*			*79.0-121*		*09/12/2015 14:25*	WG813810
(S) 4-Bromofluorobenzene	*98.6*			*80.1-120*		*09/12/2015 14:25*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	2.72	J J5	0.597	3.00	1	09/06/2015 16:43	WG813827
(S) Toluene-d8	*220*	J1		*70.0-130*		*09/06/2015 16:43*	WG813827

Sample Narrative:

8260B L787282-03 WG813827: Surrogate failure confirmed.

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J3 J6	1.05	25.0	1	09/15/2015 14:49	WG815223
Acrylonitrile	U	J3	0.873	2.50	1	09/15/2015 14:49	WG815223
Benzene	U		0.0896	0.500	1	09/15/2015 14:49	WG815223
Bromobenzene	U		0.133	0.500	1	09/15/2015 14:49	WG815223
Bromodichloromethane	U		0.0800	0.500	1	09/15/2015 14:49	WG815223
Bromochloromethane	U		0.145	0.500	1	09/15/2015 14:49	WG815223
Bromoform	U		0.186	0.500	1	09/15/2015 14:49	WG815223
Bromomethane	U		0.157	0.500	1	09/15/2015 14:49	WG815223
n-Butylbenzene	U		0.143	0.500	1	09/15/2015 14:49	WG815223
sec-Butylbenzene	U		0.134	0.500	1	09/15/2015 14:49	WG815223
tert-Butylbenzene	U		0.183	0.500	1	09/15/2015 14:49	WG815223
Carbon disulfide	U		0.101	0.500	1	09/15/2015 14:49	WG815223
Carbon tetrachloride	U		0.159	0.500	1	09/15/2015 14:49	WG815223
Chlorobenzene	U		0.140	0.500	1	09/15/2015 14:49	WG815223
Chlorodibromomethane	U		0.128	0.500	1	09/15/2015 14:49	WG815223
Chloroethane	U		0.141	0.500	1	09/15/2015 14:49	WG815223
2-Chloroethyl vinyl ether	U	J3 J6	0.877	2.50	1	09/15/2015 14:49	WG815223
Chloroform	0.648		0.0860	0.500	1	09/15/2015 14:49	WG815223
Chloromethane	U		0.153	0.500	1	09/15/2015 14:49	WG815223
2-Chlorotoluene	U		0.111	0.500	1	09/15/2015 14:49	WG815223
4-Chlorotoluene	U		0.0972	0.500	1	09/15/2015 14:49	WG815223
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/15/2015 14:49	WG815223
1,2-Dibromoethane	U		0.193	0.500	1	09/15/2015 14:49	WG815223
Dibromomethane	U		0.117	0.500	1	09/15/2015 14:49	WG815223
1,2-Dichlorobenzene	U		0.101	0.500	1	09/15/2015 14:49	WG815223
1,3-Dichlorobenzene	U		0.130	0.500	1	09/15/2015 14:49	WG815223
1,4-Dichlorobenzene	U		0.121	0.500	1	09/15/2015 14:49	WG815223
Dichlorodifluoromethane	U		0.127	0.500	1	09/15/2015 14:49	WG815223
1,1-Dichloroethane	U		0.114	0.500	1	09/15/2015 14:49	WG815223
1,2-Dichloroethane	U		0.108	0.500	1	09/15/2015 14:49	WG815223
1,1-Dichloroethene	U		0.188	0.500	1	09/15/2015 14:49	WG815223
cis-1,2-Dichloroethene	1.14		0.0933	0.500	1	09/15/2015 14:49	WG815223
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/15/2015 14:49	WG815223
1,2-Dichloropropane	U		0.190	0.500	1	09/15/2015 14:49	WG815223
1,1-Dichloropropene	U		0.128	0.500	1	09/15/2015 14:49	WG815223
1,3-Dichloropropane	U		0.147	0.500	1	09/15/2015 14:49	WG815223
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/15/2015 14:49	WG815223
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/15/2015 14:49	WG815223
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/15/2015 14:49	WG815223
2,2-Dichloropropane	U		0.0929	0.500	1	09/15/2015 14:49	WG815223
Di-isopropyl ether	U		0.0924	0.500	1	09/15/2015 14:49	WG815223
Ethylbenzene	U		0.158	0.500	1	09/15/2015 14:49	WG815223
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/15/2015 14:49	WG815223
2-Hexanone	U		0.757	2.50	1	09/15/2015 14:49	WG815223
n-Hexane	U		0.305	1.00	1	09/15/2015 14:49	WG815223
Iodomethane	U		0.377	10.0	1	09/15/2015 14:49	WG815223
Isopropylbenzene	U		0.126	0.500	1	09/15/2015 14:49	WG815223
p-Isopropyltoluene	U		0.138	0.500	1	09/15/2015 14:49	WG815223
2-Butanone (MEK)	U	J3 J6	1.28	2.50	1	09/15/2015 14:49	WG815223
Methylene Chloride	U		1.07	2.50	1	09/15/2015 14:49	WG815223
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/15/2015 14:49	WG815223
Methyl tert-butyl ether	U		0.102	0.500	1	09/15/2015 14:49	WG815223
Naphthalene	U		0.174	0.500	1	09/15/2015 14:49	WG815223
n-Propylbenzene	U		0.162	0.500	1	09/15/2015 14:49	WG815223
Styrene	U		0.117	0.500	1	09/15/2015 14:49	WG815223
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/15/2015 14:49	WG815223

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/15/2015 14:49	WG815223
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/15/2015 14:49	WG815223
Tetrachloroethene	U		0.199	0.500	1	09/15/2015 14:49	WG815223
Toluene	1.18		0.102	0.500	1	09/15/2015 14:49	WG815223
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/15/2015 14:49	WG815223
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/15/2015 14:49	WG815223
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/15/2015 14:49	WG815223
1,1,2-Trichloroethane	U		0.186	0.500	1	09/15/2015 14:49	WG815223
Trichloroethene	124	V	0.153	0.500	1	09/15/2015 14:49	WG815223
Trichlorofluoromethane	U		0.130	0.500	1	09/15/2015 14:49	WG815223
1,2,3-Trichloropropane	U		0.247	2.50	1	09/15/2015 14:49	WG815223
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/15/2015 14:49	WG815223
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/15/2015 14:49	WG815223
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/15/2015 14:49	WG815223
Vinyl acetate	U		0.645	2.50	1	09/15/2015 14:49	WG815223
Vinyl chloride	U		0.118	0.500	1	09/15/2015 14:49	WG815223
Xylenes, Total	1.47	J	0.316	1.50	1	09/15/2015 14:49	WG815223
(S) Toluene-d8	*100*			*90.0-115*		*09/15/2015 14:49*	WG815223
(S) Dibromofluoromethane	*94.7*			*79.0-121*		*09/15/2015 14:49*	WG815223
(S) 4-Bromofluorobenzene	*93.9*			*80.1-120*		*09/15/2015 14:49*	WG815223

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	09/06/2015 18:44	WG813827
(S) Toluene-d8	*96.1*			*70.0-130*		*09/06/2015 18:44*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 15:05	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 15:05	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 15:05	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 15:05	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 15:05	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 15:05	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 15:05	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 15:05	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 15:05	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 15:05	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 15:05	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 15:05	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 15:05	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 15:05	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 15:05	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 15:05	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 15:05	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 15:05	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 15:05	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 15:05	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 15:05	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 15:05	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 15:05	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 15:05	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 15:05	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 15:05	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 15:05	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 15:05	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 15:05	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 15:05	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 15:05	WG813810
cis-1,2-Dichloroethene	6.41		0.0933	0.500	1	09/15/2015 17:29	WG815223
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 15:05	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 15:05	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 15:05	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 15:05	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 15:05	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 15:05	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 15:05	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 15:05	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 15:05	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 15:05	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 15:05	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 15:05	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 15:05	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 15:05	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 15:05	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 15:05	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 15:05	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 15:05	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 15:05	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 15:05	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 15:05	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 15:05	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 15:05	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 15:05	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 15:05	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 15:05	WG813810
Tetrachloroethene	6.45		0.199	0.500	1	09/12/2015 15:05	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 15:05	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 15:05	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 15:05	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 15:05	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 15:05	WG813810
Trichloroethene	10.1		0.153	0.500	1	09/15/2015 17:29	WG815223
Trichlorofluoromethane	1.42		0.130	0.500	1	09/12/2015 15:05	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 15:05	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 15:05	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 15:05	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 15:05	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 15:05	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 15:05	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 15:05	WG813810
(S) Toluene-d8	*103*			*90.0-115*		*09/12/2015 15:05*	WG813810
(S) Dibromofluoromethane	*93.6*			*79.0-121*		*09/12/2015 15:05*	WG813810
(S) 4-Bromofluorobenzene	*97.9*			*80.1-120*		*09/12/2015 15:05*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.08	J	1.05	25.0	1	09/12/2015 15:25	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 15:25	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 15:25	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 15:25	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 15:25	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 15:25	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 15:25	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 15:25	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 15:25	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 15:25	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 15:25	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 15:25	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 15:25	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 15:25	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 15:25	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 15:25	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 15:25	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 15:25	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 15:25	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 15:25	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 15:25	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 15:25	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 15:25	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 15:25	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 15:25	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 15:25	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 15:25	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 15:25	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 15:25	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 15:25	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 15:25	WG813810
cis-1,2-Dichloroethene	2.43		0.0933	0.500	1	09/15/2015 17:49	WG815223
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 15:25	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 15:25	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 15:25	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 15:25	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 15:25	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 15:25	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 15:25	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 15:25	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 15:25	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 15:25	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 15:25	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 15:25	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 15:25	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 15:25	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 15:25	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 15:25	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 15:25	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 15:25	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 15:25	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 15:25	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 15:25	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 15:25	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 15:25	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 15:25	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 15:25	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 15:25	WG813810
Tetrachloroethene	0.510		0.199	0.500	1	09/12/2015 15:25	WG813810
Toluene	0.396	J	0.102	0.500	1	09/12/2015 15:25	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 15:25	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 15:25	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 15:25	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 15:25	WG813810
Trichloroethene	3.85		0.153	0.500	1	09/15/2015 17:49	WG815223
Trichlorofluoromethane	0.433	J	0.130	0.500	1	09/12/2015 15:25	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 15:25	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 15:25	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 15:25	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 15:25	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 15:25	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 15:25	WG813810
Xylenes, Total	0.400	J	0.316	1.50	1	09/12/2015 15:25	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 15:25*	WG813810
(S) Dibromofluoromethane	*94.8*			*79.0-121*		*09/12/2015 15:25*	WG813810
(S) 4-Bromofluorobenzene	*98.0*			*80.1-120*		*09/12/2015 15:25*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 15:46	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 15:46	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 15:46	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 15:46	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 15:46	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 15:46	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 15:46	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 15:46	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 15:46	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 15:46	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 15:46	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 15:46	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 15:46	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 15:46	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 15:46	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 15:46	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 15:46	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 15:46	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 15:46	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 15:46	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 15:46	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 15:46	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 15:46	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 15:46	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 15:46	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 15:46	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 15:46	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 15:46	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 15:46	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 15:46	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 15:46	WG813810
cis-1,2-Dichloroethene	9.00		0.0933	0.500	1	09/12/2015 15:46	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 15:46	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 15:46	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 15:46	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 15:46	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 15:46	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 15:46	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 15:46	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 15:46	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 15:46	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 15:46	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 15:46	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 15:46	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 15:46	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 15:46	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 15:46	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 15:46	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 15:46	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 15:46	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 15:46	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 15:46	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 15:46	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 15:46	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 15:46	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 15:46	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 15:46	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 15:46	WG813810
Tetrachloroethene	1.92		0.199	0.500	1	09/12/2015 15:46	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 15:46	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 15:46	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 15:46	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 15:46	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 15:46	WG813810
Trichloroethene	22.3		0.153	0.500	1	09/12/2015 15:46	WG813810
Trichlorofluoromethane	2.00		0.130	0.500	1	09/12/2015 15:46	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 15:46	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 15:46	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 15:46	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 15:46	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 15:46	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 15:46	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 15:46	WG813810
(S) Toluene-d8	*100*			*90.0-115*		*09/12/2015 15:46*	WG813810
(S) Dibromofluoromethane	*95.5*			*79.0-121*		*09/12/2015 15:46*	WG813810
(S) 4-Bromofluorobenzene	*97.2*			*80.1-120*		*09/12/2015 15:46*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.15	J	1.05	25.0	1	09/12/2015 16:06	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 16:06	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 16:06	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 16:06	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 16:06	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 16:06	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 16:06	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 16:06	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 16:06	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 16:06	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 16:06	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 16:06	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 16:06	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 16:06	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 16:06	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 16:06	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 16:06	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 16:06	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 16:06	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 16:06	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 16:06	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 16:06	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 16:06	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 16:06	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 16:06	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 16:06	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 16:06	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 16:06	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 16:06	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 16:06	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 16:06	WG813810
cis-1,2-Dichloroethene	0.877		0.0933	0.500	1	09/12/2015 16:06	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 16:06	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 16:06	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 16:06	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 16:06	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 16:06	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 16:06	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 16:06	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 16:06	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 16:06	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 16:06	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 16:06	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 16:06	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 16:06	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 16:06	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 16:06	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 16:06	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 16:06	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 16:06	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 16:06	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 16:06	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 16:06	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 16:06	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 16:06	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 16:06	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 16:06	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 16:06	WG813810
Tetrachloroethene	13.6		0.199	0.500	1	09/12/2015 16:06	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 16:06	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 16:06	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 16:06	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 16:06	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 16:06	WG813810
Trichloroethene	2.64		0.153	0.500	1	09/12/2015 16:06	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 16:06	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 16:06	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 16:06	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 16:06	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 16:06	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 16:06	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 16:06	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 16:06	WG813810
(S) Toluene-d8	*103*			*90.0-115*		*09/12/2015 16:06*	WG813810
(S) Dibromofluoromethane	*95.8*			*79.0-121*		*09/12/2015 16:06*	WG813810
(S) 4-Bromofluorobenzene	*99.3*			*80.1-120*		*09/12/2015 16:06*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	09/06/2015 19:08	WG813827
(S) Toluene-d8	*95.3*			*70.0-130*		*09/06/2015 19:08*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.22	J	1.05	25.0	1	09/12/2015 16:26	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 16:26	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 16:26	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 16:26	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 16:26	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 16:26	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 16:26	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 16:26	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 16:26	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 16:26	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 16:26	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 16:26	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 16:26	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 16:26	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 16:26	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 16:26	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 16:26	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 16:26	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 16:26	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 16:26	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 16:26	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 16:26	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 16:26	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 16:26	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 16:26	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 16:26	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 16:26	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 16:26	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 16:26	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 16:26	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 16:26	WG813810
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2015 16:26	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 16:26	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 16:26	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 16:26	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 16:26	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 16:26	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 16:26	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 16:26	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 16:26	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 16:26	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 16:26	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 16:26	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 16:26	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 16:26	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 16:26	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 16:26	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 16:26	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 16:26	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 16:26	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 16:26	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 16:26	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 16:26	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 16:26	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 16:26	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 16:26	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 16:26	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 16:26	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 16:26	WG813810
Toluene	0.477	J	0.102	0.500	1	09/12/2015 16:26	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 16:26	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 16:26	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 16:26	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 16:26	WG813810
Trichloroethene	U		0.153	0.500	1	09/12/2015 16:26	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 16:26	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 16:26	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 16:26	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 16:26	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 16:26	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 16:26	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 16:26	WG813810
Xylenes, Total	0.412	J	0.316	1.50	1	09/12/2015 16:26	WG813810
(S) Toluene-d8	*103*			*90.0-115*		*09/12/2015 16:26*	WG813810
(S) Dibromofluoromethane	*95.0*			*79.0-121*		*09/12/2015 16:26*	WG813810
(S) 4-Bromofluorobenzene	*99.7*			*80.1-120*		*09/12/2015 16:26*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.28	J	1.05	25.0	1	09/12/2015 16:46	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 16:46	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 16:46	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 16:46	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 16:46	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 16:46	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 16:46	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 16:46	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 16:46	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 16:46	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 16:46	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 16:46	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 16:46	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 16:46	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 16:46	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 16:46	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 16:46	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 16:46	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 16:46	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 16:46	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 16:46	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 16:46	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 16:46	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 16:46	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 16:46	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 16:46	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 16:46	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 16:46	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 16:46	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 16:46	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 16:46	WG813810
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2015 16:46	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 16:46	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 16:46	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 16:46	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 16:46	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 16:46	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 16:46	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 16:46	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 16:46	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 16:46	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 16:46	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 16:46	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 16:46	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 16:46	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 16:46	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 16:46	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 16:46	WG813810
2-Butanone (MEK)	1.89	J	1.28	2.50	1	09/12/2015 16:46	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 16:46	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 16:46	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 16:46	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 16:46	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 16:46	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 16:46	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 16:46	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 16:46	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 16:46	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 16:46	WG813810
Toluene	4.50		0.102	0.500	1	09/12/2015 16:46	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 16:46	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 16:46	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 16:46	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 16:46	WG813810
Trichloroethene	U		0.153	0.500	1	09/12/2015 16:46	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 16:46	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 16:46	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 16:46	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 16:46	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 16:46	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 16:46	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 16:46	WG813810
Xylenes, Total	0.874	J	0.316	1.50	1	09/12/2015 16:46	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 16:46*	WG813810
(S) Dibromofluoromethane	*95.2*			*79.0-121*		*09/12/2015 16:46*	WG813810
(S) 4-Bromofluorobenzene	*98.4*			*80.1-120*		*09/12/2015 16:46*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 17:06	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 17:06	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 17:06	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 17:06	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 17:06	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 17:06	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 17:06	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 17:06	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 17:06	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 17:06	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 17:06	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 17:06	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 17:06	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 17:06	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 17:06	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 17:06	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 17:06	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 17:06	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 17:06	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 17:06	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 17:06	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 17:06	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 17:06	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 17:06	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 17:06	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 17:06	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 17:06	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 17:06	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 17:06	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 17:06	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 17:06	WG813810
cis-1,2-Dichloroethene	3.19		0.0933	0.500	1	09/12/2015 17:06	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 17:06	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 17:06	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 17:06	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 17:06	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 17:06	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 17:06	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 17:06	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 17:06	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 17:06	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 17:06	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 17:06	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 17:06	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 17:06	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 17:06	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 17:06	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 17:06	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 17:06	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 17:06	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 17:06	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 17:06	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 17:06	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 17:06	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 17:06	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 17:06	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 17:06	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 17:06	WG813810
Tetrachloroethene	1.25		0.199	0.500	1	09/12/2015 17:06	WG813810
Toluene	0.959		0.102	0.500	1	09/12/2015 17:06	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 17:06	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 17:06	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 17:06	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 17:06	WG813810
Trichloroethene	6.19		0.153	0.500	1	09/12/2015 17:06	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 17:06	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 17:06	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 17:06	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 17:06	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 17:06	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 17:06	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 17:06	WG813810
Xylenes, Total	1.26	J	0.316	1.50	1	09/12/2015 17:06	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 17:06*	WG813810
(S) Dibromofluoromethane	*96.4*			*79.0-121*		*09/12/2015 17:06*	WG813810
(S) 4-Bromofluorobenzene	*98.5*			*80.1-120*		*09/12/2015 17:06*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	09/06/2015 19:32	WG813827
(S) Toluene-d8	*95.1*			*70.0-130*		*09/06/2015 19:32*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 17:26	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 17:26	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 17:26	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 17:26	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 17:26	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 17:26	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 17:26	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 17:26	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 17:26	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 17:26	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 17:26	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 17:26	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 17:26	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 17:26	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 17:26	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 17:26	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 17:26	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 17:26	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 17:26	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 17:26	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 17:26	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 17:26	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 17:26	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 17:26	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 17:26	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 17:26	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 17:26	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 17:26	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 17:26	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 17:26	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 17:26	WG813810
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2015 17:26	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 17:26	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 17:26	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 17:26	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 17:26	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 17:26	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 17:26	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 17:26	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 17:26	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 17:26	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 17:26	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 17:26	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 17:26	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 17:26	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 17:26	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 17:26	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 17:26	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 17:26	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 17:26	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 17:26	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 17:26	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 17:26	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 17:26	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 17:26	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 17:26	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 17:26	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 17:26	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 17:26	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 17:26	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 17:26	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 17:26	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 17:26	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 17:26	WG813810
Trichloroethene	U		0.153	0.500	1	09/12/2015 17:26	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 17:26	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 17:26	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 17:26	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 17:26	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 17:26	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 17:26	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 17:26	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 17:26	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 17:26*	WG813810
(S) Dibromofluoromethane	*88.6*			*79.0-121*		*09/12/2015 17:26*	WG813810
(S) 4-Bromofluorobenzene	*97.9*			*80.1-120*		*09/12/2015 17:26*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	09/06/2015 19:56	WG813827
(S) Toluene-d8	*94.9*			*70.0-130*		*09/06/2015 19:56*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 17:46	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 17:46	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 17:46	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 17:46	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 17:46	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 17:46	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 17:46	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 17:46	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 17:46	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 17:46	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 17:46	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 17:46	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 17:46	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 17:46	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 17:46	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 17:46	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 17:46	WG813810
Chloroform	2.16		0.0860	0.500	1	09/12/2015 17:46	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 17:46	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 17:46	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 17:46	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 17:46	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 17:46	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 17:46	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 17:46	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 17:46	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 17:46	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 17:46	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 17:46	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 17:46	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 17:46	WG813810
cis-1,2-Dichloroethene	4.70		0.0933	0.500	1	09/12/2015 17:46	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 17:46	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 17:46	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 17:46	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 17:46	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 17:46	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 17:46	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 17:46	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 17:46	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 17:46	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 17:46	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 17:46	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 17:46	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 17:46	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 17:46	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 17:46	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 17:46	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 17:46	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 17:46	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 17:46	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 17:46	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 17:46	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 17:46	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 17:46	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 17:46	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 17:46	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 17:46	WG813810
Tetrachloroethene	0.834		0.199	0.500	1	09/12/2015 17:46	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 17:46	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 17:46	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 17:46	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 17:46	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 17:46	WG813810
Trichloroethene	41.6		0.153	0.500	1	09/12/2015 17:46	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 17:46	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 17:46	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 17:46	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 17:46	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 17:46	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 17:46	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 17:46	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 17:46	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 17:46*	WG813810
(S) Dibromofluoromethane	*91.4*			*79.0-121*		*09/12/2015 17:46*	WG813810
(S) 4-Bromofluorobenzene	*97.7*			*80.1-120*		*09/12/2015 17:46*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	9.02		0.597	3.00	1	09/06/2015 20:21	WG813827
(S) Toluene-d8	*94.5*			*70.0-130*		*09/06/2015 20:21*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.09	J	1.05	25.0	1	09/12/2015 18:06	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 18:06	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 18:06	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 18:06	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 18:06	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 18:06	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 18:06	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 18:06	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 18:06	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 18:06	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 18:06	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 18:06	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 18:06	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 18:06	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 18:06	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 18:06	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 18:06	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 18:06	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 18:06	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 18:06	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 18:06	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 18:06	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 18:06	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 18:06	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 18:06	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 18:06	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 18:06	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 18:06	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 18:06	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 18:06	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 18:06	WG813810
cis-1,2-Dichloroethene	5.03		0.0933	0.500	1	09/12/2015 18:06	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 18:06	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 18:06	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 18:06	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 18:06	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 18:06	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 18:06	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 18:06	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 18:06	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 18:06	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 18:06	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 18:06	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 18:06	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 18:06	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 18:06	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 18:06	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 18:06	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 18:06	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 18:06	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 18:06	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 18:06	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 18:06	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 18:06	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 18:06	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 18:06	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 18:06	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 18:06	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 18:06	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 18:06	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 18:06	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 18:06	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 18:06	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 18:06	WG813810
Trichloroethene	20.5		0.153	0.500	1	09/12/2015 18:06	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 18:06	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 18:06	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 18:06	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 18:06	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 18:06	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 18:06	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 18:06	WG813810
Xylenes, Total	0.437	J	0.316	1.50	1	09/12/2015 18:06	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 18:06*	WG813810
(S) Dibromofluoromethane	*91.9*			*79.0-121*		*09/12/2015 18:06*	WG813810
(S) 4-Bromofluorobenzene	*89.5*			*80.1-120*		*09/12/2015 18:06*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	6.62		0.597	3.00	1	09/06/2015 20:45	WG813827
(S) Toluene-d8	*94.5*			*70.0-130*		*09/06/2015 20:45*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 18:26	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 18:26	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 18:26	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 18:26	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 18:26	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 18:26	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 18:26	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 18:26	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 18:26	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 18:26	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 18:26	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 18:26	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 18:26	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 18:26	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 18:26	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 18:26	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 18:26	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 18:26	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 18:26	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 18:26	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 18:26	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 18:26	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 18:26	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 18:26	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 18:26	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 18:26	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 18:26	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 18:26	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 18:26	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 18:26	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 18:26	WG813810
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2015 18:26	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 18:26	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 18:26	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 18:26	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 18:26	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 18:26	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 18:26	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 18:26	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 18:26	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 18:26	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 18:26	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 18:26	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 18:26	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 18:26	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 18:26	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 18:26	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 18:26	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 18:26	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 18:26	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 18:26	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 18:26	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 18:26	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 18:26	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 18:26	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 18:26	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 18:26	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 18:26	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 18:26	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 18:26	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 18:26	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 18:26	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 18:26	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 18:26	WG813810
Trichloroethene	0.312	J	0.153	0.500	1	09/12/2015 18:26	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 18:26	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 18:26	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 18:26	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 18:26	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 18:26	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 18:26	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 18:26	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 18:26	WG813810
(S) Toluene-d8	*100*			*90.0-115*		*09/12/2015 18:26*	WG813810
(S) Dibromofluoromethane	*91.0*			*79.0-121*		*09/12/2015 18:26*	WG813810
(S) 4-Bromofluorobenzene	*64.6*	J2		*80.1-120*		*09/12/2015 18:26*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 18:46	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 18:46	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 18:46	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 18:46	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 18:46	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 18:46	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 18:46	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 18:46	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 18:46	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 18:46	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 18:46	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 18:46	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 18:46	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 18:46	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 18:46	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 18:46	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 18:46	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 18:46	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 18:46	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 18:46	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 18:46	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 18:46	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 18:46	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 18:46	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 18:46	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 18:46	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 18:46	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 18:46	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 18:46	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 18:46	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 18:46	WG813810
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2015 18:46	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 18:46	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 18:46	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 18:46	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 18:46	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 18:46	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 18:46	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 18:46	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 18:46	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 18:46	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 18:46	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 18:46	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 18:46	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 18:46	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 18:46	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 18:46	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 18:46	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 18:46	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 18:46	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 18:46	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 18:46	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 18:46	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 18:46	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 18:46	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 18:46	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 18:46	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 18:46	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 18:46	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 18:46	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 18:46	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 18:46	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 18:46	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 18:46	WG813810
Trichloroethene	10.9		0.153	0.500	1	09/12/2015 18:46	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 18:46	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 18:46	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 18:46	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 18:46	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 18:46	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 18:46	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 18:46	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 18:46	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 18:46*	WG813810
(S) Dibromofluoromethane	*94.0*			*79.0-121*		*09/12/2015 18:46*	WG813810
(S) 4-Bromofluorobenzene	*73.6*	J2		*80.1-120*		*09/12/2015 18:46*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 19:06	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 19:06	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 19:06	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 19:06	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 19:06	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 19:06	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 19:06	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 19:06	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 19:06	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 19:06	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 19:06	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 19:06	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 19:06	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 19:06	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 19:06	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 19:06	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 19:06	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 19:06	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 19:06	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 19:06	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 19:06	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 19:06	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 19:06	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 19:06	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 19:06	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 19:06	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 19:06	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 19:06	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 19:06	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 19:06	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 19:06	WG813810
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2015 19:06	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 19:06	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 19:06	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 19:06	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 19:06	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 19:06	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 19:06	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 19:06	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 19:06	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 19:06	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 19:06	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 19:06	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 19:06	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 19:06	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 19:06	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 19:06	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 19:06	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 19:06	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 19:06	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 19:06	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 19:06	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 19:06	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 19:06	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 19:06	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 19:06	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 19:06	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 19:06	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 19:06	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 19:06	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 19:06	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 19:06	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 19:06	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 19:06	WG813810
Trichloroethene	U		0.153	0.500	1	09/12/2015 19:06	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 19:06	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 19:06	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 19:06	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 19:06	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 19:06	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 19:06	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 19:06	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 19:06	WG813810
(S) Toluene-d8	*101*			*90.0-115*		*09/12/2015 19:06*	WG813810
(S) Dibromofluoromethane	*90.4*			*79.0-121*		*09/12/2015 19:06*	WG813810
(S) 4-Bromofluorobenzene	*71.8*	J2		*80.1-120*		*09/12/2015 19:06*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 19:26	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 19:26	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 19:26	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 19:26	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 19:26	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 19:26	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 19:26	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 19:26	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 19:26	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 19:26	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 19:26	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 19:26	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 19:26	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 19:26	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 19:26	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 19:26	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 19:26	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 19:26	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 19:26	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 19:26	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 19:26	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 19:26	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 19:26	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 19:26	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 19:26	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 19:26	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 19:26	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 19:26	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 19:26	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 19:26	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 19:26	WG813810
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2015 19:26	WG813810
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 19:26	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 19:26	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 19:26	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 19:26	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 19:26	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 19:26	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 19:26	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 19:26	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 19:26	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 19:26	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 19:26	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 19:26	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 19:26	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 19:26	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 19:26	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 19:26	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 19:26	WG813810
Methylene Chloride	U		1.07	2.50	1	09/12/2015 19:26	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 19:26	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 19:26	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 19:26	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 19:26	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 19:26	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 19:26	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 19:26	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 19:26	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 19:26	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 19:26	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 19:26	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 19:26	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 19:26	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 19:26	WG813810
Trichloroethene	0.768		0.153	0.500	1	09/12/2015 19:26	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 19:26	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 19:26	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 19:26	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 19:26	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 19:26	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 19:26	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 19:26	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 19:26	WG813810
(S) Toluene-d8	*101*			*90.0-115*		*09/12/2015 19:26*	WG813810
(S) Dibromofluoromethane	*88.8*			*79.0-121*		*09/12/2015 19:26*	WG813810
(S) 4-Bromofluorobenzene	*76.0*	J2		*80.1-120*		*09/12/2015 19:26*	WG813810

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	14.9		1.40	10.0	1	09/11/2015 16:55	WG814626
Nickel	10.2		4.90	10.0	1	09/11/2015 16:55	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	64.2		1.05	25.0	1	09/12/2015 19:46	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 19:46	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 19:46	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 19:46	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 19:46	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 19:46	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 19:46	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 19:46	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 19:46	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 19:46	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 19:46	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 19:46	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 19:46	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 19:46	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 19:46	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 19:46	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 19:46	WG813810
Chloroform	0.497	J	0.0860	0.500	1	09/12/2015 19:46	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 19:46	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 19:46	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 19:46	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 19:46	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 19:46	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 19:46	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 19:46	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 19:46	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 19:46	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 19:46	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 19:46	WG813810
1,2-Dichloroethane	0.716		0.108	0.500	1	09/12/2015 19:46	WG813810
1,1-Dichloroethene	13.3		0.188	0.500	1	09/12/2015 19:46	WG813810
cis-1,2-Dichloroethene	6700		9.33	50.0	100	09/15/2015 18:08	WG815223
trans-1,2-Dichloroethene	2.02		0.152	0.500	1	09/12/2015 19:46	WG813810
1,2-Dichloropropane	0.375	J	0.190	0.500	1	09/12/2015 19:46	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 19:46	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 19:46	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 19:46	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 19:46	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 19:46	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 19:46	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 19:46	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 19:46	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 19:46	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 19:46	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 19:46	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 19:46	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 19:46	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 19:46	WG813810
2-Butanone (MEK)	62.6		1.28	2.50	1	09/12/2015 19:46	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	09/12/2015 19:46	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 19:46	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 19:46	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 19:46	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 19:46	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 19:46	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 19:46	WG813810
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 19:46	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 19:46	WG813810
Tetrachloroethene	U		0.199	0.500	1	09/12/2015 19:46	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 19:46	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 19:46	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 19:46	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 19:46	WG813810
1,1,2-Trichloroethane	2.13		0.186	0.500	1	09/12/2015 19:46	WG813810
Trichloroethene	17.7		0.153	0.500	1	09/12/2015 19:46	WG813810
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 19:46	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 19:46	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 19:46	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 19:46	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 19:46	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 19:46	WG813810
Vinyl chloride	1.48		0.118	0.500	1	09/12/2015 19:46	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 19:46	WG813810
(S) Toluene-d8	*102*			*90.0-115*		*09/12/2015 19:46*	WG813810
(S) Dibromofluoromethane	*94.0*			*79.0-121*		*09/12/2015 19:46*	WG813810
(S) 4-Bromofluorobenzene	*74.7*	J2		*80.1-120*		*09/12/2015 19:46*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	6.12		0.597	3.00	1	09/11/2015 17:53	WG814728
(S) Toluene-d8	*95.4*			*70.0-130*		*09/11/2015 17:53*	WG814728

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	U		1.40	10.0	1	09/11/2015 16:58	WG814626
Nickel	U		4.90	10.0	1	09/11/2015 16:58	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	6.27	J	1.05	25.0	1	09/12/2015 20:07	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 20:07	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 20:07	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 20:07	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 20:07	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 20:07	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 20:07	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 20:07	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 20:07	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 20:07	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 20:07	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 20:07	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 20:07	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 20:07	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 20:07	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 20:07	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 20:07	WG813810
Chloroform	0.962		0.0860	0.500	1	09/12/2015 20:07	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 20:07	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 20:07	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 20:07	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 20:07	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 20:07	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 20:07	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 20:07	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 20:07	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 20:07	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 20:07	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 20:07	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 20:07	WG813810
1,1-Dichloroethene	4.46		0.188	0.500	1	09/12/2015 20:07	WG813810
cis-1,2-Dichloroethene	1500		2.33	12.5	25	09/15/2015 18:28	WG815223
trans-1,2-Dichloroethene	2.87		0.152	0.500	1	09/12/2015 20:07	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 20:07	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 20:07	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 20:07	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 20:07	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 20:07	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 20:07	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 20:07	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 20:07	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 20:07	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 20:07	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 20:07	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 20:07	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 20:07	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 20:07	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 20:07	WG813810
2-Butanone (MEK)	9.30		1.28	2.50	1	09/12/2015 20:07	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	09/12/2015 20:07	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 20:07	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 20:07	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 20:07	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 20:07	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 20:07	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 20:07	WG813810
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 20:07	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 20:07	WG813810
Tetrachloroethene	2.36		0.199	0.500	1	09/12/2015 20:07	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 20:07	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 20:07	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 20:07	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 20:07	WG813810
1,1,2-Trichloroethane	1.00		0.186	0.500	1	09/12/2015 20:07	WG813810
Trichloroethene	983		3.82	12.5	25	09/15/2015 18:28	WG815223
Trichlorofluoromethane	U		0.130	0.500	1	09/12/2015 20:07	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 20:07	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 20:07	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 20:07	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 20:07	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 20:07	WG813810
Vinyl chloride	0.905		0.118	0.500	1	09/12/2015 20:07	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 20:07	WG813810
(S) Toluene-d8	*94.4*			*90.0-115*		*09/12/2015 20:07*	WG813810
(S) Dibromofluoromethane	*92.6*			*79.0-121*		*09/12/2015 20:07*	WG813810
(S) 4-Bromofluorobenzene	*74.5*	J2		*80.1-120*		*09/12/2015 20:07*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	3.64		0.597	3.00	1	09/14/2015 15:04	WG815066
(S) Toluene-d8	*153*	J1		*70.0-130*		*09/14/2015 15:04*	WG815066

Sample Narrative:

8260B L787282-28 WG815066: Surrogate failure confirmed.

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	U		1.40	10.0	1	09/11/2015 17:01	WG814626
Nickel	U		4.90	10.0	1	09/11/2015 17:01	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2015 20:27	WG813810
Acrylonitrile	U		0.873	2.50	1	09/12/2015 20:27	WG813810
Benzene	U		0.0896	0.500	1	09/12/2015 20:27	WG813810
Bromobenzene	U		0.133	0.500	1	09/12/2015 20:27	WG813810
Bromodichloromethane	U		0.0800	0.500	1	09/12/2015 20:27	WG813810
Bromochloromethane	U		0.145	0.500	1	09/12/2015 20:27	WG813810
Bromoform	U		0.186	0.500	1	09/12/2015 20:27	WG813810
Bromomethane	U		0.157	0.500	1	09/12/2015 20:27	WG813810
n-Butylbenzene	U		0.143	0.500	1	09/12/2015 20:27	WG813810
sec-Butylbenzene	U		0.134	0.500	1	09/12/2015 20:27	WG813810
tert-Butylbenzene	U		0.183	0.500	1	09/12/2015 20:27	WG813810
Carbon disulfide	U		0.101	0.500	1	09/12/2015 20:27	WG813810
Carbon tetrachloride	U		0.159	0.500	1	09/12/2015 20:27	WG813810
Chlorobenzene	U		0.140	0.500	1	09/12/2015 20:27	WG813810
Chlorodibromomethane	U		0.128	0.500	1	09/12/2015 20:27	WG813810
Chloroethane	U		0.141	0.500	1	09/12/2015 20:27	WG813810
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/12/2015 20:27	WG813810
Chloroform	U		0.0860	0.500	1	09/12/2015 20:27	WG813810
Chloromethane	U		0.153	0.500	1	09/12/2015 20:27	WG813810
2-Chlorotoluene	U		0.111	0.500	1	09/12/2015 20:27	WG813810
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2015 20:27	WG813810
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/12/2015 20:27	WG813810
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2015 20:27	WG813810
Dibromomethane	U		0.117	0.500	1	09/12/2015 20:27	WG813810
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2015 20:27	WG813810
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2015 20:27	WG813810
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2015 20:27	WG813810
Dichlorodifluoromethane	U		0.127	0.500	1	09/12/2015 20:27	WG813810
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2015 20:27	WG813810
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2015 20:27	WG813810
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2015 20:27	WG813810
cis-1,2-Dichloroethene	12.7		0.466	2.50	5	09/15/2015 18:47	WG815223
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2015 20:27	WG813810
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2015 20:27	WG813810
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2015 20:27	WG813810
1,3-Dichloropropane	U		0.147	0.500	1	09/12/2015 20:27	WG813810
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2015 20:27	WG813810
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2015 20:27	WG813810
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2015 20:27	WG813810
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2015 20:27	WG813810
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2015 20:27	WG813810
Ethylbenzene	U		0.158	0.500	1	09/12/2015 20:27	WG813810
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2015 20:27	WG813810
2-Hexanone	U		0.757	2.50	1	09/12/2015 20:27	WG813810
n-Hexane	U		0.305	1.00	1	09/12/2015 20:27	WG813810
Iodomethane	U		0.377	10.0	1	09/12/2015 20:27	WG813810
Isopropylbenzene	U		0.126	0.500	1	09/12/2015 20:27	WG813810
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2015 20:27	WG813810
2-Butanone (MEK)	U		1.28	2.50	1	09/12/2015 20:27	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	09/12/2015 20:27	WG813810
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/12/2015 20:27	WG813810
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2015 20:27	WG813810
Naphthalene	U		0.174	0.500	1	09/12/2015 20:27	WG813810
n-Propylbenzene	U		0.162	0.500	1	09/12/2015 20:27	WG813810
Styrene	U		0.117	0.500	1	09/12/2015 20:27	WG813810
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2015 20:27	WG813810
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2015 20:27	WG813810
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2015 20:27	WG813810
Tetrachloroethene	12.5		0.199	0.500	1	09/12/2015 20:27	WG813810
Toluene	U		0.102	0.500	1	09/12/2015 20:27	WG813810
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2015 20:27	WG813810
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2015 20:27	WG813810
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2015 20:27	WG813810
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2015 20:27	WG813810
Trichloroethene	283		0.765	2.50	5	09/15/2015 18:47	WG815223
Trichlorofluoromethane	1.14		0.130	0.500	1	09/12/2015 20:27	WG813810
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2015 20:27	WG813810
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2015 20:27	WG813810
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2015 20:27	WG813810
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2015 20:27	WG813810
Vinyl acetate	U		0.645	2.50	1	09/12/2015 20:27	WG813810
Vinyl chloride	U		0.118	0.500	1	09/12/2015 20:27	WG813810
Xylenes, Total	U		0.316	1.50	1	09/12/2015 20:27	WG813810
(S) Toluene-d8	*96.6*			*90.0-115*		*09/12/2015 20:27*	WG813810
(S) Dibromofluoromethane	*90.7*			*79.0-121*		*09/12/2015 20:27*	WG813810
(S) 4-Bromofluorobenzene	*74.1*	J2		*80.1-120*		*09/12/2015 20:27*	WG813810

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	0.706	J	0.597	3.00	1	09/06/2015 21:57	WG813827
(S) Toluene-d8	*99.7*			*70.0-130*		*09/06/2015 21:57*	WG813827

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	21.8		1.40	10.0	1	09/11/2015 17:04	WG814626
Nickel	16.4		4.90	10.0	1	09/11/2015 17:04	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/09/2015 04:29	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 04:29	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 04:29	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 04:29	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 04:29	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 04:29	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 04:29	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 04:29	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 04:29	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 04:29	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 04:29	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 04:29	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 04:29	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 04:29	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 04:29	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 04:29	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 04:29	WG814108
Chloroform	U		0.0860	0.500	1	09/09/2015 04:29	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 04:29	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 04:29	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 04:29	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 04:29	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 04:29	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 04:29	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 04:29	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 04:29	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 04:29	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 04:29	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 04:29	WG814108
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2015 04:29	WG814108
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2015 04:29	WG814108
cis-1,2-Dichloroethene	3.59		0.0933	0.500	1	09/09/2015 04:29	WG814108
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/09/2015 04:29	WG814108
1,2-Dichloropropane	U		0.190	0.500	1	09/09/2015 04:29	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 04:29	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 04:29	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 04:29	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 04:29	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 04:29	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 04:29	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 04:29	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 04:29	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 04:29	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 04:29	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 04:29	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 04:29	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 04:29	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 04:29	WG814108
2-Butanone (MEK)	U		1.28	2.50	1	09/09/2015 04:29	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	09/09/2015 04:29	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 04:29	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 04:29	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 04:29	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 04:29	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 04:29	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 04:29	WG814108
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 04:29	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 04:29	WG814108
Tetrachloroethene	0.791		0.199	0.500	1	09/09/2015 04:29	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 04:29	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 04:29	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 04:29	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 04:29	WG814108
1,1,2-Trichloroethane	U		0.186	0.500	1	09/09/2015 04:29	WG814108
Trichloroethene	214		1.53	5.00	10	09/10/2015 21:25	WG814394
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 04:29	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 04:29	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 04:29	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 04:29	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 04:29	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 04:29	WG814108
Vinyl chloride	U		0.118	0.500	1	09/09/2015 04:29	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 04:29	WG814108
(S) Toluene-d8	*92.0*			*90.0-115*		*09/09/2015 04:29*	WG814108
(S) Dibromofluoromethane	*92.0*			*79.0-121*		*09/09/2015 04:29*	WG814108
(S) 4-Bromofluorobenzene	*110*			*80.1-120*		*09/09/2015 04:29*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	0.879	J	0.597	3.00	1	09/06/2015 22:21	WG813827
(S) Toluene-d8	*97.2*			*70.0-130*		*09/06/2015 22:21*	WG813827

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	8.42	J	1.40	10.0	1	09/11/2015 17:07	WG814626
Nickel	U		4.90	10.0	1	09/11/2015 17:07	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/09/2015 04:50	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 04:50	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 04:50	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 04:50	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 04:50	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 04:50	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 04:50	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 04:50	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 04:50	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 04:50	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 04:50	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 04:50	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 04:50	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 04:50	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 04:50	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 04:50	WG814108
2-Chloroethyl vinyl ether	1.69	J	0.877	2.50	1	09/09/2015 04:50	WG814108
Chloroform	2.59		0.0860	0.500	1	09/09/2015 04:50	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 04:50	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 04:50	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 04:50	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 04:50	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 04:50	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 04:50	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 04:50	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 04:50	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 04:50	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 04:50	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 04:50	WG814108
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2015 04:50	WG814108
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2015 04:50	WG814108
cis-1,2-Dichloroethene	8.47		0.0933	0.500	1	09/09/2015 04:50	WG814108
trans-1,2-Dichloroethene	0.843		0.152	0.500	1	09/09/2015 04:50	WG814108
1,2-Dichloropropane	0.342	J	0.190	0.500	1	09/09/2015 04:50	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 04:50	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 04:50	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 04:50	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 04:50	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 04:50	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 04:50	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 04:50	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 04:50	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 04:50	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 04:50	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 04:50	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 04:50	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 04:50	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 04:50	WG814108
2-Butanone (MEK)	U		1.28	2.50	1	09/09/2015 04:50	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	09/09/2015 04:50	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 04:50	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 04:50	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 04:50	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 04:50	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 04:50	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 04:50	WG814108
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 04:50	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 04:50	WG814108
Tetrachloroethene	4.46		0.199	0.500	1	09/09/2015 04:50	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 04:50	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 04:50	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 04:50	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 04:50	WG814108
1,1,2-Trichloroethane	7.11		0.186	0.500	1	09/09/2015 04:50	WG814108
Trichloroethene	4470		15.3	50.0	100	09/10/2015 21:45	WG814394
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 04:50	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 04:50	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 04:50	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 04:50	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 04:50	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 04:50	WG814108
Vinyl chloride	U		0.118	0.500	1	09/09/2015 04:50	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 04:50	WG814108
(S) Toluene-d8	*66.8*	J2		*90.0-115*		*09/09/2015 04:50*	WG814108
(S) Dibromofluoromethane	*92.7*			*79.0-121*		*09/09/2015 04:50*	WG814108
(S) 4-Bromofluorobenzene	*108*			*80.1-120*		*09/09/2015 04:50*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	10.5		0.597	3.00	1	09/14/2015 15:43	WG815066
(S) Toluene-d8	*526*	J1		*70.0-130*		*09/14/2015 15:43*	WG815066

Sample Narrative:

8260B L787282-34 WG815066: Previous run also had failing IS/SURR recovery. Matrix effect.

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	5.62	J	1.40	10.0	1	09/11/2015 17:10	WG814626
Nickel	U		4.90	10.0	1	09/11/2015 17:10	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	17.8	J	1.05	25.0	1	09/09/2015 05:11	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 05:11	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 05:11	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 05:11	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 05:11	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 05:11	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 05:11	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 05:11	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 05:11	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 05:11	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 05:11	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 05:11	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 05:11	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 05:11	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 05:11	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 05:11	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 05:11	WG814108
Chloroform	1.78		0.0860	0.500	1	09/09/2015 05:11	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 05:11	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 05:11	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 05:11	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 05:11	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 05:11	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 05:11	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 05:11	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 05:11	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 05:11	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 05:11	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 05:11	WG814108
1,2-Dichloroethane	0.749		0.108	0.500	1	09/09/2015 05:11	WG814108
1,1-Dichloroethene	5.39		0.188	0.500	1	09/09/2015 05:11	WG814108
cis-1,2-Dichloroethene	2830		9.33	50.0	100	09/10/2015 19:25	WG814394
trans-1,2-Dichloroethene	3.17		0.152	0.500	1	09/09/2015 05:11	WG814108
1,2-Dichloropropane	0.346	J	0.190	0.500	1	09/09/2015 05:11	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 05:11	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 05:11	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 05:11	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 05:11	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 05:11	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 05:11	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 05:11	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 05:11	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 05:11	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 05:11	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 05:11	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 05:11	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 05:11	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 05:11	WG814108
2-Butanone (MEK)	21.0		1.28	2.50	1	09/09/2015 05:11	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	1.16	J	1.07	2.50	1	09/09/2015 05:11	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 05:11	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 05:11	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 05:11	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 05:11	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 05:11	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 05:11	WG814108
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 05:11	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 05:11	WG814108
Tetrachloroethene	2.85		0.199	0.500	1	09/09/2015 05:11	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 05:11	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 05:11	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 05:11	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 05:11	WG814108
1,1,2-Trichloroethane	7.25		0.186	0.500	1	09/09/2015 05:11	WG814108
Trichloroethene	1980		15.3	50.0	100	09/10/2015 19:25	WG814394
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 05:11	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 05:11	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 05:11	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 05:11	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 05:11	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 05:11	WG814108
Vinyl chloride	0.830		0.118	0.500	1	09/09/2015 05:11	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 05:11	WG814108
(S) Toluene-d8	*75.0*	J2		*90.0-115*		*09/09/2015 05:11*	WG814108
(S) Dibromofluoromethane	*91.3*			*79.0-121*		*09/09/2015 05:11*	WG814108
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/09/2015 05:11*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	22.3		0.597	3.00	1	09/14/2015 16:07	WG815066
(S) Toluene-d8	*253*	J1		*70.0-130*		*09/14/2015 16:07*	WG815066

Sample Narrative:

8260B L787282-36 WG815066: Previous run also had failing IS/SURR recovery. Matrix effect.

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	143		1.40	10.0	1	09/11/2015 17:13	WG814626
Nickel	146		4.90	10.0	1	09/11/2015 17:13	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	39.4	J	5.25	125	5	09/09/2015 05:32	WG814108
Acrylonitrile	U		4.36	12.5	5	09/09/2015 05:32	WG814108
Benzene	U		0.448	2.50	5	09/09/2015 05:32	WG814108
Bromobenzene	U		0.665	2.50	5	09/09/2015 05:32	WG814108
Bromodichloromethane	U		0.400	2.50	5	09/09/2015 05:32	WG814108
Bromochloromethane	U		0.725	2.50	5	09/09/2015 05:32	WG814108
Bromoform	U		0.930	2.50	5	09/09/2015 05:32	WG814108
Bromomethane	U		0.785	2.50	5	09/09/2015 05:32	WG814108
n-Butylbenzene	U		0.715	2.50	5	09/09/2015 05:32	WG814108
sec-Butylbenzene	U		0.670	2.50	5	09/09/2015 05:32	WG814108
tert-Butylbenzene	U		0.915	2.50	5	09/09/2015 05:32	WG814108
Carbon disulfide	U		0.505	2.50	5	09/09/2015 05:32	WG814108
Carbon tetrachloride	U		0.795	2.50	5	09/09/2015 05:32	WG814108
Chlorobenzene	U		0.700	2.50	5	09/09/2015 05:32	WG814108
Chlorodibromomethane	U		0.640	2.50	5	09/09/2015 05:32	WG814108
Chloroethane	U		0.705	2.50	5	09/09/2015 05:32	WG814108
2-Chloroethyl vinyl ether	5.19	J	4.38	12.5	5	09/09/2015 05:32	WG814108
Chloroform	4.21		0.430	2.50	5	09/09/2015 05:32	WG814108
Chloromethane	U		0.765	2.50	5	09/09/2015 05:32	WG814108
2-Chlorotoluene	U		0.555	2.50	5	09/09/2015 05:32	WG814108
4-Chlorotoluene	U		0.486	2.50	5	09/09/2015 05:32	WG814108
1,2-Dibromo-3-Chloropropane	U		1.62	5.00	5	09/09/2015 05:32	WG814108
1,2-Dibromoethane	U		0.965	2.50	5	09/09/2015 05:32	WG814108
Dibromomethane	U		0.585	2.50	5	09/09/2015 05:32	WG814108
1,2-Dichlorobenzene	U		0.505	2.50	5	09/09/2015 05:32	WG814108
1,3-Dichlorobenzene	U		0.650	2.50	5	09/09/2015 05:32	WG814108
1,4-Dichlorobenzene	U		0.605	2.50	5	09/09/2015 05:32	WG814108
Dichlorodifluoromethane	U		0.635	2.50	5	09/09/2015 05:32	WG814108
1,1-Dichloroethane	U		0.570	2.50	5	09/09/2015 05:32	WG814108
1,2-Dichloroethane	1.46	J	0.540	2.50	5	09/09/2015 05:32	WG814108
1,1-Dichloroethene	13.0		0.940	2.50	5	09/09/2015 05:32	WG814108
cis-1,2-Dichloroethene	10600		46.6	250	500	09/10/2015 19:45	WG814394
trans-1,2-Dichloroethene	4.97		0.760	2.50	5	09/09/2015 05:32	WG814108
1,2-Dichloropropane	1.38	J	0.950	2.50	5	09/09/2015 05:32	WG814108
1,1-Dichloropropene	U		0.640	2.50	5	09/09/2015 05:32	WG814108
1,3-Dichloropropane	U		0.735	2.50	5	09/09/2015 05:32	WG814108
cis-1,3-Dichloropropene	U		0.488	2.50	5	09/09/2015 05:32	WG814108
trans-1,3-Dichloropropene	U		1.11	2.50	5	09/09/2015 05:32	WG814108
trans-1,4-Dichloro-2-butene	U		1.28	25.0	5	09/09/2015 05:32	WG814108
2,2-Dichloropropane	U		0.464	2.50	5	09/09/2015 05:32	WG814108
Di-isopropyl ether	U		0.462	2.50	5	09/09/2015 05:32	WG814108
Ethylbenzene	U		0.790	2.50	5	09/09/2015 05:32	WG814108
Hexachloro-1,3-butadiene	U		0.785	5.00	5	09/09/2015 05:32	WG814108
2-Hexanone	U		3.78	12.5	5	09/09/2015 05:32	WG814108
n-Hexane	U		1.52	5.00	5	09/09/2015 05:32	WG814108
Iodomethane	U		1.88	50.0	5	09/09/2015 05:32	WG814108
Isopropylbenzene	U		0.630	2.50	5	09/09/2015 05:32	WG814108
p-Isopropyltoluene	U		0.690	2.50	5	09/09/2015 05:32	WG814108
2-Butanone (MEK)	207		6.40	12.5	5	09/09/2015 05:32	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		5.35	12.5	5	09/09/2015 05:32	WG814108
4-Methyl-2-pentanone (MIBK)	U		4.12	12.5	5	09/09/2015 05:32	WG814108
Methyl tert-butyl ether	U		0.510	2.50	5	09/09/2015 05:32	WG814108
Naphthalene	1.18	J	0.870	2.50	5	09/09/2015 05:32	WG814108
n-Propylbenzene	U		0.810	2.50	5	09/09/2015 05:32	WG814108
Styrene	U		0.585	2.50	5	09/09/2015 05:32	WG814108
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	09/09/2015 05:32	WG814108
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	09/09/2015 05:32	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	09/09/2015 05:32	WG814108
Tetrachloroethene	3.05		0.995	2.50	5	09/09/2015 05:32	WG814108
Toluene	1.43	J	0.510	2.50	5	09/09/2015 05:32	WG814108
1,2,3-Trichlorobenzene	U		0.820	2.50	5	09/09/2015 05:32	WG814108
1,2,4-Trichlorobenzene	U		1.78	2.50	5	09/09/2015 05:32	WG814108
1,1,1-Trichloroethane	U		0.470	2.50	5	09/09/2015 05:32	WG814108
1,1,2-Trichloroethane	16.7		0.930	2.50	5	09/09/2015 05:32	WG814108
Trichloroethene	2510		76.5	250	500	09/10/2015 19:45	WG814394
Trichlorofluoromethane	U		0.650	2.50	5	09/09/2015 05:32	WG814108
1,2,3-Trichloropropane	U		1.24	12.5	5	09/09/2015 05:32	WG814108
1,2,4-Trimethylbenzene	0.791	J	0.615	2.50	5	09/09/2015 05:32	WG814108
1,2,3-Trimethylbenzene	0.403	J	0.370	2.50	5	09/09/2015 05:32	WG814108
1,3,5-Trimethylbenzene	U		0.620	2.50	5	09/09/2015 05:32	WG814108
Vinyl acetate	U		3.22	12.5	5	09/09/2015 05:32	WG814108
Vinyl chloride	2.20	J	0.590	2.50	5	09/09/2015 05:32	WG814108
Xylenes, Total	U		1.58	7.50	5	09/09/2015 05:32	WG814108
(S) Toluene-d8	*87.5*	J2		*90.0-115*		*09/09/2015 05:32*	WG814108
(S) Dibromofluoromethane	*89.1*			*79.0-121*		*09/09/2015 05:32*	WG814108
(S) 4-Bromofluorobenzene	*110*			*80.1-120*		*09/09/2015 05:32*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		5.97	30.0	10	09/14/2015 16:31	WG815066
(S) Toluene-d8	*97.0*			*70.0-130*		*09/14/2015 16:31*	WG815066

Sample Narrative:

8260B L787282-38 WG815066: Matrix interference when ran at a lower dilution.

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/09/2015 05:52	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 05:52	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 05:52	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 05:52	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 05:52	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 05:52	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 05:52	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 05:52	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 05:52	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 05:52	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 05:52	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 05:52	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 05:52	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 05:52	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 05:52	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 05:52	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 05:52	WG814108
Chloroform	U		0.0860	0.500	1	09/09/2015 05:52	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 05:52	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 05:52	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 05:52	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 05:52	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 05:52	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 05:52	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 05:52	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 05:52	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 05:52	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 05:52	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 05:52	WG814108
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2015 05:52	WG814108
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2015 05:52	WG814108
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/10/2015 20:05	WG814394
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/09/2015 05:52	WG814108
1,2-Dichloropropane	U		0.190	0.500	1	09/09/2015 05:52	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 05:52	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 05:52	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 05:52	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 05:52	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 05:52	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 05:52	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 05:52	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 05:52	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 05:52	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 05:52	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 05:52	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 05:52	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 05:52	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 05:52	WG814108
2-Butanone (MEK)	U		1.28	2.50	1	09/09/2015 05:52	WG814108
Methylene Chloride	U		1.07	2.50	1	09/09/2015 05:52	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 05:52	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 05:52	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 05:52	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 05:52	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 05:52	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 05:52	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 05:52	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 05:52	WG814108
Tetrachloroethene	U		0.199	0.500	1	09/09/2015 05:52	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 05:52	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 05:52	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 05:52	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 05:52	WG814108
1,1,2-Trichloroethane	U		0.186	0.500	1	09/09/2015 05:52	WG814108
Trichloroethene	U		0.153	0.500	1	09/10/2015 20:05	WG814394
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 05:52	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 05:52	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 05:52	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 05:52	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 05:52	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 05:52	WG814108
Vinyl chloride	U		0.118	0.500	1	09/09/2015 05:52	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 05:52	WG814108
(S) Toluene-d8	*96.0*			*90.0-115*		*09/09/2015 05:52*	WG814108
(S) Dibromofluoromethane	*92.8*			*79.0-121*		*09/09/2015 05:52*	WG814108
(S) 4-Bromofluorobenzene	*108*			*80.1-120*		*09/09/2015 05:52*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	09/06/2015 23:57	WG813827
(S) Toluene-d8	*95.0*			*70.0-130*		*09/06/2015 23:57*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/09/2015 06:13	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 06:13	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 06:13	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 06:13	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 06:13	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 06:13	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 06:13	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 06:13	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 06:13	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 06:13	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 06:13	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 06:13	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 06:13	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 06:13	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 06:13	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 06:13	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 06:13	WG814108
Chloroform	U		0.0860	0.500	1	09/09/2015 06:13	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 06:13	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 06:13	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 06:13	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 06:13	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 06:13	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 06:13	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 06:13	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 06:13	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 06:13	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 06:13	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 06:13	WG814108
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2015 06:13	WG814108
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2015 06:13	WG814108
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/10/2015 20:25	WG814394
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/09/2015 06:13	WG814108
1,2-Dichloropropane	U		0.190	0.500	1	09/09/2015 06:13	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 06:13	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 06:13	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 06:13	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 06:13	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 06:13	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 06:13	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 06:13	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 06:13	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 06:13	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 06:13	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 06:13	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 06:13	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 06:13	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 06:13	WG814108
2-Butanone (MEK)	U		1.28	2.50	1	09/09/2015 06:13	WG814108
Methylene Chloride	U		1.07	2.50	1	09/09/2015 06:13	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 06:13	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 06:13	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 06:13	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 06:13	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 06:13	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 06:13	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 06:13	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 06:13	WG814108
Tetrachloroethene	U		0.199	0.500	1	09/09/2015 06:13	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 06:13	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 06:13	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 06:13	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 06:13	WG814108
1,1,2-Trichloroethane	U		0.186	0.500	1	09/09/2015 06:13	WG814108
Trichloroethene	U		0.153	0.500	1	09/10/2015 20:25	WG814394
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 06:13	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 06:13	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 06:13	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 06:13	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 06:13	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 06:13	WG814108
Vinyl chloride	U		0.118	0.500	1	09/09/2015 06:13	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 06:13	WG814108
(S) Toluene-d8	*96.1*			*90.0-115*		*09/09/2015 06:13*	WG814108
(S) Dibromofluoromethane	*93.9*			*79.0-121*		*09/09/2015 06:13*	WG814108
(S) 4-Bromofluorobenzene	*109*			*80.1-120*		*09/09/2015 06:13*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	09/07/2015 00:21	WG813827
(S) Toluene-d8	*95.1*			*70.0-130*		*09/07/2015 00:21*	WG813827

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/09/2015 06:34	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 06:34	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 06:34	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 06:34	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 06:34	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 06:34	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 06:34	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 06:34	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 06:34	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 06:34	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 06:34	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 06:34	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 06:34	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 06:34	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 06:34	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 06:34	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 06:34	WG814108
Chloroform	U		0.0860	0.500	1	09/09/2015 06:34	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 06:34	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 06:34	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 06:34	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 06:34	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 06:34	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 06:34	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 06:34	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 06:34	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 06:34	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 06:34	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 06:34	WG814108
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2015 06:34	WG814108
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2015 06:34	WG814108
cis-1,2-Dichloroethene	0.376	J	0.0933	0.500	1	09/09/2015 06:34	WG814108
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/09/2015 06:34	WG814108
1,2-Dichloropropane	U		0.190	0.500	1	09/09/2015 06:34	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 06:34	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 06:34	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 06:34	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 06:34	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 06:34	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 06:34	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 06:34	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 06:34	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 06:34	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 06:34	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 06:34	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 06:34	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 06:34	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 06:34	WG814108
2-Butanone (MEK)	U		1.28	2.50	1	09/09/2015 06:34	WG814108
Methylene Chloride	U		1.07	2.50	1	09/09/2015 06:34	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 06:34	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 06:34	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 06:34	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 06:34	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 06:34	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 06:34	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 06:34	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 06:34	WG814108
Tetrachloroethene	U		0.199	0.500	1	09/09/2015 06:34	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 06:34	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 06:34	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 06:34	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 06:34	WG814108
1,1,2-Trichloroethane	U		0.186	0.500	1	09/09/2015 06:34	WG814108
Trichloroethene	0.935		0.153	0.500	1	09/09/2015 06:34	WG814108
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 06:34	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 06:34	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 06:34	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 06:34	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 06:34	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 06:34	WG814108
Vinyl chloride	U		0.118	0.500	1	09/09/2015 06:34	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 06:34	WG814108
(S) Toluene-d8	*96.2*			*90.0-115*		*09/09/2015 06:34*	WG814108
(S) Dibromofluoromethane	*87.8*			*79.0-121*		*09/09/2015 06:34*	WG814108
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/09/2015 06:34*	WG814108

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	15.5		1.40	10.0	1	09/11/2015 17:22	WG814626
Nickel	8.60	J	4.90	10.0	1	09/11/2015 17:22	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	56.5		1.05	25.0	1	09/09/2015 06:55	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 06:55	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 06:55	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 06:55	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 06:55	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 06:55	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 06:55	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 06:55	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 06:55	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 06:55	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 06:55	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 06:55	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 06:55	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 06:55	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 06:55	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 06:55	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 06:55	WG814108
Chloroform	0.832		0.0860	0.500	1	09/09/2015 06:55	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 06:55	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 06:55	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 06:55	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 06:55	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 06:55	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 06:55	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 06:55	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 06:55	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 06:55	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 06:55	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 06:55	WG814108
1,2-Dichloroethane	1.70		0.108	0.500	1	09/09/2015 06:55	WG814108
1,1-Dichloroethene	14.2		0.188	0.500	1	09/09/2015 06:55	WG814108
cis-1,2-Dichloroethene	7140		9.33	50.0	100	09/10/2015 20:45	WG814394
trans-1,2-Dichloroethene	2.79		0.152	0.500	1	09/09/2015 06:55	WG814108
1,2-Dichloropropane	0.588		0.190	0.500	1	09/09/2015 06:55	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 06:55	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 06:55	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 06:55	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 06:55	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 06:55	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 06:55	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 06:55	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 06:55	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 06:55	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 06:55	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 06:55	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 06:55	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 06:55	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 06:55	WG814108
2-Butanone (MEK)	62.4		1.28	2.50	1	09/09/2015 06:55	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	09/09/2015 06:55	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 06:55	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 06:55	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 06:55	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 06:55	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 06:55	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 06:55	WG814108
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 06:55	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 06:55	WG814108
Tetrachloroethene	U		0.199	0.500	1	09/09/2015 06:55	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 06:55	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 06:55	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 06:55	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 06:55	WG814108
1,1,2-Trichloroethane	5.11		0.186	0.500	1	09/09/2015 06:55	WG814108
Trichloroethene	25.4		0.153	0.500	1	09/09/2015 06:55	WG814108
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 06:55	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 06:55	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 06:55	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 06:55	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 06:55	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 06:55	WG814108
Vinyl chloride	1.70		0.118	0.500	1	09/09/2015 06:55	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 06:55	WG814108
(S) Toluene-d8	*94.2*			*90.0-115*		*09/09/2015 06:55*	WG814108
(S) Dibromofluoromethane	*93.6*			*79.0-121*		*09/09/2015 06:55*	WG814108
(S) 4-Bromofluorobenzene	*109*			*80.1-120*		*09/09/2015 06:55*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	5.30		0.597	3.00	1	09/14/2015 16:55	WG815066
(S) Toluene-d8	*95.0*			*70.0-130*		*09/14/2015 16:55*	WG815066

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chromium	U		1.40	10.0	1	09/11/2015 17:25	WG814626
Nickel	U		4.90	10.0	1	09/11/2015 17:25	WG814626

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.10	J	1.05	25.0	1	09/09/2015 07:16	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 07:16	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 07:16	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 07:16	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 07:16	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 07:16	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 07:16	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 07:16	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 07:16	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 07:16	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 07:16	WG814108
Carbon disulfide	U		0.101	0.500	1	09/09/2015 07:16	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 07:16	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 07:16	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 07:16	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 07:16	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 07:16	WG814108
Chloroform	U		0.0860	0.500	1	09/09/2015 07:16	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 07:16	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 07:16	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 07:16	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 07:16	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 07:16	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 07:16	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 07:16	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 07:16	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 07:16	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 07:16	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 07:16	WG814108
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2015 07:16	WG814108
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2015 07:16	WG814108
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/10/2015 21:05	WG814394
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/09/2015 07:16	WG814108
1,2-Dichloropropane	U		0.190	0.500	1	09/09/2015 07:16	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 07:16	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 07:16	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 07:16	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 07:16	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 07:16	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 07:16	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 07:16	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 07:16	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 07:16	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 07:16	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 07:16	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 07:16	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 07:16	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 07:16	WG814108
2-Butanone (MEK)	U		1.28	2.50	1	09/09/2015 07:16	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	09/09/2015 07:16	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 07:16	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 07:16	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 07:16	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 07:16	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 07:16	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 07:16	WG814108
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 07:16	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 07:16	WG814108
Tetrachloroethene	U		0.199	0.500	1	09/09/2015 07:16	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 07:16	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 07:16	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 07:16	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 07:16	WG814108
1,1,2-Trichloroethane	U		0.186	0.500	1	09/09/2015 07:16	WG814108
Trichloroethene	0.454	J	0.153	0.500	1	09/09/2015 07:16	WG814108
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 07:16	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 07:16	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 07:16	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 07:16	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 07:16	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 07:16	WG814108
Vinyl chloride	U		0.118	0.500	1	09/09/2015 07:16	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 07:16	WG814108
(S) Toluene-d8	*95.5*			*90.0-115*		*09/09/2015 07:16*	WG814108
(S) Dibromofluoromethane	*89.8*			*79.0-121*		*09/09/2015 07:16*	WG814108
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/09/2015 07:16*	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	09/15/2015 14:16	WG815312
(S) Toluene-d8	*95.9*			*70.0-130*		*09/15/2015 14:16*	WG815312

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.92	J	1.05	25.0	1	09/09/2015 01:22	WG814108
Acrylonitrile	U		0.873	2.50	1	09/09/2015 01:22	WG814108
Benzene	U		0.0896	0.500	1	09/09/2015 01:22	WG814108
Bromobenzene	U		0.133	0.500	1	09/09/2015 01:22	WG814108
Bromodichloromethane	U		0.0800	0.500	1	09/09/2015 01:22	WG814108
Bromochloromethane	U		0.145	0.500	1	09/09/2015 01:22	WG814108
Bromoform	U		0.186	0.500	1	09/09/2015 01:22	WG814108
Bromomethane	U		0.157	0.500	1	09/09/2015 01:22	WG814108
n-Butylbenzene	U		0.143	0.500	1	09/09/2015 01:22	WG814108
sec-Butylbenzene	U		0.134	0.500	1	09/09/2015 01:22	WG814108
tert-Butylbenzene	U		0.183	0.500	1	09/09/2015 01:22	WG814108
Carbon disulfide	0.481	J	0.101	0.500	1	09/09/2015 01:22	WG814108
Carbon tetrachloride	U		0.159	0.500	1	09/09/2015 01:22	WG814108
Chlorobenzene	U		0.140	0.500	1	09/09/2015 01:22	WG814108
Chlorodibromomethane	U		0.128	0.500	1	09/09/2015 01:22	WG814108
Chloroethane	U		0.141	0.500	1	09/09/2015 01:22	WG814108
2-Chloroethyl vinyl ether	U		0.877	2.50	1	09/09/2015 01:22	WG814108
Chloroform	U		0.0860	0.500	1	09/09/2015 01:22	WG814108
Chloromethane	U		0.153	0.500	1	09/09/2015 01:22	WG814108
2-Chlorotoluene	U		0.111	0.500	1	09/09/2015 01:22	WG814108
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2015 01:22	WG814108
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	09/09/2015 01:22	WG814108
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2015 01:22	WG814108
Dibromomethane	U		0.117	0.500	1	09/09/2015 01:22	WG814108
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2015 01:22	WG814108
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2015 01:22	WG814108
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2015 01:22	WG814108
Dichlorodifluoromethane	U		0.127	0.500	1	09/09/2015 01:22	WG814108
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2015 01:22	WG814108
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2015 01:22	WG814108
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2015 01:22	WG814108
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/09/2015 01:22	WG814108
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/09/2015 01:22	WG814108
1,2-Dichloropropane	U		0.190	0.500	1	09/09/2015 01:22	WG814108
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2015 01:22	WG814108
1,3-Dichloropropane	U		0.147	0.500	1	09/09/2015 01:22	WG814108
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2015 01:22	WG814108
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2015 01:22	WG814108
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2015 01:22	WG814108
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2015 01:22	WG814108
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2015 01:22	WG814108
Ethylbenzene	U		0.158	0.500	1	09/09/2015 01:22	WG814108
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2015 01:22	WG814108
2-Hexanone	U		0.757	2.50	1	09/09/2015 01:22	WG814108
n-Hexane	U		0.305	1.00	1	09/09/2015 01:22	WG814108
Iodomethane	U		0.377	10.0	1	09/09/2015 01:22	WG814108
Isopropylbenzene	U		0.126	0.500	1	09/09/2015 01:22	WG814108
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2015 01:22	WG814108
2-Butanone (MEK)	U		1.28	2.50	1	09/09/2015 01:22	WG814108
Methylene Chloride	U		1.07	2.50	1	09/09/2015 01:22	WG814108
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	09/09/2015 01:22	WG814108
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2015 01:22	WG814108
Naphthalene	U		0.174	0.500	1	09/09/2015 01:22	WG814108
n-Propylbenzene	U		0.162	0.500	1	09/09/2015 01:22	WG814108
Styrene	U		0.117	0.500	1	09/09/2015 01:22	WG814108
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2015 01:22	WG814108

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2015 01:22	WG814108
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2015 01:22	WG814108
Tetrachloroethene	0.372	J	0.199	0.500	1	09/09/2015 01:22	WG814108
Toluene	U		0.102	0.500	1	09/09/2015 01:22	WG814108
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2015 01:22	WG814108
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2015 01:22	WG814108
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2015 01:22	WG814108
1,1,2-Trichloroethane	U		0.186	0.500	1	09/09/2015 01:22	WG814108
Trichloroethene	U		0.153	0.500	1	09/09/2015 01:22	WG814108
Trichlorofluoromethane	U		0.130	0.500	1	09/09/2015 01:22	WG814108
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2015 01:22	WG814108
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2015 01:22	WG814108
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2015 01:22	WG814108
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2015 01:22	WG814108
Vinyl acetate	U		0.645	2.50	1	09/09/2015 01:22	WG814108
Vinyl chloride	U		0.118	0.500	1	09/09/2015 01:22	WG814108
Xylenes, Total	U		0.316	1.50	1	09/09/2015 01:22	WG814108
(S) Toluene-d8	*95.1*			*90.0-115*		*09/09/2015 01:22*	WG814108
(S) Dibromofluoromethane	*91.0*			*79.0-121*		*09/09/2015 01:22*	WG814108
(S) 4-Bromofluorobenzene	*110*			*80.1-120*		*09/09/2015 01:22*	WG814108

Method Blank (MB)

(MB) 09/11/15 16:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chromium	U		0.0014	0.0100
Nickel	U		0.0049	0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/11/15 16:14 • (LCSD) 09/11/15 21:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Chromium	1.00	0.958	1.01	96	101	80-120			6	20
Nickel	1.00	0.950	0.992	95	99	80-120			4	20

L787147-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/11/15 16:19 • (MS) 09/11/15 16:25 • (MSD) 09/11/15 16:28

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chromium	1.00	0.00754	0.949	0.959	94	95	1	75-125			1	20
Nickel	1.00	0.00313	0.931	0.938	93	93	1	75-125			1	20

Method Blank (MB)

(MB) 09/12/15 12:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.00105	0.0250
Acrylonitrile	U		0.000873	0.00250
Benzene	U		0.0000896	0.000500
Bromobenzene	U		0.000133	0.000500
Bromodichloromethane	U		0.0000800	0.000500
Bromochloromethane	U		0.000145	0.000500
Bromoform	U		0.000186	0.000500
Bromomethane	U		0.000157	0.000500
n-Butylbenzene	U		0.000143	0.000500
sec-Butylbenzene	U		0.000134	0.000500
tert-Butylbenzene	U		0.000183	0.000500
Carbon disulfide	U		0.000101	0.000500
Carbon tetrachloride	U		0.000159	0.000500
Chlorobenzene	U		0.000140	0.000500
Chlorodibromomethane	U		0.000128	0.000500
Chloroethane	U		0.000141	0.000500
2-Chloroethyl vinyl ether	U		0.000877	0.00250
Chloroform	U		0.0000860	0.000500
Chloromethane	U		0.000153	0.000500
2-Chlorotoluene	U		0.000111	0.000500
4-Chlorotoluene	U		0.0000972	0.000500
1,2-Dibromo-3-Chloropropane	U		0.000325	0.00100
1,2-Dibromoethane	U		0.000193	0.000500
Dibromomethane	U		0.000117	0.000500
1,2-Dichlorobenzene	U		0.000101	0.000500
1,3-Dichlorobenzene	U		0.000130	0.000500
1,4-Dichlorobenzene	U		0.000121	0.000500
Dichlorodifluoromethane	U		0.000127	0.000500
1,1-Dichloroethane	U		0.000114	0.000500
1,2-Dichloroethane	U		0.000108	0.000500
1,1-Dichloroethene	U		0.000188	0.000500
cis-1,2-Dichloroethene	U		0.0000933	0.000500
trans-1,2-Dichloroethene	U		0.000152	0.000500
1,2-Dichloropropane	U		0.000190	0.000500
1,1-Dichloropropene	U		0.000128	0.000500
1,3-Dichloropropane	U		0.000147	0.000500

Method Blank (MB)

(MB) 09/12/15 12:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
cis-1,3-Dichloropropene	U		0.0000976	0.000500
trans-1,3-Dichloropropene	U		0.000222	0.000500
trans-1,4-Dichloro-2-butene	U		0.000257	0.00500
2,2-Dichloropropane	U		0.0000929	0.000500
Di-isopropyl ether	U		0.0000924	0.000500
Ethylbenzene	U		0.000158	0.000500
Hexachloro-1,3-butadiene	U		0.000157	0.00100
2-Hexanone	U		0.000757	0.00250
n-Hexane	U		0.000305	0.00100
Iodomethane	U		0.000377	0.0100
Isopropylbenzene	U		0.000126	0.000500
p-Isopropyltoluene	U		0.000138	0.000500
2-Butanone (MEK)	U		0.00128	0.00250
Methylene Chloride	U		0.00107	0.00250
4-Methyl-2-pentanone (MIBK)	U		0.000823	0.00250
Methyl tert-butyl ether	U		0.000102	0.000500
Naphthalene	U		0.000174	0.000500
n-Propylbenzene	U		0.000162	0.000500
Styrene	U		0.000117	0.000500
1,1,1,2-Tetrachloroethane	U		0.000120	0.000500
1,1,2,2-Tetrachloroethane	U		0.000130	0.000500
1,1,2-Trichlorotrifluoroethane	U		0.000164	0.000500
Tetrachloroethene	U		0.000199	0.000500
Toluene	U		0.000102	0.000500
1,2,3-Trichlorobenzene	U		0.000164	0.000500
1,2,4-Trichlorobenzene	U		0.000355	0.000500
1,1,1-Trichloroethane	U		0.0000940	0.000500
1,1,2-Trichloroethane	U		0.000186	0.000500
Trichloroethene	U		0.000153	0.000500
Trichlorofluoromethane	U		0.000130	0.000500
1,2,3-Trichloropropane	U		0.000247	0.00250
1,2,4-Trimethylbenzene	U		0.000123	0.000500
1,2,3-Trimethylbenzene	U		0.0000739	0.000500
1,3,5-Trimethylbenzene	U		0.000124	0.000500
Vinyl acetate	U		0.000645	0.00250
Vinyl chloride	U		0.000118	0.000500

Method Blank (MB)

(MB) 09/12/15 12:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Xylenes, Total	U		0.000316	0.00150
(S) Toluene-d8	*101*			*90.0-115*
(S) Dibromofluoromethane	*94.4*			*79.0-121*
(S) 4-Bromofluorobenzene	*97.6*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/12/15 11:25 • (LCSD) 09/12/15 11:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.104	0.108	83.3	86.7	28.7-175			4.01	20.9
Acrylonitrile	0.125	0.123	0.125	98.6	99.9	58.2-145			1.31	20
Benzene	0.0250	0.0220	0.0221	88.1	88.3	73.0-122			0.210	20
Bromobenzene	0.0250	0.0229	0.0236	91.7	94.3	81.5-115			2.80	20
Bromodichloromethane	0.0250	0.0226	0.0226	90.2	90.3	75.5-121			0.0800	20
Bromochloromethane	0.0250	0.0231	0.0235	92.4	93.9	78.9-123			1.70	20
Bromoform	0.0250	0.0245	0.0254	98.2	101	71.5-131			3.26	20
Bromomethane	0.0250	0.0194	0.0204	77.7	81.8	22.4-187			5.14	20
n-Butylbenzene	0.0250	0.0242	0.0244	96.9	97.6	75.9-134			0.680	20
sec-Butylbenzene	0.0250	0.0239	0.0243	95.7	97.4	80.6-126			1.78	20
tert-Butylbenzene	0.0250	0.0237	0.0243	94.7	97.3	79.3-127			2.75	20
Carbon disulfide	0.0250	0.0200	0.0204	80.2	81.8	53.0-134			1.98	20
Carbon tetrachloride	0.0250	0.0218	0.0220	87.1	87.9	70.9-129			0.860	20
Chlorobenzene	0.0250	0.0238	0.0248	95.1	99.0	79.7-122			4.03	20
Chlorodibromomethane	0.0250	0.0245	0.0252	98.0	101	78.2-124			2.65	20
Chloroethane	0.0250	0.0204	0.0208	81.8	83.1	41.2-153			1.60	20
2-Chloroethyl vinyl ether	0.125	0.118	0.120	94.2	96.3	23.4-162			2.30	23.5
Chloroform	0.0250	0.0210	0.0212	84.0	84.9	73.2-125			1.14	20
Chloromethane	0.0250	0.0203	0.0205	81.3	81.9	55.8-134			0.660	20
2-Chlorotoluene	0.0250	0.0233	0.0236	93.0	94.4	76.4-125			1.41	20
4-Chlorotoluene	0.0250	0.0228	0.0232	91.0	92.9	81.5-121			2.05	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0229	0.0238	91.7	95.2	64.8-131			3.78	20
1,2-Dibromoethane	0.0250	0.0232	0.0245	92.8	98.0	79.8-122			5.47	20
Dibromomethane	0.0250	0.0233	0.0239	93.2	95.6	79.5-118			2.52	20
1,2-Dichlorobenzene	0.0250	0.0231	0.0234	92.3	93.7	84.7-118			1.42	20
1,3-Dichlorobenzene	0.0250	0.0233	0.0240	93.1	96.0	77.6-127			3.10	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/12/15 11:25 • (LCSD) 09/12/15 11:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.0250	0.0235	0.0236	93.9	94.3	82.2-114			0.440	20
Dichlorodifluoromethane	0.0250	0.0191	0.0191	76.4	76.5	56.0-134			0.140	20
1,1-Dichloroethane	0.0250	0.0228	0.0228	91.1	91.3	71.7-127			0.240	20
1,2-Dichloroethane	0.0250	0.0203	0.0208	81.4	83.1	65.3-126			2.16	20
1,1-Dichloroethene	0.0250	0.0227	0.0225	91.0	90.1	59.9-137			0.950	20
cis-1,2-Dichloroethene	0.0250	0.0217	0.0216	86.7	86.4	77.3-122			0.360	20
trans-1,2-Dichloroethene	0.0250	0.0217	0.0219	86.6	87.4	72.6-125			0.920	20
1,2-Dichloropropane	0.0250	0.0253	0.0255	101	102	77.4-125			0.890	20
1,1-Dichloropropene	0.0250	0.0216	0.0218	86.4	87.2	72.5-127			0.910	20
1,3-Dichloropropane	0.0250	0.0232	0.0242	92.9	96.7	80.6-115			3.99	20
cis-1,3-Dichloropropene	0.0250	0.0240	0.0241	95.9	96.5	77.7-124			0.720	20
trans-1,3-Dichloropropene	0.0250	0.0242	0.0244	96.7	97.6	73.5-127			0.900	20
trans-1,4-Dichloro-2-butene	0.0250	0.0227	0.0234	90.6	93.6	58.3-129			3.25	20
2,2-Dichloropropane	0.0250	0.0193	0.0201	77.2	80.6	61.3-134			4.23	20
Di-isopropyl ether	0.0250	0.0235	0.0235	94.0	94.0	65.1-135			0.0400	20
Ethylbenzene	0.0250	0.0231	0.0237	92.4	94.9	80.9-121			2.65	20
Hexachloro-1,3-butadiene	0.0250	0.0238	0.0239	95.2	95.7	73.7-133			0.600	20
2-Hexanone	0.125	0.128	0.137	102	109	59.4-151			6.98	20
n-Hexane	0.0250	0.0223	0.0227	89.3	90.7	59.5-132			1.58	20
Iodomethane	0.125	0.114	0.115	91.3	92.1	64.6-137			0.890	20
Isopropylbenzene	0.0250	0.0236	0.0242	94.2	96.7	81.6-124			2.58	20
p-Isopropyltoluene	0.0250	0.0239	0.0244	95.8	97.8	77.6-129			2.07	20
2-Butanone (MEK)	0.125	0.115	0.123	92.3	98.2	46.4-155			6.25	20
Methylene Chloride	0.0250	0.0218	0.0222	87.0	89.0	69.5-120			2.26	20
4-Methyl-2-pentanone (MIBK)	0.125	0.124	0.130	99.4	104	63.3-138			4.40	20
Methyl tert-butyl ether	0.0250	0.0222	0.0224	88.7	89.6	70.1-125			0.940	20
Naphthalene	0.0250	0.0235	0.0242	93.9	96.9	69.7-134			3.21	20
n-Propylbenzene	0.0250	0.0238	0.0243	95.1	97.2	81.9-122			2.20	20
Styrene	0.0250	0.0232	0.0242	92.6	96.6	79.9-124			4.20	20
1,1,1,2-Tetrachloroethane	0.0250	0.0230	0.0240	92.0	96.2	78.5-125			4.46	20
1,1,2,2-Tetrachloroethane	0.0250	0.0242	0.0260	96.6	104	79.3-123			7.45	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0226	0.0231	90.4	92.3	62.0-141			2.04	20
Tetrachloroethene	0.0250	0.0227	0.0239	90.7	95.5	73.5-130			5.16	20
Toluene	0.0250	0.0232	0.0233	92.9	93.4	77.9-116			0.490	20
1,2,3-Trichlorobenzene	0.0250	0.0249	0.0254	99.5	101	75.7-134			1.95	20
1,2,4-Trichlorobenzene	0.0250	0.0247	0.0249	98.8	99.5	76.1-136			0.700	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/12/15 11:25 • (LCSD) 09/12/15 11:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1-Trichloroethane	0.0250	0.0209	0.0210	83.8	84.1	71.1-129			0.330	20
1,1,2-Trichloroethane	0.0250	0.0229	0.0246	91.8	98.4	81.6-120			6.96	20
Trichloroethene	0.0250	0.0234	0.0233	93.5	93.4	79.5-121			0.110	20
Trichlorofluoromethane	0.0250	0.0227	0.0229	90.8	91.5	49.1-157			0.820	20
1,2,3-Trichloropropane	0.0250	0.0238	0.0251	95.0	101	74.9-124			5.66	20
1,2,4-Trimethylbenzene	0.0250	0.0232	0.0236	92.6	94.3	79.0-122			1.81	20
1,2,3-Trimethylbenzene	0.0250	0.0234	0.0236	93.5	94.4	79.9-118			0.970	20
1,3,5-Trimethylbenzene	0.0250	0.0236	0.0239	94.5	95.5	81.0-123			1.02	20
Vinyl acetate	0.125	0.144	0.146	115	117	41.7-159			1.44	20
Vinyl chloride	0.0250	0.0204	0.0205	81.7	82.1	61.5-134			0.500	20
Xylenes, Total	0.0750	0.0697	0.0719	92.9	95.9	79.2-122			3.14	20
(S) Toluene-d8				*104*	*103*	*90.0-115*				
(S) Dibromofluoromethane				*94.6*	*94.0*	*79.0-121*				
(S) 4-Bromofluorobenzene				*95.0*	*96.4*	*80.1-120*				

L787282-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/12/15 14:05 • (MS) 09/12/15 13:05 • (MSD) 09/12/15 13:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.250	0.00103	0.137	0.0710	54.4	142	1	25.0-156		J3	63.4	21.5
Acrylonitrile	0.250	ND	0.270	0.210	108	420	1	55.9-161		J3	24.9	20
Benzene	0.0500	ND	0.0442	0.0438	88.4	87.5	1	58.6-133			1.00	20
Bromobenzene	0.0500	ND	0.0476	0.0468	95.2	93.5	1	70.6-125			1.82	20
Bromodichloromethane	0.0500	ND	0.0451	0.0438	90.1	87.6	1	69.2-127			2.83	20
Bromochloromethane	0.0500	ND	0.0471	0.0456	94.3	91.2	1	74.4-128			3.33	20
Bromoform	0.0500	ND	0.0534	0.0530	107	106	1	66.3-140			0.635	20
Bromomethane	0.0500	ND	0.0400	0.0405	80.1	81.1	1	16.6-183			1.23	20.5
n-Butylbenzene	0.0500	ND	0.0492	0.0465	98.4	92.9	1	64.8-145			5.74	20
sec-Butylbenzene	0.0500	ND	0.0489	0.0449	97.8	89.8	1	66.8-139			8.50	20
tert-Butylbenzene	0.0500	ND	0.0493	0.0461	98.6	92.1	1	67.1-138			6.72	20
Carbon disulfide	0.0500	ND	0.0404	0.0406	80.8	81.2	1	34.9-138			0.569	20
Carbon tetrachloride	0.0500	ND	0.0443	0.0440	88.6	88.1	1	60.6-139			0.576	20
Chlorobenzene	0.0500	ND	0.0499	0.0503	99.7	101	1	70.1-130			0.953	20
Chlorodibromomethane	0.0500	ND	0.0520	0.0516	104	103	1	71.6-132			0.667	20
Chloroethane	0.0500	ND	0.0414	0.0407	82.8	81.5	1	33.3-155			1.54	20

L787282-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/12/15 14:05 • (MS) 09/12/15 13:05 • (MSD) 09/12/15 13:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2-Chloroethyl vinyl ether	0.250	ND	0.000468	0.000	0.187	0.000	1	5.00-149	J6	J3 J6	200	40
Chloroform	0.0500	0.000499	0.0430	0.0424	85.0	84.7	1	66.1-133			1.46	20
Chloromethane	0.0500	ND	0.0416	0.0405	83.3	81.0	1	40.7-139			2.79	20
2-Chlorotoluene	0.0500	ND	0.0486	0.0471	97.1	94.1	1	66.9-134			3.12	20
4-Chlorotoluene	0.0500	ND	0.0473	0.0475	94.6	95.0	1	66.8-134			0.453	20
1,2-Dibromo-3-Chloropropane	0.0500	ND	0.0495	0.0499	99.1	99.8	1	63.9-142			0.745	20.2
1,2-Dibromoethane	0.0500	ND	0.0500	0.0496	100	99.3	1	73.8-131			0.740	20
Dibromomethane	0.0500	ND	0.0474	0.0456	94.7	91.3	1	72.8-127			3.68	20
1,2-Dichlorobenzene	0.0500	ND	0.0473	0.0484	94.5	96.9	1	77.4-127			2.45	20
1,3-Dichlorobenzene	0.0500	ND	0.0492	0.0489	98.4	97.8	1	67.9-136			0.683	20
1,4-Dichlorobenzene	0.0500	ND	0.0477	0.0484	95.4	96.8	1	74.4-123			1.42	20
Dichlorodifluoromethane	0.0500	ND	0.0397	0.0383	79.5	76.6	1	42.2-146			3.62	20
1,1-Dichloroethane	0.0500	ND	0.0453	0.0445	90.5	89.0	1	64.0-134			1.68	20
1,2-Dichloroethane	0.0500	ND	0.0414	0.0400	82.8	80.0	1	60.7-132			3.42	20
1,1-Dichloroethene	0.0500	ND	0.0452	0.0450	90.4	90.1	1	48.8-144			0.417	20
cis-1,2-Dichloroethene	0.0500	0.0204	0.0615	0.0606	82.3	121	1	60.6-136			1.44	20
trans-1,2-Dichloroethene	0.0500	0.000513	0.0443	0.0444	87.5	88.7	1	61.0-132			0.173	20
1,2-Dichloropropane	0.0500	ND	0.0490	0.0484	98.0	96.8	1	69.7-130			1.21	20
1,1-Dichloropropene	0.0500	ND	0.0440	0.0438	87.9	87.5	1	61.5-136			0.452	20
1,3-Dichloropropane	0.0500	ND	0.0488	0.0489	97.6	97.8	1	74.3-123			0.228	20
cis-1,3-Dichloropropene	0.0500	ND	0.0462	0.0459	92.4	91.9	1	71.1-129			0.526	20
trans-1,3-Dichloropropene	0.0500	ND	0.0487	0.0487	97.5	97.4	1	66.3-136			0.0320	20
trans-1,4-Dichloro-2-butene	0.0500	ND	0.0504	0.0495	101	99.1	1	57.6-136			1.73	20
2,2-Dichloropropane	0.0500	ND	0.0407	0.0395	81.4	78.9	1	54.9-142			3.04	20
Di-isopropyl ether	0.0500	ND	0.0466	0.0456	93.2	91.1	1	59.9-140			2.24	20
Ethylbenzene	0.0500	ND	0.0494	0.0487	98.8	97.5	1	62.7-136			1.37	20
Hexachloro-1,3-butadiene	0.0500	ND	0.0476	0.0435	95.1	87.0	1	61.1-144			8.94	20.1
2-Hexanone	0.250	ND	0.263	0.254	105	509	1	59.4-154			3.39	20.1
n-Hexane	0.0500	ND	0.0440	0.0434	88.0	86.8	1	38.7-146			1.37	20
Iodomethane	0.250	ND	0.232	0.227	92.8	454	1	55.2-140			2.04	20
Isopropylbenzene	0.0500	ND	0.0490	0.0478	98.0	95.5	1	67.4-136			2.63	20
p-Isopropyltoluene	0.0500	ND	0.0493	0.0449	98.5	89.7	1	62.8-143			9.32	20
2-Butanone (MEK)	0.250	ND	0.204	0.141	81.7	283	1	45.0-156		J3	36.4	20.8
Methylene Chloride	0.0500	ND	0.0444	0.0432	88.8	86.4	1	61.5-125			2.68	20
4-Methyl-2-pentanone (MIBK)	0.250	ND	0.257	0.243	103	486	1	60.7-150			5.43	20
Methyl tert-butyl ether	0.0500	ND	0.0444	0.0421	88.8	84.2	1	61.4-136			5.27	20

L787282-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/12/15 14:05 • (MS) 09/12/15 13:05 • (MSD) 09/12/15 13:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.0500	0.000430	0.0489	0.0513	96.9	103	1	61.8-143			4.77	20
n-Propylbenzene	0.0500	ND	0.0494	0.0476	98.7	95.2	1	63.2-139			3.63	20
Styrene	0.0500	ND	0.0498	0.0494	99.5	98.7	1	68.2-133			0.822	20
1,1,1,2-Tetrachloroethane	0.0500	ND	0.0485	0.0488	96.9	97.6	1	70.5-132			0.721	20
1,1,2,2-Tetrachloroethane	0.0500	ND	0.0537	0.0513	107	103	1	64.9-145			4.62	20
1,1,2-Trichlorotrifluoroethane	0.0500	ND	0.0461	0.0472	92.1	94.3	1	53.7-150			2.32	20
Tetrachloroethene	0.0500	0.000886	0.0485	0.0490	95.3	98.0	1	57.4-141			0.974	20
Toluene	0.0500	ND	0.0456	0.0454	91.2	90.7	1	67.8-124			0.536	20
1,2,3-Trichlorobenzene	0.0500	ND	0.0507	0.0508	101	102	1	65.7-143			0.0543	20
1,2,4-Trichlorobenzene	0.0500	ND	0.0510	0.0499	102	99.9	1	67.0-146			2.07	20
1,1,1-Trichloroethane	0.0500	ND	0.0425	0.0415	84.9	82.9	1	58.7-134			2.39	20
1,1,2-Trichloroethane	0.0500	ND	0.0498	0.0486	99.6	97.2	1	74.1-130			2.45	20
Trichloroethene	0.0500	0.363	0.365	0.359	2.24	718	1	48.9-148	V	V	1.49	20
Trichlorofluoromethane	0.0500	ND	0.0467	0.0460	93.4	92.1	1	39.9-165			1.49	20
1,2,3-Trichloropropane	0.0500	ND	0.0514	0.0498	103	99.7	1	71.5-134			3.19	20
1,2,4-Trimethylbenzene	0.0500	ND	0.0480	0.0461	96.1	92.3	1	60.5-137			4.06	20
1,2,3-Trimethylbenzene	0.0500	ND	0.0471	0.0467	94.2	93.4	1	62.7-133			0.879	20
1,3,5-Trimethylbenzene	0.0500	ND	0.0487	0.0465	97.5	93.0	1	67.9-134			4.65	20
Vinyl acetate	0.250	ND	0.306	0.292	123	584	1	42.8-181			4.77	20
Vinyl chloride	0.0500	ND	0.0417	0.0410	83.3	82.1	1	44.3-143			1.47	20
Xylenes, Total	0.150	ND	0.147	0.147	98.3	293	1	65.6-133			0.665	20
(S) Toluene-d8					*99.6*	*99.2*		*90.0-115*				
(S) Dibromofluoromethane					*95.3*	*91.6*		*79.0-121*				
(S) 4-Bromofluorobenzene					*95.9*	*94.9*		*80.1-120*				

Method Blank (MB)

(MB) 09/06/15 15:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
1,4-Dioxane	U		0.000597	0.00300
(S) Toluene-d8	*95.9*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/06/15 13:54 • (LCSD) 09/06/15 14:18

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
1,4-Dioxane	0.0500	0.0438	0.0445	87.5	89.1	70.0-130			1.75	25
(S) Toluene-d8				*96.1*	*95.8*	*70.0-130*				

L787282-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/06/15 16:43 • (MS) 09/06/15 15:31 • (MSD) 09/06/15 15:55

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
1,4-Dioxane	0.0500	0.00272	0.145	0.138	285	270	1	0.000-200	J5	J5	5.23	42
(S) Toluene-d8					*211*	*207*		*70.0-130*	J1	J1		

Method Blank (MB)

(MB) 09/08/15 23:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.00105	0.0250
Acrylonitrile	U		0.000873	0.00250
Benzene	U		0.0000896	0.000500
Bromobenzene	U		0.000133	0.000500
Bromodichloromethane	U		0.0000800	0.000500
Bromochloromethane	U		0.000145	0.000500
Bromoform	U		0.000186	0.000500
Bromomethane	U		0.000157	0.000500
n-Butylbenzene	U		0.000143	0.000500
Carbon disulfide	U		0.000101	0.000500
sec-Butylbenzene	U		0.000134	0.000500
tert-Butylbenzene	U		0.000183	0.000500
Carbon tetrachloride	U		0.000159	0.000500
Chlorobenzene	U		0.000140	0.000500
Chlorodibromomethane	U		0.000128	0.000500
Chloroethane	U		0.000141	0.000500
2-Chloroethyl vinyl ether	U		0.000877	0.00250
Chloroform	U		0.0000860	0.000500
Chloromethane	U		0.000153	0.000500
2-Chlorotoluene	U		0.000111	0.000500
4-Chlorotoluene	U		0.0000972	0.000500
1,2-Dibromo-3-Chloropropane	U		0.000325	0.00100
1,2-Dibromoethane	U		0.000193	0.000500
Dibromomethane	U		0.000117	0.000500
1,2-Dichlorobenzene	U		0.000101	0.000500
1,3-Dichlorobenzene	U		0.000130	0.000500
1,4-Dichlorobenzene	U		0.000121	0.000500
Dichlorodifluoromethane	U		0.000127	0.000500
1,1-Dichloroethane	U		0.000114	0.000500
1,2-Dichloroethane	U		0.000108	0.000500
1,1-Dichloroethene	U		0.000188	0.000500
cis-1,2-Dichloroethene	U		0.0000933	0.000500
trans-1,2-Dichloroethene	U		0.000152	0.000500
1,2-Dichloropropane	U		0.000190	0.000500
trans-1,4-Dichloro-2-butene	U		0.000257	0.00500
1,1-Dichloropropene	U		0.000128	0.000500

Method Blank (MB)

(MB) 09/08/15 23:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,3-Dichloropropane	U		0.000147	0.000500
cis-1,3-Dichloropropene	U		0.0000976	0.000500
trans-1,3-Dichloropropene	U		0.000222	0.000500
2,2-Dichloropropane	U		0.0000929	0.000500
2-Hexanone	U		0.000757	0.00250
Di-isopropyl ether	U		0.0000924	0.000500
Ethylbenzene	U		0.000158	0.000500
n-Hexane	U		0.000305	0.00100
Iodomethane	U		0.000377	0.0100
Hexachloro-1,3-butadiene	U		0.000157	0.00100
Isopropylbenzene	U		0.000126	0.000500
p-Isopropyltoluene	U		0.000138	0.000500
2-Butanone (MEK)	U		0.00128	0.00250
Methylene Chloride	U		0.00107	0.00250
4-Methyl-2-pentanone (MIBK)	U		0.000823	0.00250
Methyl tert-butyl ether	U		0.000102	0.000500
1,1,2-Trichlorotrifluoroethane	U		0.000164	0.000500
Naphthalene	U		0.000174	0.000500
n-Propylbenzene	U		0.000162	0.000500
Styrene	U		0.000117	0.000500
1,1,1,2-Tetrachloroethane	U		0.000120	0.000500
1,1,2,2-Tetrachloroethane	U		0.000130	0.000500
Tetrachloroethene	U		0.000199	0.000500
1,2,3-Trimethylbenzene	U		0.0000739	0.000500
Toluene	U		0.000102	0.000500
Vinyl acetate	U		0.000645	0.00250
1,2,3-Trichlorobenzene	U		0.000164	0.000500
1,2,4-Trichlorobenzene	U		0.000355	0.000500
1,1,1-Trichloroethane	U		0.0000940	0.000500
1,1,2-Trichloroethane	U		0.000186	0.000500
Trichloroethene	U		0.000153	0.000500
Trichlorofluoromethane	U		0.000130	0.000500
1,2,3-Trichloropropane	U		0.000247	0.00250
1,2,4-Trimethylbenzene	U		0.000123	0.000500
1,3,5-Trimethylbenzene	U		0.000124	0.000500
Vinyl chloride	U		0.000118	0.000500

Method Blank (MB)

(MB) 09/08/15 23:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Xylenes, Total	U		0.000316	0.00150
(S) Toluene-d8	*95.6*			*90.0-115*
(S) Dibromofluoromethane	*88.7*			*79.0-121*
(S) 4-Bromofluorobenzene	*107*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/08/15 21:54 • (LCSD) 09/08/15 22:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	0.0253	0.0254	101	102	78.9-123			0.380	20
Carbon disulfide	0.0250	0.0208	0.0207	83.2	82.7	53.0-134			0.560	20
Acetone	0.125	0.109	0.119	87.2	94.9	28.7-175			8.43	20.9
Acrylonitrile	0.125	0.100	0.106	80.0	85.0	58.2-145			6.01	20
Benzene	0.0250	0.0223	0.0219	89.4	87.8	73.0-122			1.85	20
Bromobenzene	0.0250	0.0242	0.0241	97.0	96.3	81.5-115			0.640	20
Bromodichloromethane	0.0250	0.0236	0.0238	94.3	95.1	75.5-121			0.840	20
Bromoform	0.0250	0.0291	0.0291	116	117	71.5-131			0.130	20
Bromomethane	0.0250	0.0213	0.0211	85.0	84.3	22.4-187			0.870	20
n-Butylbenzene	0.0250	0.0220	0.0211	88.1	84.5	75.9-134			4.12	20
sec-Butylbenzene	0.0250	0.0270	0.0267	108	107	80.6-126			1.14	20
trans-1,4-Dichloro-2-butene	0.0250	0.0207	0.0217	82.9	86.8	58.3-129			4.63	20
tert-Butylbenzene	0.0250	0.0280	0.0275	112	110	79.3-127			1.87	20
Carbon tetrachloride	0.0250	0.0254	0.0254	101	101	70.9-129			0.000	20
Chlorobenzene	0.0250	0.0270	0.0267	108	107	79.7-122			1.26	20
Chlorodibromomethane	0.0250	0.0269	0.0267	108	107	78.2-124			0.550	20
2-Hexanone	0.125	0.108	0.116	86.1	92.9	59.4-151			7.55	20
Chloroethane	0.0250	0.0206	0.0199	82.2	79.7	41.2-153			3.19	20
n-Hexane	0.0250	0.0201	0.0197	80.5	78.8	59.5-132			2.07	20
2-Chloroethyl vinyl ether	0.125	0.106	0.107	84.9	85.8	23.4-162			1.08	23.5
Iodomethane	0.125	0.126	0.124	101	99.0	64.6-137			1.84	20
Chloroform	0.0250	0.0230	0.0229	91.8	91.7	73.2-125			0.190	20
Chloromethane	0.0250	0.0182	0.0179	72.8	71.8	55.8-134			1.43	20
2-Chlorotoluene	0.0250	0.0276	0.0270	110	108	76.4-125			2.18	20
4-Chlorotoluene	0.0250	0.0255	0.0249	102	99.6	81.5-121			2.39	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0229	0.0238	91.5	95.0	64.8-131			3.82	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/08/15 21:54 • (LCSD) 09/08/15 22:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dibromoethane	0.0250	0.0251	0.0256	101	103	79.8-122			1.97	20
Dibromomethane	0.0250	0.0247	0.0246	98.7	98.2	79.5-118			0.540	20
1,2-Dichlorobenzene	0.0250	0.0241	0.0235	96.4	94.1	84.7-118			2.45	20
1,3-Dichlorobenzene	0.0250	0.0284	0.0277	114	111	77.6-127			2.60	20
1,4-Dichlorobenzene	0.0250	0.0226	0.0219	90.4	87.4	82.2-114			3.38	20
Dichlorodifluoromethane	0.0250	0.0212	0.0217	84.9	86.8	56.0-134			2.22	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0240	0.0234	96.1	93.4	62.0-141			2.84	20
1,1-Dichloroethane	0.0250	0.0221	0.0216	88.3	86.5	71.7-127			2.03	20
1,2-Dichloroethane	0.0250	0.0213	0.0212	85.0	84.8	65.3-126			0.190	20
1,1-Dichloroethene	0.0250	0.0217	0.0212	86.8	85.0	59.9-137			2.12	20
cis-1,2-Dichloroethene	0.0250	0.0242	0.0238	96.6	95.1	77.3-122			1.62	20
trans-1,2-Dichloroethene	0.0250	0.0243	0.0237	97.2	94.8	72.6-125			2.57	20
1,2-Dichloropropane	0.0250	0.0223	0.0218	89.3	87.2	77.4-125			2.44	20
1,1-Dichloropropene	0.0250	0.0224	0.0224	89.6	89.6	72.5-127			0.0800	20
1,3-Dichloropropane	0.0250	0.0229	0.0228	91.4	91.1	80.6-115			0.330	20
cis-1,3-Dichloropropene	0.0250	0.0244	0.0235	97.7	94.2	77.7-124			3.63	20
trans-1,3-Dichloropropene	0.0250	0.0240	0.0246	95.9	98.4	73.5-127			2.59	20
2,2-Dichloropropane	0.0250	0.0262	0.0260	105	104	61.3-134			0.880	20
1,2,3-Trimethylbenzene	0.0250	0.0221	0.0211	88.5	84.4	79.9-118			4.70	20
Vinyl acetate	0.125	0.0960	0.100	76.8	80.3	41.7-159			4.40	20
Di-isopropyl ether	0.0250	0.0202	0.0200	80.9	80.1	65.1-135			0.980	20
Ethylbenzene	0.0250	0.0272	0.0265	109	106	80.9-121			2.45	20
Hexachloro-1,3-butadiene	0.0250	0.0253	0.0244	101	97.6	73.7-133			3.55	20
Isopropylbenzene	0.0250	0.0273	0.0268	109	107	81.6-124			2.03	20
p-Isopropyltoluene	0.0250	0.0286	0.0279	115	111	77.6-129			2.82	20
2-Butanone (MEK)	0.125	0.0929	0.100	74.3	80.1	46.4-155			7.43	20
Methylene Chloride	0.0250	0.0219	0.0216	87.4	86.3	69.5-120			1.22	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0941	0.0975	75.2	78.0	63.3-138			3.56	20
Methyl tert-butyl ether	0.0250	0.0224	0.0232	89.6	92.8	70.1-125			3.54	20
Naphthalene	0.0250	0.0222	0.0221	88.8	88.3	69.7-134			0.570	20
n-Propylbenzene	0.0250	0.0258	0.0253	103	101	81.9-122			1.72	20
Styrene	0.0250	0.0281	0.0275	112	110	79.9-124			2.17	20
1,1,1,2-Tetrachloroethane	0.0250	0.0287	0.0284	115	114	78.5-125			1.14	20
1,1,2,2-Tetrachloroethane	0.0250	0.0227	0.0236	91.0	94.5	79.3-123			3.77	20
Tetrachloroethene	0.0250	0.0291	0.0285	116	114	73.5-130			1.85	20
Toluene	0.0250	0.0245	0.0236	97.9	94.4	77.9-116			3.58	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/08/15 21:54 • (LCSD) 09/08/15 22:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,3-Trichlorobenzene	0.0250	0.0251	0.0241	100	96.5	75.7-134			3.77	20
1,2,4-Trichlorobenzene	0.0250	0.0259	0.0246	104	98.5	76.1-136			5.01	20
1,1,1-Trichloroethane	0.0250	0.0243	0.0238	97.3	95.3	71.1-129			2.10	20
1,1,2-Trichloroethane	0.0250	0.0259	0.0256	104	102	81.6-120			1.29	20
Trichloroethene	0.0250	0.0271	0.0269	109	107	79.5-121			1.10	20
Trichlorofluoromethane	0.0250	0.0225	0.0224	90.1	89.7	49.1-157			0.420	20
1,2,3-Trichloropropane	0.0250	0.0246	0.0249	98.2	99.7	74.9-124			1.54	20
1,2,4-Trimethylbenzene	0.0250	0.0270	0.0265	108	106	79.0-122			2.00	20
1,3,5-Trimethylbenzene	0.0250	0.0268	0.0263	107	105	81.0-123			1.86	20
Vinyl chloride	0.0250	0.0202	0.0203	80.9	81.1	61.5-134			0.250	20
Xylenes, Total	0.0750	0.0809	0.0782	108	104	79.2-122			3.36	20
(S) Toluene-d8				*96.6*	*96.3*	*90.0-115*				
(S) Dibromofluoromethane				*90.4*	*91.9*	*79.0-121*				
(S) 4-Bromofluorobenzene				*106*	*108*	*80.1-120*				

L787103-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 01:42 • (MS) 09/08/15 23:59 • (MSD) 09/09/15 00:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	ND	0.0240	0.0234	96.0	93.5	1	74.4-128			2.64	20
Carbon disulfide	0.0250	ND	0.0157	0.0155	63.0	62.0	1	34.9-138			1.51	20
Acetone	0.125	0.00193	0.0615	0.0617	47.7	47.8	1	25.0-156			0.290	21.5
trans-1,4-Dichloro-2-butene	0.0250	ND	0.0206	0.0206	82.4	82.3	1	57.6-136			0.110	20
Acrylonitrile	0.125	ND	0.102	0.101	81.6	81.1	1	55.9-161			0.690	20
Benzene	0.0250	ND	0.0204	0.0200	81.6	80.1	1	58.6-133			1.88	20
Bromobenzene	0.0250	ND	0.0231	0.0225	92.4	89.9	1	70.6-125			2.72	20
Bromodichloromethane	0.0250	ND	0.0227	0.0217	90.8	86.9	1	69.2-127			4.30	20
2-Hexanone	0.125	ND	0.0995	0.0985	79.6	78.8	1	59.4-154			1.01	20.1
n-Hexane	0.0250	ND	0.0163	0.0159	65.2	63.8	1	38.7-146			2.17	20
Bromoform	0.0250	ND	0.0288	0.0282	115	113	1	66.3-140			2.29	20
Iodomethane	0.125	ND	0.109	0.107	87.1	85.9	1	55.2-140			1.44	20
Bromomethane	0.0250	ND	0.0183	0.0177	73.2	70.8	1	16.6-183			3.30	20.5
n-Butylbenzene	0.0250	ND	0.0211	0.0202	84.4	80.6	1	64.8-145			4.60	20
sec-Butylbenzene	0.0250	ND	0.0264	0.0250	106	100	1	66.8-139			5.24	20
tert-Butylbenzene	0.0250	ND	0.0276	0.0262	110	105	1	67.1-138			5.17	20

L787103-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 01:42 • (MS) 09/08/15 23:59 • (MSD) 09/09/15 00:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	ND	0.0234	0.0231	93.8	92.5	1	60.6-139			1.39	20
Chlorobenzene	0.0250	ND	0.0253	0.0249	101	99.5	1	70.1-130			1.77	20
Chlorodibromomethane	0.0250	ND	0.0267	0.0257	107	103	1	71.6-132			3.83	20
Chloroethane	0.0250	ND	0.0178	0.0173	71.1	69.3	1	33.3-155			2.64	20
2-Chloroethyl vinyl ether	0.125	ND	0.00690	0.00151	5.52	1.21	1	5.00-149		J3 J6	128	40
Chloroform	0.0250	ND	0.0215	0.0210	86.0	84.0	1	66.1-133			2.35	20
Chloromethane	0.0250	ND	0.0149	0.0146	59.4	58.4	1	40.7-139			1.75	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.169	0.167	0.166	0.000	0.000	1	53.7-150	V	V	0.940	20
2-Chlorotoluene	0.0250	ND	0.0265	0.0255	106	102	1	66.9-134			3.86	20
4-Chlorotoluene	0.0250	ND	0.0243	0.0234	97.2	93.5	1	66.8-134			3.81	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0242	0.0243	96.7	97.0	1	63.9-142			0.360	20.2
1,2-Dibromoethane	0.0250	ND	0.0249	0.0245	99.6	98.0	1	73.8-131			1.64	20
Dibromomethane	0.0250	ND	0.0232	0.0225	92.7	89.9	1	72.8-127			3.05	20
1,2-Dichlorobenzene	0.0250	ND	0.0229	0.0225	91.6	90.0	1	77.4-127			1.81	20
1,3-Dichlorobenzene	0.0250	ND	0.0280	0.0267	112	107	1	67.9-136			4.89	20
1,4-Dichlorobenzene	0.0250	ND	0.0216	0.0208	86.3	83.0	1	74.4-123			3.84	20
Dichlorodifluoromethane	0.0250	0.000870	0.0203	0.0204	77.9	78.2	1	42.2-146			0.400	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0206	0.0200	82.5	80.1	1	62.7-133			2.99	20
1,1-Dichloroethane	0.0250	0.000701	0.0209	0.0203	80.7	78.4	1	64.0-134			2.88	20
1,2-Dichloroethane	0.0250	ND	0.0197	0.0193	78.8	77.2	1	60.7-132			2.16	20
Vinyl acetate	0.125	ND	0.109	0.109	87.4	87.3	1	42.8-181			0.110	20
1,1-Dichloroethene	0.0250	0.00714	0.0252	0.0255	72.1	73.6	1	48.8-144			1.46	20
cis-1,2-Dichloroethene	0.0250	0.0953	0.107	0.105	48.2	38.7	1	60.6-136	J6	J6	2.22	20
trans-1,2-Dichloroethene	0.0250	0.000637	0.0219	0.0215	85.0	83.4	1	61.0-132			1.82	20
1,2-Dichloropropane	0.0250	ND	0.0205	0.0197	82.0	78.8	1	69.7-130			3.94	20
1,1-Dichloropropene	0.0250	ND	0.0198	0.0197	79.1	78.8	1	61.5-136			0.340	20
1,3-Dichloropropane	0.0250	ND	0.0219	0.0215	87.6	86.0	1	74.3-123			1.88	20
cis-1,3-Dichloropropene	0.0250	ND	0.0218	0.0211	87.3	84.6	1	71.1-129			3.15	20
trans-1,3-Dichloropropene	0.0250	ND	0.0250	0.0248	100	99.0	1	66.3-136			1.08	20
2,2-Dichloropropane	0.0250	ND	0.0239	0.0225	95.6	90.2	1	54.9-142			5.87	20
Di-isopropyl ether	0.0250	ND	0.0190	0.0189	76.1	75.5	1	59.9-140			0.910	20
Ethylbenzene	0.0250	ND	0.0251	0.0239	100	95.6	1	62.7-136			4.89	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0245	0.0236	97.8	94.4	1	61.1-144			3.57	20.1
Isopropylbenzene	0.0250	ND	0.0262	0.0251	105	100	1	67.4-136			4.43	20
p-Isopropyltoluene	0.0250	ND	0.0276	0.0265	110	106	1	62.8-143			4.00	20
2-Butanone (MEK)	0.125	ND	0.0762	0.0770	61.0	61.6	1	45.0-156			1.02	20.8

L787103-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 01:42 • (MS) 09/08/15 23:59 • (MSD) 09/09/15 00:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methylene Chloride	0.0250	0.000472	0.0200	0.0196	78.3	76.7	1	61.5-125			2.04	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0928	0.0914	74.2	73.1	1	60.7-150			1.49	20
Methyl tert-butyl ether	0.0250	ND	0.0220	0.0218	87.9	87.4	1	61.4-136			0.640	20
Naphthalene	0.0250	ND	0.0225	0.0223	89.9	89.0	1	61.8-143			0.990	20
n-Propylbenzene	0.0250	ND	0.0244	0.0234	97.6	93.7	1	63.2-139			4.10	20
Styrene	0.0250	ND	0.0266	0.0256	106	102	1	68.2-133			3.83	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0278	0.0268	111	107	1	70.5-132			3.66	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0247	0.0236	98.8	94.5	1	64.9-145			4.39	20
Tetrachloroethene	0.0250	3.37	2.97	2.86	0.000	0.000	1	57.4-141	V	V	3.70	20
Toluene	0.0250	ND	0.0218	0.0208	87.2	83.1	1	67.8-124			4.85	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0245	0.0241	97.8	96.3	1	65.7-143			1.58	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0254	0.0247	102	98.7	1	67.0-146			2.75	20
1,1,1-Trichloroethane	0.0250	0.00269	0.0243	0.0239	86.4	84.7	1	58.7-134			1.74	20
1,1,2-Trichloroethane	0.0250	ND	0.0251	0.0244	101	97.8	1	74.1-130			2.85	20
Trichloroethene	0.0250	0.219	0.214	0.208	0.000	0.000	1	48.9-148	V	V	2.62	20
Trichlorofluoromethane	0.0250	ND	0.0195	0.0194	78.2	77.6	1	39.9-165			0.720	20
1,2,3-Trichloropropane	0.0250	ND	0.0263	0.0255	105	102	1	71.5-134			2.88	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0263	0.0251	105	100	1	60.5-137			4.78	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0258	0.0249	103	99.7	1	67.9-134			3.49	20
Vinyl chloride	0.0250	ND	0.0173	0.0171	69.1	68.6	1	44.3-143			0.680	20
Xylenes, Total	0.0750	ND	0.0757	0.0723	101	96.3	1	65.6-133			4.67	20
(S) Toluene-d8					*93.5*	*93.3*		*90.0-115*				
(S) Dibromofluoromethane					*89.0*	*91.6*		*79.0-121*				
(S) 4-Bromofluorobenzene					*107*	*108*		*80.1-120*				

Method Blank (MB)

(MB) 09/10/15 15:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
cis-1,2-Dichloroethene	U		0.0000933	0.000500
Trichloroethene	U		0.000153	0.000500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/10/15 14:31 • (LCSD) 09/10/15 14:50

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
cis-1,2-Dichloroethene	0.0250	0.0237	0.0227	94.8	90.9	77.3-122			4.18	20
Trichloroethene	0.0250	0.0254	0.0248	102	99.1	79.5-121			2.70	20

L786852-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/10/15 17:05 • (MS) 09/10/15 17:25 • (MSD) 09/10/15 17:45

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
cis-1,2-Dichloroethene	0.0250	ND	0.0215	0.0217	86.2	86.9	1	60.6-136			0.900	20
Trichloroethene	0.0250	ND	0.0228	0.0226	91.1	90.4	1	48.9-148			0.780	20

Method Blank (MB)

(MB) 09/11/15 14:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.000597	0.00300
(S) Toluene-d8	*96.4*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/11/15 13:21 • (LCSD) 09/11/15 13:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0499	0.0487	99.9	97.5	70.0-130			2.45	25
(S) Toluene-d8				*96.4*	*96.1*	*70.0-130*				

L786989-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/11/15 16:17 • (MS) 09/11/15 15:05 • (MSD) 09/11/15 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0931	0.113	0.129	39.2	72.8	1	0.000-200			13.9	42
(S) Toluene-d8					*96.7*	*96.5*		*70.0-130*				

Method Blank (MB)

(MB) 09/14/15 11:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.000597	0.00300
(S) Toluene-d8	*95.9*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/14/15 10:16 • (LCSD) 09/14/15 12:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0420	0.0368	84.0	73.6	70.0-130			13.3	25
(S) Toluene-d8				*96.5*	*95.9*	*70.0-130*				

L787593-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/14/15 14:40 • (MS) 09/14/15 13:04 • (MSD) 09/14/15 13:28

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.00119	0.0504	0.0662	98.5	130	1	0.000-200			27.0	42
(S) Toluene-d8					*99.6*	*99.0*		*70.0-130*				

Method Blank (MB)

(MB) 09/15/15 12:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.00105	0.0250
Acrylonitrile	U		0.000873	0.00250
Benzene	U		0.0000896	0.000500
Bromobenzene	U		0.000133	0.000500
Bromochloromethane	U		0.000145	0.000500
Bromodichloromethane	U		0.0000800	0.000500
Bromoform	U		0.000186	0.000500
Bromomethane	U		0.000157	0.000500
n-Butylbenzene	U		0.000143	0.000500
Carbon disulfide	U		0.000101	0.000500
sec-Butylbenzene	U		0.000134	0.000500
tert-Butylbenzene	U		0.000183	0.000500
Carbon tetrachloride	U		0.000159	0.000500
Chlorobenzene	U		0.000140	0.000500
Chlorodibromomethane	U		0.000128	0.000500
Chloroethane	U		0.000141	0.000500
2-Chloroethyl vinyl ether	U		0.000877	0.00250
Chloroform	U		0.0000860	0.000500
Chloromethane	U		0.000153	0.000500
2-Chlorotoluene	U		0.000111	0.000500
4-Chlorotoluene	U		0.0000972	0.000500
1,2-Dibromo-3-Chloropropane	U		0.000325	0.00100
1,2-Dibromoethane	U		0.000193	0.000500
Dibromomethane	U		0.000117	0.000500
1,2-Dichlorobenzene	U		0.000101	0.000500
1,3-Dichlorobenzene	U		0.000130	0.000500
1,4-Dichlorobenzene	U		0.000121	0.000500
Dichlorodifluoromethane	U		0.000127	0.000500
1,1-Dichloroethane	U		0.000114	0.000500
1,2-Dichloroethane	U		0.000108	0.000500
1,1-Dichloroethene	U		0.000188	0.000500
cis-1,2-Dichloroethene	U		0.0000933	0.000500
trans-1,2-Dichloroethene	U		0.000152	0.000500
1,2-Dichloropropane	U		0.000190	0.000500
1,1-Dichloropropene	U		0.000128	0.000500
trans-1,4-Dichloro-2-butene	U		0.000257	0.00500

Method Blank (MB)

(MB) 09/15/15 12:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,3-Dichloropropane	U		0.000147	0.000500
cis-1,3-Dichloropropene	U		0.0000976	0.000500
trans-1,3-Dichloropropene	U		0.000222	0.000500
2,2-Dichloropropane	U		0.0000929	0.000500
Di-isopropyl ether	U		0.0000924	0.000500
2-Hexanone	U		0.000757	0.00250
Ethylbenzene	U		0.000158	0.000500
Iodomethane	U		0.000377	0.0100
Hexachloro-1,3-butadiene	U		0.000157	0.00100
n-Hexane	U		0.000305	0.00100
Isopropylbenzene	U		0.000126	0.000500
p-Isopropyltoluene	U		0.000138	0.000500
2-Butanone (MEK)	U		0.00128	0.00250
Methylene Chloride	U		0.00107	0.00250
4-Methyl-2-pentanone (MIBK)	U		0.000823	0.00250
Methyl tert-butyl ether	U		0.000102	0.000500
1,1,2-Trichlorotrifluoroethane	U		0.000164	0.000500
Naphthalene	U		0.000174	0.000500
n-Propylbenzene	U		0.000162	0.000500
Styrene	U		0.000117	0.000500
1,1,1,2-Tetrachloroethane	U		0.000120	0.000500
1,1,2,2-Tetrachloroethane	U		0.000130	0.000500
Tetrachloroethene	U		0.000199	0.000500
1,2,3-Trimethylbenzene	U		0.0000739	0.000500
Toluene	U		0.000102	0.000500
Vinyl acetate	U		0.000645	0.00250
1,2,3-Trichlorobenzene	U		0.000164	0.000500
1,2,4-Trichlorobenzene	U		0.000355	0.000500
1,1,1-Trichloroethane	U		0.0000940	0.000500
1,1,2-Trichloroethane	U		0.000186	0.000500
Trichloroethene	U		0.000153	0.000500
Trichlorofluoromethane	U		0.000130	0.000500
1,2,3-Trichloropropane	U		0.000247	0.00250
1,2,4-Trimethylbenzene	U		0.000123	0.000500
1,3,5-Trimethylbenzene	U		0.000124	0.000500
Vinyl chloride	U		0.000118	0.000500

Method Blank (MB)

(MB) 09/15/15 12:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Xylenes, Total	U		0.000316	0.00150
(S) Toluene-d8	*102*			*90.0-115*
(S) Dibromofluoromethane	*95.4*			*79.0-121*
(S) 4-Bromofluorobenzene	*96.6*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/15/15 11:02 • (LCSD) 09/15/15 11:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	0.0244	0.0255	97.6	102	78.9-123			4.43	20
Carbon disulfide	0.0250	0.0237	0.0241	94.9	96.4	53.0-134			1.60	20
Acetone	0.125	0.111	0.102	88.9	81.9	28.7-175			8.20	20.9
Acrylonitrile	0.125	0.136	0.144	109	115	58.2-145			5.58	20
Benzene	0.0250	0.0239	0.0246	95.6	98.4	73.0-122			2.84	20
Bromobenzene	0.0250	0.0250	0.0250	99.9	99.9	81.5-115			0.0200	20
Bromodichloromethane	0.0250	0.0236	0.0240	94.2	95.9	75.5-121			1.82	20
Bromoform	0.0250	0.0268	0.0270	107	108	71.5-131			0.800	20
Bromomethane	0.0250	0.0228	0.0242	91.1	96.7	22.4-187			5.99	20
n-Butylbenzene	0.0250	0.0252	0.0259	101	104	75.9-134			2.83	20
sec-Butylbenzene	0.0250	0.0257	0.0258	103	103	80.6-126			0.670	20
trans-1,4-Dichloro-2-butene	0.0250	0.0243	0.0241	97.1	96.3	58.3-129			0.820	20
tert-Butylbenzene	0.0250	0.0251	0.0255	101	102	79.3-127			1.56	20
Carbon tetrachloride	0.0250	0.0228	0.0236	91.1	94.5	70.9-129			3.63	20
Chlorobenzene	0.0250	0.0258	0.0264	103	105	79.7-122			2.12	20
Chlorodibromomethane	0.0250	0.0256	0.0267	103	107	78.2-124			4.00	20
2-Hexanone	0.125	0.143	0.142	115	114	59.4-151			0.790	20
Chloroethane	0.0250	0.0225	0.0229	89.9	91.8	41.2-153			2.11	20
2-Chloroethyl vinyl ether	0.125	0.124	0.127	99.3	102	23.4-162			2.58	23.5
Iodomethane	0.125	0.123	0.128	98.8	103	64.6-137			3.76	20
Chloroform	0.0250	0.0222	0.0230	88.8	92.0	73.2-125			3.61	20
Chloromethane	0.0250	0.0236	0.0245	94.3	97.9	55.8-134			3.73	20
2-Chlorotoluene	0.0250	0.0243	0.0247	97.4	98.8	76.4-125			1.44	20
4-Chlorotoluene	0.0250	0.0244	0.0244	97.7	97.7	81.5-121			0.0200	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0239	0.0245	95.5	97.9	64.8-131			2.43	20
1,2-Dibromoethane	0.0250	0.0255	0.0254	102	101	79.8-122			0.340	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/15/15 11:02 • (LCSD) 09/15/15 11:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dibromomethane	0.0250	0.0250	0.0256	99.8	103	79.5-118			2.71	20
1,2-Dichlorobenzene	0.0250	0.0242	0.0246	96.9	98.6	84.7-118			1.68	20
1,3-Dichlorobenzene	0.0250	0.0249	0.0250	99.7	99.8	77.6-127			0.190	20
1,4-Dichlorobenzene	0.0250	0.0240	0.0245	96.2	98.0	82.2-114			1.87	20
Dichlorodifluoromethane	0.0250	0.0213	0.0217	85.0	86.8	56.0-134			2.10	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0240	0.0249	95.9	99.6	62.0-141			3.73	20
1,1-Dichloroethane	0.0250	0.0237	0.0247	94.8	98.6	71.7-127			3.98	20
1,2-Dichloroethane	0.0250	0.0215	0.0221	85.8	88.2	65.3-126			2.74	20
1,1-Dichloroethene	0.0250	0.0242	0.0245	96.7	98.0	59.9-137			1.30	20
cis-1,2-Dichloroethene	0.0250	0.0232	0.0239	92.7	95.5	77.3-122			2.91	20
trans-1,2-Dichloroethene	0.0250	0.0235	0.0244	94.1	97.6	72.6-125			3.66	20
1,2-Dichloropropane	0.0250	0.0263	0.0279	105	112	77.4-125			5.66	20
1,1-Dichloropropene	0.0250	0.0232	0.0246	92.9	98.3	72.5-127			5.65	20
1,3-Dichloropropane	0.0250	0.0252	0.0252	101	101	80.6-115			0.180	20
cis-1,3-Dichloropropene	0.0250	0.0254	0.0260	102	104	77.7-124			2.33	20
trans-1,3-Dichloropropene	0.0250	0.0259	0.0262	104	105	73.5-127			1.10	20
2,2-Dichloropropane	0.0250	0.0198	0.0215	79.1	85.8	61.3-134			8.17	20
1,2,3-Trimethylbenzene	0.0250	0.0243	0.0247	97.1	98.8	79.9-118			1.76	20
Vinyl acetate	0.125	0.152	0.153	122	122	41.7-159			0.500	20
Di-isopropyl ether	0.0250	0.0248	0.0257	99.1	103	65.1-135			3.67	20
Ethylbenzene	0.0250	0.0250	0.0255	100	102	80.9-121			2.09	20
Hexachloro-1,3-butadiene	0.0250	0.0248	0.0249	99.3	99.7	73.7-133			0.380	20
n-Hexane	0.0250	0.0252	0.0260	101	104	59.5-132			3.29	20
Isopropylbenzene	0.0250	0.0255	0.0255	102	102	81.6-124			0.0500	20
p-Isopropyltoluene	0.0250	0.0256	0.0256	102	102	77.6-129			0.170	20
2-Butanone (MEK)	0.125	0.126	0.125	101	100	46.4-155			0.710	20
Methylene Chloride	0.0250	0.0236	0.0248	94.4	99.1	69.5-120			4.86	20
4-Methyl-2-pentanone (MIBK)	0.125	0.135	0.139	108	111	63.3-138			2.51	20
Methyl tert-butyl ether	0.0250	0.0231	0.0238	92.3	95.0	70.1-125			2.96	20
Naphthalene	0.0250	0.0252	0.0255	101	102	69.7-134			1.17	20
n-Propylbenzene	0.0250	0.0255	0.0257	102	103	81.9-122			1.05	20
Styrene	0.0250	0.0250	0.0259	99.9	103	79.9-124			3.49	20
1,1,1,2-Tetrachloroethane	0.0250	0.0242	0.0246	96.8	98.5	78.5-125			1.74	20
1,1,2,2-Tetrachloroethane	0.0250	0.0268	0.0269	107	108	79.3-123			0.340	20
Tetrachloroethene	0.0250	0.0250	0.0253	100	101	73.5-130			0.970	20
Toluene	0.0250	0.0248	0.0256	99.2	102	77.9-116			3.07	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/15/15 11:02 • (LCSD) 09/15/15 11:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,3-Trichlorobenzene	0.0250	0.0258	0.0262	103	105	75.7-134			1.55	20
1,2,4-Trichlorobenzene	0.0250	0.0257	0.0259	103	104	76.1-136			0.640	20
1,1,1-Trichloroethane	0.0250	0.0213	0.0220	85.1	87.8	71.1-129			3.14	20
1,1,2-Trichloroethane	0.0250	0.0253	0.0254	101	102	81.6-120			0.400	20
Trichloroethene	0.0250	0.0245	0.0252	97.9	101	79.5-121			2.94	20
Trichlorofluoromethane	0.0250	0.0243	0.0254	97.2	102	49.1-157			4.40	20
1,2,3-Trichloropropane	0.0250	0.0259	0.0261	104	104	74.9-124			0.590	20
1,2,4-Trimethylbenzene	0.0250	0.0248	0.0248	99.1	99.2	79.0-122			0.110	20
1,3,5-Trimethylbenzene	0.0250	0.0250	0.0251	99.9	100	81.0-123			0.460	20
Vinyl chloride	0.0250	0.0235	0.0239	93.8	95.7	61.5-134			1.99	20
Xylenes, Total	0.0750	0.0758	0.0769	101	103	79.2-122			1.46	20
(S) Toluene-d8				*104*	*105*	*90.0-115*				
(S) Dibromofluoromethane				*92.8*	*95.1*	*79.0-121*				
(S) 4-Bromofluorobenzene				*96.1*	*96.2*	*80.1-120*				

L787282-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/15/15 14:49 • (MS) 09/15/15 15:09 • (MSD) 09/15/15 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	ND	0.0239	0.0221	95.4	88.5	1	74.4-128			7.55	20
Carbon disulfide	0.0250	ND	0.0200	0.0209	80.1	83.4	1	34.9-138			4.08	20
Acetone	0.125	ND	0.0408	0.0221	32.7	17.7	1	25.0-156		J3 J6	59.4	21.5
trans-1,4-Dichloro-2-butene	0.0250	ND	0.0213	0.0205	85.1	82.0	1	57.6-136			3.70	20
Acrylonitrile	0.125	ND	0.109	0.0791	87.4	63.3	1	55.9-161		J3	32.0	20
Benzene	0.0250	ND	0.0227	0.0225	90.7	90.1	1	58.6-133			0.640	20
Bromobenzene	0.0250	ND	0.0233	0.0247	93.3	98.7	1	70.6-125			5.57	20
Bromodichloromethane	0.0250	ND	0.0226	0.0220	90.6	88.1	1	69.2-127			2.80	20
2-Hexanone	0.125	ND	0.112	0.0939	89.3	75.1	1	59.4-154			17.2	20.1
Bromoform	0.0250	ND	0.0256	0.0243	102	97.3	1	66.3-140			5.00	20
Iodomethane	0.125	ND	0.118	0.116	94.1	92.4	1	55.2-140			1.83	20
Bromomethane	0.0250	ND	0.0222	0.0231	88.9	92.5	1	16.6-183			3.93	20.5
n-Butylbenzene	0.0250	ND	0.0235	0.0236	93.9	94.4	1	64.8-145			0.500	20
sec-Butylbenzene	0.0250	ND	0.0233	0.0250	93.2	100	1	66.8-139			7.08	20
tert-Butylbenzene	0.0250	ND	0.0231	0.0250	92.6	100	1	67.1-138			7.71	20
Carbon tetrachloride	0.0250	ND	0.0220	0.0220	87.8	87.8	1	60.6-139			0.0100	20

L787282-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/15/15 14:49 • (MS) 09/15/15 15:09 • (MSD) 09/15/15 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chlorobenzene	0.0250	ND	0.0246	0.0260	98.4	104	1	70.1-130			5.42	20
Chlorodibromomethane	0.0250	ND	0.0253	0.0250	101	100	1	71.6-132			1.05	20
Chloroethane	0.0250	ND	0.0221	0.0222	88.3	88.9	1	33.3-155			0.780	20
2-Chloroethyl vinyl ether	0.125	ND	0.000321	0.000	0.257	0.000	1	5.00-149	J6	J3 J6	200	40
Chloroform	0.0250	0.000648	0.0222	0.0213	86.1	82.8	1	66.1-133			3.74	20
Chloromethane	0.0250	ND	0.0227	0.0227	90.6	90.8	1	40.7-139			0.210	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0241	0.0236	96.3	94.5	1	53.7-150			1.91	20
2-Chlorotoluene	0.0250	ND	0.0230	0.0249	92.0	99.5	1	66.9-134			7.82	20
4-Chlorotoluene	0.0250	ND	0.0229	0.0244	91.6	97.5	1	66.8-134			6.28	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0214	0.0201	85.8	80.5	1	63.9-142			6.33	20.2
1,2-Dibromoethane	0.0250	ND	0.0240	0.0240	96.1	95.9	1	73.8-131			0.260	20
Dibromomethane	0.0250	ND	0.0232	0.0220	92.7	88.0	1	72.8-127			5.23	20
1,2-Dichlorobenzene	0.0250	ND	0.0229	0.0235	91.6	94.1	1	77.4-127			2.69	20
1,3-Dichlorobenzene	0.0250	ND	0.0235	0.0253	94.2	101	1	67.9-136			7.00	20
1,4-Dichlorobenzene	0.0250	ND	0.0236	0.0235	94.6	94.0	1	74.4-123			0.650	20
Dichlorodifluoromethane	0.0250	ND	0.0221	0.0217	88.5	86.8	1	42.2-146			2.00	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0227	0.0230	90.8	91.9	1	62.7-133			1.25	20
1,1-Dichloroethane	0.0250	ND	0.0230	0.0229	91.8	91.8	1	64.0-134			0.0600	20
1,2-Dichloroethane	0.0250	ND	0.0208	0.0199	83.0	79.6	1	60.7-132			4.23	20
Vinyl acetate	0.125	ND	0.148	0.135	119	108	1	42.8-181			9.52	20
1,1-Dichloroethene	0.0250	ND	0.0211	0.0214	84.3	85.5	1	48.8-144			1.38	20
cis-1,2-Dichloroethene	0.0250	0.00114	0.0232	0.0234	88.0	88.9	1	60.6-136			0.960	20
trans-1,2-Dichloroethene	0.0250	ND	0.0226	0.0225	90.2	90.1	1	61.0-132			0.110	20
1,2-Dichloropropane	0.0250	ND	0.0249	0.0242	99.8	96.9	1	69.7-130			2.98	20
1,1-Dichloropropene	0.0250	ND	0.0223	0.0225	89.2	90.2	1	61.5-136			1.08	20
1,3-Dichloropropane	0.0250	ND	0.0238	0.0246	95.2	98.2	1	74.3-123			3.11	20
cis-1,3-Dichloropropene	0.0250	ND	0.0234	0.0227	93.7	90.8	1	71.1-129			3.10	20
trans-1,3-Dichloropropene	0.0250	ND	0.0241	0.0244	96.4	97.7	1	66.3-136			1.24	20
2,2-Dichloropropane	0.0250	ND	0.0206	0.0211	82.5	84.6	1	54.9-142			2.47	20
Di-isopropyl ether	0.0250	ND	0.0233	0.0222	93.1	88.9	1	59.9-140			4.62	20
Ethylbenzene	0.0250	ND	0.0242	0.0258	97.0	103	1	62.7-136			6.36	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0213	0.0215	85.1	86.2	1	61.1-144			1.24	20.1
n-Hexane	0.0250	ND	0.0200	0.0208	80.0	83.0	1	38.7-146			3.77	20
Isopropylbenzene	0.0250	ND	0.0234	0.0254	93.6	101	1	67.4-136			8.10	20
p-Isopropyltoluene	0.0250	ND	0.0232	0.0246	92.8	98.4	1	62.8-143			5.86	20
2-Butanone (MEK)	0.125	ND	0.0617	0.0379	49.3	30.3	1	45.0-156		J3 J6	47.8	20.8

L787282-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/15/15 14:49 • (MS) 09/15/15 15:09 • (MSD) 09/15/15 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methylene Chloride	0.0250	0.000658	0.0231	0.0213	89.6	82.4	1	61.5-125			8.13	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.120	0.0984	95.8	78.7	1	60.7-150			19.6	20
Methyl tert-butyl ether	0.0250	ND	0.0211	0.0188	84.2	75.3	1	61.4-136			11.2	20
Naphthalene	0.0250	ND	0.0232	0.0231	92.8	92.2	1	61.8-143			0.660	20
n-Propylbenzene	0.0250	ND	0.0236	0.0256	94.6	102	1	63.2-139			7.74	20
Styrene	0.0250	ND	0.0237	0.0246	94.7	98.4	1	68.2-133			3.89	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0233	0.0244	93.0	97.5	1	70.5-132			4.75	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0254	0.0245	102	98.1	1	64.9-145			3.73	20
Tetrachloroethene	0.0250	ND	0.0238	0.0253	95.4	101	1	57.4-141			6.05	20
Toluene	0.0250	0.00118	0.0245	0.0250	93.3	95.3	1	67.8-124			1.94	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0242	0.0242	96.9	96.7	1	65.7-143			0.280	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0240	0.0238	96.2	95.4	1	67.0-146			0.860	20
1,1,1-Trichloroethane	0.0250	ND	0.0210	0.0212	84.2	84.7	1	58.7-134			0.630	20
1,1,2-Trichloroethane	0.0250	ND	0.0241	0.0249	96.4	99.4	1	74.1-130			3.04	20
Trichloroethene	0.0250	0.124	0.129	0.133	20.5	35.5	1	48.9-148	V	V	2.86	20
Trichlorofluoromethane	0.0250	ND	0.0241	0.0231	96.4	92.4	1	39.9-165			4.26	20
1,2,3-Trichloropropane	0.0250	ND	0.0243	0.0232	97.1	92.6	1	71.5-134			4.74	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0228	0.0246	91.3	98.5	1	60.5-137			7.62	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0231	0.0248	92.3	99.4	1	67.9-134			7.35	20
Vinyl chloride	0.0250	ND	0.0225	0.0227	90.0	90.6	1	44.3-143			0.700	20
Xylenes, Total	0.0750	0.00147	0.0723	0.0774	94.5	101	1	65.6-133			6.81	20
(S) Toluene-d8					*101*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*92.3*	*90.2*		*79.0-121*				
(S) 4-Bromofluorobenzene					*93.0*	*98.7*		*80.1-120*				

Method Blank (MB)

(MB) 09/15/15 13:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.000597	0.00300
(S) Toluene-d8	*95.8*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/15/15 12:08 • (LCSD) 09/15/15 12:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0415	0.0514	82.9	103	70.0-130			21.3	25
(S) Toluene-d8				*95.8*	*95.5*	*70.0-130*				

L788267-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/15/15 14:40 • (MS) 09/15/15 17:44 • (MSD) 09/15/15 18:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0756	0.150	0.147	148	142	1	0.000-200			2.04	42
(S) Toluene-d8					*96.0*	*95.8*		*70.0-130*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

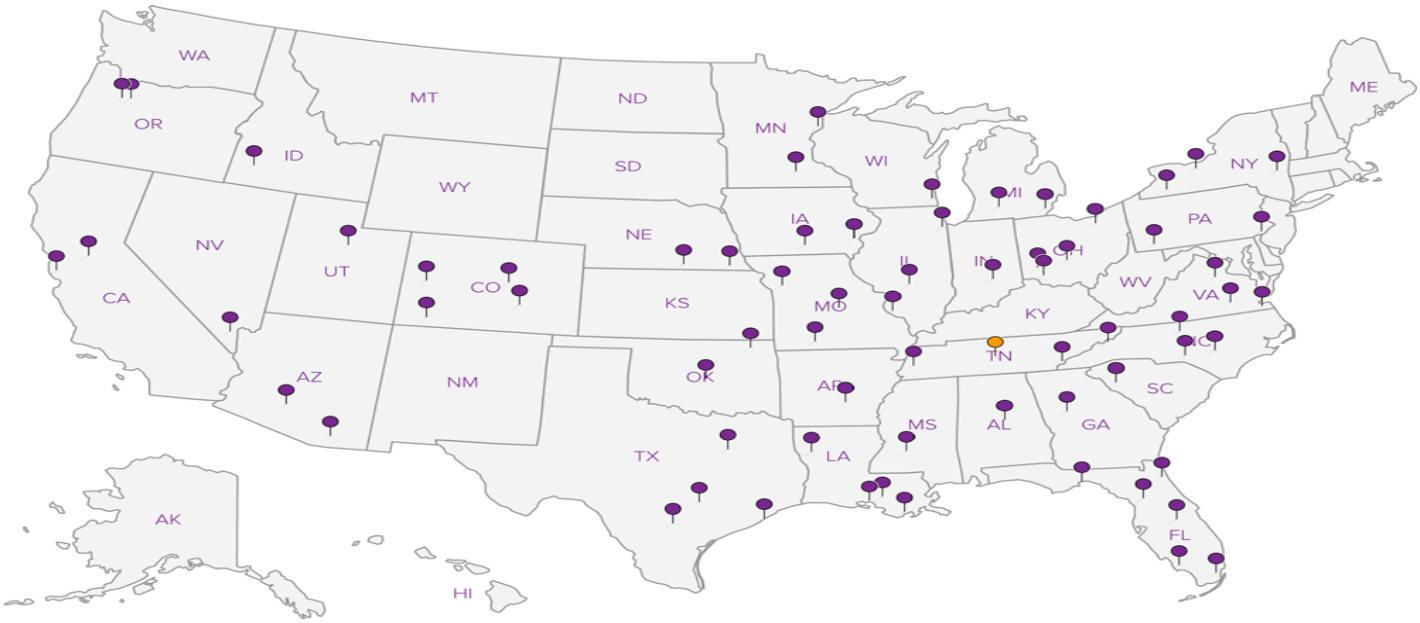
[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Chain of Custody Page 1 of 3

ESC LAB SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L787282

C241

Company Name/Address:
AECOM
701 Corporate Center Drive
Suite 475
Raleigh , NC 27607

Billing Information:
Quote #:
ENSRNC021815S

Report to:
Bob Wyrick

Email To:
bob.wyrick@aecom.com

Project Description: Parker Wake Forest

City/State Collected: Wake Forest, NC

Phone: 919-872-6600
Fax:

Client Project #
60341618.2

Lab Project #

Collected by (print):
A.C. Whisenhunt

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed
Standard

Email? ___No X Yes
FAX? X No ___Yes

Acctnum: ENSRNC
Template:
Prelogin:
TSR:
Cooler:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260LL: 4 x 40ml amber VOAs w/ HCl	14 D x 8260SIM: 2 z 40ml amber VOAs w/ HCl	Cr & Ni x 6010: 250 HDPE-Nitric	Rem./Contaminant	Sample # (lab only)
mw-3	Grab	GW		9-2-15	0930	5	X		X		-01
mw-6	Grab	GW		9-2-15	1400	6	X	X			-02/-03
mw-6DR3	Grab	GW		9-2-15	1315	6	X	X			-03 -04/-05
mw-8	Grab	GW		9-1-15	1335	4	X				-04 -06
mw-8D	Grab	GW		9-1-15	1440	4	X				-05 -07
mw-8DR	Grab	GW		9-1-15	1410	4	X				-06 -08
mw-13	Grab	GW		9-3-15	1315	6	X	X			-07 -09/-10
mw-21	Grab	GW		9-1-15	1235	4	X				-08 -11
mw-21D	Grab	GW		9-1-15	1200	4	X				-09 -12
mw-29	Grab	GW		9-3-15	1230	6	X	X			-10 -13/-14

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #

Condition: OK (lab use only)

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9-4-15	1000	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
	9/4/15	16:45	

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____

Temp: 3.6 °C Bottles Received: 16

Date: 9/5/15 Time: 700

COC Seal Intact: ___Y ___N ___NA

pH Checked: OK NCF:

Company Name/Address:
AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607

Billing Information:
Quote #:
ENSRNC021815S

Report to:
Bob Wyrick

Email To:
bob.wyrick@aecom.com

Project Description: Parker Wake Forest

City/State Collected: Wake Forest, NC

Phone: 919-872-6600
Fax:

Client Project #
60341618.2

Lab Project #

Collected by (print):
A.C. Whichard

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed
Standard

Email? ___No X Yes
FAX? X No ___Yes

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260LL: 4 x 40ml amber VOAs w/ HCl	14 D x 8260SIM: 2 z 40ml amber VOAs w/ HCl	Cr & Ni x 6010: 250 HDPE-Nitric	Rem./Contaminant	Sample # (lab only)
MW-32	Grab	GW		9-1-15	1055	6	X	X			-15/-16
MW-33	Grab	GW		9-1-15	1200	6	X	X			-17/18
MW-34	Grab	GW		9-1-15	1345	6	X	X			-19/-20
MW-36	Grab	GW		9-2-15	0800	4	X				-21
MW-38	Grab	GW		9-1-15	1050	4	X				-22
MW-39D	Grab	GW		9-1-15	0955	4	X				-23
MW-40D	Grab	GW		9-1-15	1020	4	X				-24
RW-4	Grab	GW		9-3-15	1515	7	X	X	X		-25/-26
RW-6	Grab	GW		9-3-15	1430	7	X	X	X		-27/-28
RW-19	Grab	GW		9-3-15	1350	7	X	X	X		-29/-30

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9-4-15	1000	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date: 9/4/15	Time: 16:45	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 3.8 °C Bottles Received: 164
Date: 9/5/15 Time: 700

Hold #
Condition: Okh (lab use only)
COC Seal Intact: ___ Y ___ N ___ NA
pH Checked: CL NCF:

Chain of Custody Page 2 of 3

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 6787282
Table #
Acctnum: ENSRNC
Template:
Prelogin:
TSR:
Cooler:
Shipped Via:

Chain of Custody Page 3 of 3

ESC LABS — YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Company Name/Address:
AECOM
701 Corporate Center Drive
Suite 475
Raleigh , NC 27607

Billing Information:
Quote #:
ENSRNC021815S

Report to:
Bob Wyrick

Email To:
bob.wyrick@aecom.com

Project Description: Parker Wake Forest

City/State Collected: Wake Forest, NC

Phone: 919-872-6600
Fax:

Client Project #
60341618.2

Lab Project #

Collected by (print):
A.C. Whichard

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed
Standard

Email? ___No X Yes
FAX? X No ___Yes

Immediately Packed on Ice N ___ Y X

L# L787282
Table # L70
Acctnum: ENSRNC
Template:
Prelogin:
TSR:
Cooler:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260LL: 4 x 40ml amber VOAs w/ HCl	14 D x 8260SIM: 2 z 40ml amber VOAs w/ HCl	Cr & Ni x 6010: 250 HDPE-Nitric	Rem./Contaminant	Sample # (lab only)
POC-1A	Grab	GW		9-2-15	1100	7	X	X	X		-31/-32
POC-1B	Grab	GW		9-2-15	1010	7	X	X	X		-33/-34
POC-2A	Grab	GW		9-2-15	1145	7	X	X	X		-24/-36
POC-2B	Grab	GW		9-2-15	1230	7	X	X	X		-25/-38
Andrews-WSW	Grab	GW		9-3-15	1115	6	X	X			-26/-41/-42
Perry-WSW	Grab	GW		9-3-15	1130	6	X	X			-27/-43
DUP-01-090215	Grab	GW		9-2-15	—	4	X				-28/-44/-45
DUP-02-090315	Grab	GW		9-3-15	—	7	X	X	X		-29/-46/-47
EB-01-090215	Grab	GW		9-2-15	0730	7	X	X	X		-30/-48
Trip Blank	Grab	GW		—	—	2	X				

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ____

pH ____ Temp ____
Flow ____ Other ____

Remarks:

Hold #

Condition: OK (lab use only)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	9-4-15	1000	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
	9/4/15	16:45	

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____

Temp: 3.8 °C Bottles Received: 164

Date: 9/5/15 Time: 700

COC Seal Intact: ___Y ___N ___NA

pH Checked: c2 NCF:

Appendix K.
Appendix IX Laboratory Analytical Report

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

April 12, 2010

Mr. Matt Allen
AECOM Environment
8540 Colonnade Center Drive
Suite 306
Raleigh, NC 27615

RE: Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Dear Mr. Allen:
Enclosed are the analytical results for sample(s) received by the laboratory on February 24, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Helton

brandon.helton@pacelabs.com
Project Manager

Enclosures

cc: Mr. Bob Wyrick, AECOM Environment

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Charlotte Certification IDs

Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
West Virginia Certification #: 357
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 990060003
South Carolina Certification #: 990060001
Pennsylvania Certification #: 68-00784
North Carolina Wastewater Certification #: 12
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706
New Jersey Certification #: NC012
Louisiana/LELAP Certification #: 04034
Kentucky UST Certification #: 84

Asheville Certification IDs

Connecticut Certification #: PH-0106
2225 Riverside Dr. Asheville, NC 28804
Virginia Certification #: 00072
Tennessee Certification #: 2980
South Carolina Certification #: 99030001
South Carolina Bioassay Certification #: 99030002
Pennsylvania Certification #: 68-03578
North Carolina Wastewater Certification #: 40
North Carolina Drinking Water Certification #: 37712
North Carolina Bioassay Certification #: 9
New Jersey Certification #: NC011
Massachusetts Certification #: M-NC030
Louisiana/LELAP Certification #: 03095
Florida/NELAP Certification #: E87648
West Virginia Certification #: 356

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9264000001	**POC-2A**	Water	02/23/10 11:15	02/24/10 17:25
9264000002	**POC-2B**	Water	02/23/10 10:45	02/24/10 17:25
9264000003	**POC-1B**	Water	02/23/10 15:25	02/24/10 17:25
9264000004	**MW-40**	Water	02/23/10 10:50	02/24/10 17:25
9264000005	**MW-6**	Water	02/23/10 16:18	02/24/10 17:25
9264000006	**MW-3**	Water	02/23/10 17:50	02/24/10 17:25
9264000007	**MW-36**	Water	02/23/10 16:00	02/24/10 17:25
9264000008	**EB-2**	Water	02/23/10 17:15	02/24/10 17:25
9264000009	**MW-40D**	Water	02/23/10 12:55	02/24/10 17:25
9264000010	**TB-0069**	Water	02/23/10 00:00	02/24/10 17:25

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9264000001	**POC-2A**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	66	PASI-C
		SM 4500-S2D	TEE	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A
9264000002	**POC-2B**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	66	PASI-C
		SM 4500-S2D	TEE	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A
9264000003	**POC-1B**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	66	PASI-C
		SM 4500-S2D	TEE	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A
9264000004	**MW-40**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	50	PASI-C
9264000005	**MW-6**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	50	PASI-C
9264000006	**MW-3**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	50	PASI-C
9264000007	**MW-36**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	50	PASI-C
9264000008	**EB-2**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	50	PASI-C
9264000009	**MW-40D**	EPA 8260	MCK	50	PASI-C
9264000010	**TB-0069**	EPA 8260	MCK	50	PASI-C

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-2A **Lab ID: 9264000001** Collected: 02/23/10 11:15 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	**602**	ug/L	100	1	03/03/10 13:54	03/11/10 02:21	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-38-2	
Barium	**20.6**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:21	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:21	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:21	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:21	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:21	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:21	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 14:40	03/03/10 14:27	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	5000	200		03/05/10 14:02	67-64-1	
Acetonitrile	ND	ug/L	10000	200		03/05/10 14:02	75-05-8	
Acrolein	ND	ug/L	2000	200		03/05/10 14:02	107-02-8	
Acrylonitrile	ND	ug/L	2000	200		03/05/10 14:02	107-13-1	
Allyl chloride	ND	ug/L	400	200		03/05/10 14:02	107-05-1	
Benzene	ND	ug/L	200	200		03/05/10 14:02	71-43-2	
Bromodichloromethane	ND	ug/L	200	200		03/05/10 14:02	75-27-4	
Bromoform	ND	ug/L	200	200		03/05/10 14:02	75-25-2	
Bromomethane	ND	ug/L	1000	200		03/05/10 14:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	1000	200		03/05/10 14:02	78-93-3	
Carbon disulfide	ND	ug/L	400	200		03/05/10 14:02	75-15-0	
Carbon tetrachloride	ND	ug/L	200	200		03/05/10 14:02	56-23-5	
Chlorobenzene	ND	ug/L	200	200		03/05/10 14:02	108-90-7	
Chloroethane	ND	ug/L	200	200		03/05/10 14:02	75-00-3	
Chloroform	ND	ug/L	200	200		03/05/10 14:02	67-66-3	
Chloromethane	ND	ug/L	200	200		03/05/10 14:02	74-87-3	
Chloroprene	ND	ug/L	1000	200		03/05/10 14:02	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	600	200		03/05/10 14:02	96-12-8	
Dibromochloromethane	ND	ug/L	200	200		03/05/10 14:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	200	200		03/05/10 14:02	106-93-4	
Dibromomethane	ND	ug/L	200	200		03/05/10 14:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	200	200		03/05/10 14:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	200	200		03/05/10 14:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	200	200		03/05/10 14:02	106-46-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-2A **Lab ID: 9264000001** Collected: 02/23/10 11:15 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
trans-1,4-Dichloro-2-butene	ND	ug/L	200	200		03/05/10 14:02	110-57-6	
Dichlorodifluoromethane	ND	ug/L	200	200		03/05/10 14:02	75-71-8	
1,1-Dichloroethane	ND	ug/L	200	200		03/05/10 14:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	200	200		03/05/10 14:02	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	200	200		03/05/10 14:02	540-59-0	
1,1-Dichloroethene	ND	ug/L	200	200		03/05/10 14:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	200	200		03/05/10 14:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	200	200		03/05/10 14:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	200	200		03/05/10 14:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	200	200		03/05/10 14:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	200	200		03/05/10 14:02	10061-02-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	30000	200		03/05/10 14:02	123-91-1	
Ethylbenzene	ND	ug/L	200	200		03/05/10 14:02	100-41-4	
Ethyl methacrylate	ND	ug/L	200	200		03/05/10 14:02	97-63-2	
2-Hexanone	ND	ug/L	1000	200		03/05/10 14:02	591-78-6	
Iodomethane	ND	ug/L	1000	200		03/05/10 14:02	74-88-4	
Isobutanol	ND	ug/L	20000	200		03/05/10 14:02	78-83-1	
Methacrylonitrile	ND	ug/L	2000	200		03/05/10 14:02	126-98-7	
Methylene Chloride	ND	ug/L	400	200		03/05/10 14:02	75-09-2	
Methyl methacrylate	ND	ug/L	400	200		03/05/10 14:02	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	1000	200		03/05/10 14:02	108-10-1	
Naphthalene	ND	ug/L	200	200		03/05/10 14:02	91-20-3	
Propionitrile	ND	ug/L	4000	200		03/05/10 14:02	107-12-0	
Styrene	ND	ug/L	200	200		03/05/10 14:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	200	200		03/05/10 14:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	200	200		03/05/10 14:02	79-34-5	
Tetrachloroethene	ND	ug/L	200	200		03/05/10 14:02	127-18-4	
Toluene	ND	ug/L	200	200		03/05/10 14:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	200	200		03/05/10 14:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	200	200		03/05/10 14:02	79-00-5	
Trichloroethene	**18600**	ug/L	200	200		03/05/10 14:02	79-01-6	
Trichlorofluoromethane	ND	ug/L	200	200		03/05/10 14:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	200	200		03/05/10 14:02	96-18-4	
Vinyl acetate	ND	ug/L	400	200		03/05/10 14:02	108-05-4	
Vinyl chloride	ND	ug/L	200	200		03/05/10 14:02	75-01-4	
Xylene (Total)	ND	ug/L	400	200		03/05/10 14:02	1330-20-7	
m&p-Xylene	ND	ug/L	400	200		03/05/10 14:02	1330-20-7	
o-Xylene	ND	ug/L	200	200		03/05/10 14:02	95-47-6	
4-Bromofluorobenzene (S)	96	%	87-109	200		03/05/10 14:02	460-00-4	
Dibromofluoromethane (S)	101	%	85-115	200		03/05/10 14:02	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	79-120	200		03/05/10 14:02	17060-07-0	
Toluene-d8 (S)	99	%	70-120	200		03/05/10 14:02	2037-26-5	
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	1		02/25/10 20:18		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-2A **Lab ID: 9264000001** Collected: 02/23/10 11:15 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		03/07/10 11:30	57-12-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-2B **Lab ID: 9264000002** Collected: 02/23/10 10:45 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	ND	ug/L	100	1	03/03/10 13:54	03/11/10 02:24	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-38-2	
Barium	**7.2**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:24	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:24	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:24	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:24	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:24	7440-62-2	
Zinc	**14.7**	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:24	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 14:40	03/03/10 14:29	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	5000	200		03/02/10 06:24	67-64-1	
Acetonitrile	ND	ug/L	10000	200		03/02/10 06:24	75-05-8	
Acrolein	ND	ug/L	2000	200		03/02/10 06:24	107-02-8	
Acrylonitrile	ND	ug/L	2000	200		03/02/10 06:24	107-13-1	
Allyl chloride	ND	ug/L	400	200		03/02/10 06:24	107-05-1	
Benzene	ND	ug/L	200	200		03/02/10 06:24	71-43-2	
Bromodichloromethane	ND	ug/L	200	200		03/02/10 06:24	75-27-4	
Bromoform	ND	ug/L	200	200		03/02/10 06:24	75-25-2	
Bromomethane	ND	ug/L	1000	200		03/02/10 06:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	1000	200		03/02/10 06:24	78-93-3	
Carbon disulfide	ND	ug/L	400	200		03/02/10 06:24	75-15-0	
Carbon tetrachloride	ND	ug/L	200	200		03/02/10 06:24	56-23-5	
Chlorobenzene	ND	ug/L	200	200		03/02/10 06:24	108-90-7	
Chloroethane	ND	ug/L	200	200		03/02/10 06:24	75-00-3	
Chloroform	ND	ug/L	200	200		03/02/10 06:24	67-66-3	
Chloromethane	ND	ug/L	200	200		03/02/10 06:24	74-87-3	
Chloroprene	ND	ug/L	1000	200		03/02/10 06:24	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	600	200		03/02/10 06:24	96-12-8	
Dibromochloromethane	ND	ug/L	200	200		03/02/10 06:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	200	200		03/02/10 06:24	106-93-4	
Dibromomethane	ND	ug/L	200	200		03/02/10 06:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	200	200		03/02/10 06:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	200	200		03/02/10 06:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	200	200		03/02/10 06:24	106-46-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-2B **Lab ID: 9264000002** Collected: 02/23/10 10:45 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
trans-1,4-Dichloro-2-butene	ND	ug/L	200	200		03/02/10 06:24	110-57-6	
Dichlorodifluoromethane	ND	ug/L	200	200		03/02/10 06:24	75-71-8	
1,1-Dichloroethane	ND	ug/L	200	200		03/02/10 06:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	200	200		03/02/10 06:24	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	200	200		03/02/10 06:24	540-59-0	
1,1-Dichloroethene	ND	ug/L	200	200		03/02/10 06:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	200	200		03/02/10 06:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	200	200		03/02/10 06:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	200	200		03/02/10 06:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	200	200		03/02/10 06:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	200	200		03/02/10 06:24	10061-02-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	30000	200		03/02/10 06:24	123-91-1	
Ethylbenzene	ND	ug/L	200	200		03/02/10 06:24	100-41-4	
Ethyl methacrylate	ND	ug/L	200	200		03/02/10 06:24	97-63-2	
2-Hexanone	ND	ug/L	1000	200		03/02/10 06:24	591-78-6	
Iodomethane	ND	ug/L	1000	200		03/02/10 06:24	74-88-4	
Isobutanol	ND	ug/L	20000	200		03/02/10 06:24	78-83-1	
Methacrylonitrile	ND	ug/L	2000	200		03/02/10 06:24	126-98-7	
Methylene Chloride	ND	ug/L	400	200		03/02/10 06:24	75-09-2	
Methyl methacrylate	ND	ug/L	400	200		03/02/10 06:24	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	1000	200		03/02/10 06:24	108-10-1	
Naphthalene	ND	ug/L	200	200		03/02/10 06:24	91-20-3	
Propionitrile	ND	ug/L	4000	200		03/02/10 06:24	107-12-0	
Styrene	ND	ug/L	200	200		03/02/10 06:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	200	200		03/02/10 06:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	200	200		03/02/10 06:24	79-34-5	
Tetrachloroethene	ND	ug/L	200	200		03/02/10 06:24	127-18-4	
Toluene	ND	ug/L	200	200		03/02/10 06:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	200	200		03/02/10 06:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	200	200		03/02/10 06:24	79-00-5	
Trichloroethene	**16300**	ug/L	200	200		03/02/10 06:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	200	200		03/02/10 06:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	200	200		03/02/10 06:24	96-18-4	
Vinyl acetate	ND	ug/L	400	200		03/02/10 06:24	108-05-4	
Vinyl chloride	ND	ug/L	200	200		03/02/10 06:24	75-01-4	
Xylene (Total)	ND	ug/L	400	200		03/02/10 06:24	1330-20-7	
m&p-Xylene	ND	ug/L	400	200		03/02/10 06:24	1330-20-7	
o-Xylene	ND	ug/L	200	200		03/02/10 06:24	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109	200		03/02/10 06:24	460-00-4	
Dibromofluoromethane (S)	110	%	85-115	200		03/02/10 06:24	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120	200		03/02/10 06:24	17060-07-0	
Toluene-d8 (S)	101	%	70-120	200		03/02/10 06:24	2037-26-5	
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	1		02/25/10 20:18		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-2B **Lab ID: 9264000002** Collected: 02/23/10 10:45 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		03/07/10 11:32	57-12-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-1B **Lab ID: 9264000003** Collected: 02/23/10 15:25 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	ND	ug/L	100	1	03/03/10 13:54	03/11/10 02:27	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-38-2	
Barium	**17.5**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:27	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:27	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7439-92-1	
Nickel	**27.4**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:27	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:27	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:27	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:27	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 14:39	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	2500	100		03/02/10 06:48	67-64-1	
Acetonitrile	ND	ug/L	5000	100		03/02/10 06:48	75-05-8	
Acrolein	ND	ug/L	1000	100		03/02/10 06:48	107-02-8	
Acrylonitrile	ND	ug/L	1000	100		03/02/10 06:48	107-13-1	
Allyl chloride	ND	ug/L	200	100		03/02/10 06:48	107-05-1	
Benzene	ND	ug/L	100	100		03/02/10 06:48	71-43-2	
Bromodichloromethane	ND	ug/L	100	100		03/02/10 06:48	75-27-4	
Bromoform	ND	ug/L	100	100		03/02/10 06:48	75-25-2	
Bromomethane	ND	ug/L	500	100		03/02/10 06:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	500	100		03/02/10 06:48	78-93-3	
Carbon disulfide	ND	ug/L	200	100		03/02/10 06:48	75-15-0	
Carbon tetrachloride	ND	ug/L	100	100		03/02/10 06:48	56-23-5	
Chlorobenzene	ND	ug/L	100	100		03/02/10 06:48	108-90-7	
Chloroethane	ND	ug/L	100	100		03/02/10 06:48	75-00-3	
Chloroform	ND	ug/L	100	100		03/02/10 06:48	67-66-3	
Chloromethane	ND	ug/L	100	100		03/02/10 06:48	74-87-3	
Chloroprene	ND	ug/L	500	100		03/02/10 06:48	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	300	100		03/02/10 06:48	96-12-8	
Dibromochloromethane	ND	ug/L	100	100		03/02/10 06:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	100	100		03/02/10 06:48	106-93-4	
Dibromomethane	ND	ug/L	100	100		03/02/10 06:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	100	100		03/02/10 06:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	100	100		03/02/10 06:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	100	100		03/02/10 06:48	106-46-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-1B **Lab ID: 9264000003** Collected: 02/23/10 15:25 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
trans-1,4-Dichloro-2-butene	ND	ug/L	100	100		03/02/10 06:48	110-57-6	
Dichlorodifluoromethane	ND	ug/L	100	100		03/02/10 06:48	75-71-8	
1,1-Dichloroethane	ND	ug/L	100	100		03/02/10 06:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	100	100		03/02/10 06:48	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	100	100		03/02/10 06:48	540-59-0	
1,1-Dichloroethene	ND	ug/L	100	100		03/02/10 06:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	100	100		03/02/10 06:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	100	100		03/02/10 06:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	100	100		03/02/10 06:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	100	100		03/02/10 06:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	100	100		03/02/10 06:48	10061-02-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	15000	100		03/02/10 06:48	123-91-1	
Ethylbenzene	ND	ug/L	100	100		03/02/10 06:48	100-41-4	
Ethyl methacrylate	ND	ug/L	100	100		03/02/10 06:48	97-63-2	
2-Hexanone	ND	ug/L	500	100		03/02/10 06:48	591-78-6	
Iodomethane	ND	ug/L	500	100		03/02/10 06:48	74-88-4	
Isobutanol	ND	ug/L	10000	100		03/02/10 06:48	78-83-1	
Methacrylonitrile	ND	ug/L	1000	100		03/02/10 06:48	126-98-7	
Methylene Chloride	ND	ug/L	200	100		03/02/10 06:48	75-09-2	
Methyl methacrylate	ND	ug/L	200	100		03/02/10 06:48	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	500	100		03/02/10 06:48	108-10-1	
Naphthalene	ND	ug/L	100	100		03/02/10 06:48	91-20-3	
Propionitrile	ND	ug/L	2000	100		03/02/10 06:48	107-12-0	
Styrene	ND	ug/L	100	100		03/02/10 06:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	100	100		03/02/10 06:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	100	100		03/02/10 06:48	79-34-5	
Tetrachloroethene	ND	ug/L	100	100		03/02/10 06:48	127-18-4	
Toluene	ND	ug/L	100	100		03/02/10 06:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	100	100		03/02/10 06:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	100	100		03/02/10 06:48	79-00-5	
Trichloroethene	**11100**	ug/L	100	100		03/02/10 06:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	100	100		03/02/10 06:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	100	100		03/02/10 06:48	96-18-4	
Vinyl acetate	ND	ug/L	200	100		03/02/10 06:48	108-05-4	
Vinyl chloride	ND	ug/L	100	100		03/02/10 06:48	75-01-4	
Xylene (Total)	ND	ug/L	200	100		03/02/10 06:48	1330-20-7	
m&p-Xylene	ND	ug/L	200	100		03/02/10 06:48	1330-20-7	
o-Xylene	ND	ug/L	100	100		03/02/10 06:48	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109	100		03/02/10 06:48	460-00-4	
Dibromofluoromethane (S)	111	%	85-115	100		03/02/10 06:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	79-120	100		03/02/10 06:48	17060-07-0	
Toluene-d8 (S)	100	%	70-120	100		03/02/10 06:48	2037-26-5	
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	1		02/25/10 20:18		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: POC-1B **Lab ID: 9264000003** Collected: 02/23/10 15:25 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		03/07/10 11:32	57-12-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-40 **Lab ID: 9264000004** Collected: 02/23/10 10:50 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	**117**	ug/L	100	1	03/03/10 13:54	03/11/10 02:31	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-38-2	
Barium	**16.1**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:31	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:31	7440-43-9	
Chromium	**5.8**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:31	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:31	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:31	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:31	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 14:44	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/02/10 07:13	67-64-1	
Benzene	ND	ug/L	1.0	1		03/02/10 07:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/02/10 07:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/02/10 07:13	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/02/10 07:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/02/10 07:13	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		03/02/10 07:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/02/10 07:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/02/10 07:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/02/10 07:13	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/02/10 07:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/02/10 07:13	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/02/10 07:13	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/02/10 07:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/10 07:13	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/02/10 07:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 07:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 07:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 07:13	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/02/10 07:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/02/10 07:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/02/10 07:13	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		03/02/10 07:13	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/02/10 07:13	75-35-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-40 **Lab ID: 9264000004** Collected: 02/23/10 10:50 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 07:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 07:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 07:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 07:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 07:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		03/02/10 07:13	100-41-4	
Methylene Chloride	ND	ug/L	2.0	1		03/02/10 07:13	75-09-2	
Naphthalene	ND	ug/L	1.0	1		03/02/10 07:13	91-20-3	
Styrene	ND	ug/L	1.0	1		03/02/10 07:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 07:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 07:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/02/10 07:13	127-18-4	
Toluene	ND	ug/L	1.0	1		03/02/10 07:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/02/10 07:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/02/10 07:13	79-00-5	
Trichloroethene	**9.2**	ug/L	1.0	1		03/02/10 07:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/02/10 07:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/02/10 07:13	96-18-4	
Vinyl chloride	ND	ug/L	1.0	1		03/02/10 07:13	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/02/10 07:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/02/10 07:13	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/02/10 07:13	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109	1		03/02/10 07:13	460-00-4	
Dibromofluoromethane (S)	112	%	85-115	1		03/02/10 07:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	110	%	79-120	1		03/02/10 07:13	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		03/02/10 07:13	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-6 **Lab ID: 9264000005** Collected: 02/23/10 16:18 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	ND	ug/L	100	1	03/03/10 13:54	03/11/10 02:45	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-38-2	
Barium	**45.3**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:45	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:45	7440-43-9	
Chromium	**16.6**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:45	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:45	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:45	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:45	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 14:54	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	250	10		03/01/10 16:23	67-64-1	
Benzene	ND	ug/L	10.0	10		03/01/10 16:23	71-43-2	
Bromodichloromethane	ND	ug/L	10.0	10		03/01/10 16:23	75-27-4	
Bromoform	ND	ug/L	10.0	10		03/01/10 16:23	75-25-2	
Bromomethane	ND	ug/L	50.0	10		03/01/10 16:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	10		03/01/10 16:23	78-93-3	
Carbon disulfide	ND	ug/L	20.0	10		03/01/10 16:23	75-15-0	
Carbon tetrachloride	ND	ug/L	10.0	10		03/01/10 16:23	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		03/01/10 16:23	108-90-7	
Chloroethane	ND	ug/L	10.0	10		03/01/10 16:23	75-00-3	
Chloroform	ND	ug/L	10.0	10		03/01/10 16:23	67-66-3	
Chloromethane	ND	ug/L	10.0	10		03/01/10 16:23	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	30.0	10		03/01/10 16:23	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		03/01/10 16:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		03/01/10 16:23	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		03/01/10 16:23	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:23	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	10		03/01/10 16:23	75-71-8	
1,1-Dichloroethane	ND	ug/L	10.0	10		03/01/10 16:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	10		03/01/10 16:23	107-06-2	
1,2-Dichloroethene (Total)	**724**	ug/L	10.0	10		03/01/10 16:23	540-59-0	
1,1-Dichloroethene	ND	ug/L	10.0	10		03/01/10 16:23	75-35-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-6 **Lab ID: 9264000005** Collected: 02/23/10 16:18 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
cis-1,2-Dichloroethene	**694**	ug/L	10.0	10		03/01/10 16:23	156-59-2	
trans-1,2-Dichloroethene	**30.0**	ug/L	10.0	10		03/01/10 16:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	10.0	10		03/01/10 16:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	10.0	10		03/01/10 16:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	10.0	10		03/01/10 16:23	10061-02-6	
Ethylbenzene	ND	ug/L	10.0	10		03/01/10 16:23	100-41-4	
Methylene Chloride	ND	ug/L	20.0	10		03/01/10 16:23	75-09-2	
Naphthalene	ND	ug/L	10.0	10		03/01/10 16:23	91-20-3	
Styrene	ND	ug/L	10.0	10		03/01/10 16:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 16:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 16:23	79-34-5	
Tetrachloroethene	ND	ug/L	10.0	10		03/01/10 16:23	127-18-4	
Toluene	ND	ug/L	10.0	10		03/01/10 16:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	10.0	10		03/01/10 16:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		03/01/10 16:23	79-00-5	
Trichloroethene	**2390**	ug/L	50.0	50		03/03/10 08:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		03/01/10 16:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	10.0	10		03/01/10 16:23	96-18-4	
Vinyl chloride	ND	ug/L	10.0	10		03/01/10 16:23	75-01-4	
Xylene (Total)	ND	ug/L	20.0	10		03/01/10 16:23	1330-20-7	
m&p-Xylene	ND	ug/L	20.0	10		03/01/10 16:23	1330-20-7	
o-Xylene	ND	ug/L	10.0	10		03/01/10 16:23	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109	10		03/01/10 16:23	460-00-4	
Dibromofluoromethane (S)	108	%	85-115	10		03/01/10 16:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120	10		03/01/10 16:23	17060-07-0	
Toluene-d8 (S)	100	%	70-120	10		03/01/10 16:23	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-3 **Lab ID: 9264000006** Collected: 02/23/10 17:50 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	**759**	ug/L	100	1	03/03/10 13:54	03/11/10 02:49	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-38-2	
Barium	**31.3**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:49	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:49	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-48-4	
Copper	**26.4**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:49	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:49	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:49	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:49	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 14:56	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	250	10		03/04/10 10:53	67-64-1	
Benzene	ND	ug/L	10.0	10		03/04/10 10:53	71-43-2	
Bromodichloromethane	ND	ug/L	10.0	10		03/04/10 10:53	75-27-4	
Bromoform	ND	ug/L	10.0	10		03/04/10 10:53	75-25-2	
Bromomethane	ND	ug/L	50.0	10		03/04/10 10:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	10		03/04/10 10:53	78-93-3	
Carbon disulfide	ND	ug/L	20.0	10		03/04/10 10:53	75-15-0	
Carbon tetrachloride	ND	ug/L	10.0	10		03/04/10 10:53	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		03/04/10 10:53	108-90-7	
Chloroethane	ND	ug/L	10.0	10		03/04/10 10:53	75-00-3	
Chloroform	ND	ug/L	10.0	10		03/04/10 10:53	67-66-3	
Chloromethane	ND	ug/L	10.0	10		03/04/10 10:53	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	30.0	10		03/04/10 10:53	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		03/04/10 10:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		03/04/10 10:53	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		03/04/10 10:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		03/04/10 10:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		03/04/10 10:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		03/04/10 10:53	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	10		03/04/10 10:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	10.0	10		03/04/10 10:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	10		03/04/10 10:53	107-06-2	
1,2-Dichloroethene (Total)	**19.6**	ug/L	10.0	10		03/04/10 10:53	540-59-0	
1,1-Dichloroethene	ND	ug/L	10.0	10		03/04/10 10:53	75-35-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-3 **Lab ID: 9264000006** Collected: 02/23/10 17:50 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
cis-1,2-Dichloroethene	**19.6**	ug/L	10.0	10		03/04/10 10:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	10.0	10		03/04/10 10:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	10.0	10		03/04/10 10:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	10.0	10		03/04/10 10:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	10.0	10		03/04/10 10:53	10061-02-6	
Ethylbenzene	ND	ug/L	10.0	10		03/04/10 10:53	100-41-4	
Methylene Chloride	ND	ug/L	20.0	10		03/04/10 10:53	75-09-2	
Naphthalene	ND	ug/L	10.0	10		03/04/10 10:53	91-20-3	
Styrene	ND	ug/L	10.0	10		03/04/10 10:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		03/04/10 10:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	10		03/04/10 10:53	79-34-5	
Tetrachloroethene	ND	ug/L	10.0	10		03/04/10 10:53	127-18-4	
Toluene	ND	ug/L	10.0	10		03/04/10 10:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	10.0	10		03/04/10 10:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		03/04/10 10:53	79-00-5	
Trichloroethene	**1520**	ug/L	10.0	10		03/04/10 10:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		03/04/10 10:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	10.0	10		03/04/10 10:53	96-18-4	
Vinyl chloride	ND	ug/L	10.0	10		03/04/10 10:53	75-01-4	
Xylene (Total)	ND	ug/L	20.0	10		03/04/10 10:53	1330-20-7	
m&p-Xylene	ND	ug/L	20.0	10		03/04/10 10:53	1330-20-7	
o-Xylene	ND	ug/L	10.0	10		03/04/10 10:53	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109	10		03/04/10 10:53	460-00-4	
Dibromofluoromethane (S)	100	%	85-115	10		03/04/10 10:53	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%	79-120	10		03/04/10 10:53	17060-07-0	
Toluene-d8 (S)	99	%	70-120	10		03/04/10 10:53	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-36 **Lab ID: 9264000007** Collected: 02/23/10 16:00 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	**409**	ug/L	100	1	03/03/10 13:54	03/11/10 02:53	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-38-2	
Barium	**61.7**	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:53	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:53	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:53	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:53	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:53	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:53	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 14:59	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/02/10 07:37	67-64-1	
Benzene	ND	ug/L	1.0	1		03/02/10 07:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/02/10 07:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/02/10 07:37	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/02/10 07:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/02/10 07:37	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		03/02/10 07:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/02/10 07:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/02/10 07:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/02/10 07:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/02/10 07:37	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/02/10 07:37	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/02/10 07:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/02/10 07:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/10 07:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/02/10 07:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 07:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 07:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 07:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/02/10 07:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/02/10 07:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/02/10 07:37	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		03/02/10 07:37	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/02/10 07:37	75-35-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-36 **Lab ID: 9264000007** Collected: 02/23/10 16:00 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 07:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 07:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 07:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 07:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 07:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		03/02/10 07:37	100-41-4	
Methylene Chloride	ND	ug/L	2.0	1		03/02/10 07:37	75-09-2	
Naphthalene	ND	ug/L	1.0	1		03/02/10 07:37	91-20-3	
Styrene	ND	ug/L	1.0	1		03/02/10 07:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 07:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 07:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/02/10 07:37	127-18-4	
Toluene	ND	ug/L	1.0	1		03/02/10 07:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/02/10 07:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/02/10 07:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/02/10 07:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/02/10 07:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/02/10 07:37	96-18-4	
Vinyl chloride	ND	ug/L	1.0	1		03/02/10 07:37	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/02/10 07:37	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/02/10 07:37	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/02/10 07:37	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109	1		03/02/10 07:37	460-00-4	
Dibromofluoromethane (S)	110	%	85-115	1		03/02/10 07:37	1868-53-7	
1,2-Dichloroethane-d4 (S)	111	%	79-120	1		03/02/10 07:37	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		03/02/10 07:37	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: EB-2 **Lab ID: 9264000008** Collected: 02/23/10 17:15 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	ND	ug/L	100	1	03/03/10 13:54	03/11/10 02:56	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-38-2	
Barium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:56	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:54	03/11/10 02:56	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:56	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:56	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:54	03/11/10 02:56	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:54	03/11/10 02:56	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/02/10 00:25	67-64-1	
Benzene	ND	ug/L	1.0	1		03/02/10 00:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/02/10 00:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/02/10 00:25	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/02/10 00:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/02/10 00:25	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		03/02/10 00:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/02/10 00:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/02/10 00:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/02/10 00:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/02/10 00:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/02/10 00:25	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/02/10 00:25	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/02/10 00:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/10 00:25	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/02/10 00:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 00:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 00:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 00:25	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/02/10 00:25	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/02/10 00:25	75-34-3	
1,2-Dichloroethane	**1.4**	ug/L	1.0	1		03/02/10 00:25	107-06-2	C9
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		03/02/10 00:25	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/02/10 00:25	75-35-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: EB-2 **Lab ID: 9264000008** Collected: 02/23/10 17:15 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 00:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 00:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 00:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 00:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 00:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		03/02/10 00:25	100-41-4	
Methylene Chloride	**2.4**	ug/L	2.0	1		03/02/10 00:25	75-09-2	C9
Naphthalene	ND	ug/L	1.0	1		03/02/10 00:25	91-20-3	
Styrene	ND	ug/L	1.0	1		03/02/10 00:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 00:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 00:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/02/10 00:25	127-18-4	
Toluene	ND	ug/L	1.0	1		03/02/10 00:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/02/10 00:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/02/10 00:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/02/10 00:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/02/10 00:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/02/10 00:25	96-18-4	
Vinyl chloride	ND	ug/L	1.0	1		03/02/10 00:25	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/02/10 00:25	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/02/10 00:25	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/02/10 00:25	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109	1		03/02/10 00:25	460-00-4	
Dibromofluoromethane (S)	109	%	85-115	1		03/02/10 00:25	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	79-120	1		03/02/10 00:25	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		03/02/10 00:25	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-40D **Lab ID: 9264000009** Collected: 02/23/10 12:55 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/01/10 12:57	67-64-1	
Benzene	ND	ug/L	1.0	1		03/01/10 12:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/01/10 12:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/01/10 12:57	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/01/10 12:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/01/10 12:57	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		03/01/10 12:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/01/10 12:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/01/10 12:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/01/10 12:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/01/10 12:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/01/10 12:57	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/01/10 12:57	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/01/10 12:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/01/10 12:57	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/01/10 12:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 12:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 12:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 12:57	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/01/10 12:57	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/01/10 12:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/01/10 12:57	107-06-2	
1,2-Dichloroethene (Total)	**1.1**	ug/L	1.0	1		03/01/10 12:57	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/01/10 12:57	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	1		03/01/10 12:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/01/10 12:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/01/10 12:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/01/10 12:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/01/10 12:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		03/01/10 12:57	100-41-4	
Methylene Chloride	ND	ug/L	2.0	1		03/01/10 12:57	75-09-2	
Naphthalene	ND	ug/L	1.0	1		03/01/10 12:57	91-20-3	
Styrene	ND	ug/L	1.0	1		03/01/10 12:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 12:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 12:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/01/10 12:57	127-18-4	
Toluene	ND	ug/L	1.0	1		03/01/10 12:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/01/10 12:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/01/10 12:57	79-00-5	
Trichloroethene	**14.0**	ug/L	1.0	1		03/01/10 12:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/01/10 12:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/01/10 12:57	96-18-4	
Vinyl chloride	ND	ug/L	1.0	1		03/01/10 12:57	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/01/10 12:57	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/01/10 12:57	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/01/10 12:57	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109	1		03/01/10 12:57	460-00-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: MW-40D **Lab ID: 9264000009** Collected: 02/23/10 12:55 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	106	%	85-115	1		03/01/10 12:57	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	79-120	1		03/01/10 12:57	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		03/01/10 12:57	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: TB-0069 **Lab ID: 9264000010** Collected: 02/23/10 00:00 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	**47.9**	ug/L	25.0	1		03/02/10 00:49	67-64-1	
Benzene	ND	ug/L	1.0	1		03/02/10 00:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/02/10 00:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/02/10 00:49	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/02/10 00:49	74-83-9	
2-Butanone (MEK)	**6.1**	ug/L	5.0	1		03/02/10 00:49	78-93-3	C9
Carbon disulfide	ND	ug/L	2.0	1		03/02/10 00:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/02/10 00:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/02/10 00:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/02/10 00:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/02/10 00:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/02/10 00:49	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/02/10 00:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/02/10 00:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/10 00:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/02/10 00:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 00:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 00:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 00:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/02/10 00:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/02/10 00:49	75-34-3	
1,2-Dichloroethane	**1.5**	ug/L	1.0	1		03/02/10 00:49	107-06-2	C9
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		03/02/10 00:49	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/02/10 00:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 00:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 00:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 00:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 00:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/02/10 00:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		03/02/10 00:49	100-41-4	
Methylene Chloride	**3.5**	ug/L	2.0	1		03/02/10 00:49	75-09-2	C9
Naphthalene	ND	ug/L	1.0	1		03/02/10 00:49	91-20-3	
Styrene	ND	ug/L	1.0	1		03/02/10 00:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 00:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 00:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/02/10 00:49	127-18-4	
Toluene	ND	ug/L	1.0	1		03/02/10 00:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/02/10 00:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/02/10 00:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/02/10 00:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/02/10 00:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/02/10 00:49	96-18-4	
Vinyl chloride	ND	ug/L	1.0	1		03/02/10 00:49	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/02/10 00:49	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/02/10 00:49	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/02/10 00:49	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109	1		03/02/10 00:49	460-00-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

Sample: TB-0069 **Lab ID: 9264000010** Collected: 02/23/10 00:00 Received: 02/24/10 17:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	109	%	85-115	1		03/02/10 00:49	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120	1		03/02/10 00:49	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		03/02/10 00:49	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: MPRP/5902 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 9264000001, 9264000002, 9264000003, 9264000004, 9264000005, 9264000006, 9264000007, 9264000008

METHOD BLANK: 409953 Matrix: Water
Associated Lab Samples: 9264000001, 9264000002, 9264000003, 9264000004, 9264000005, 9264000006, 9264000007, 9264000008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	100	03/11/10 01:17	
Antimony	ug/L	ND	5.0	03/11/10 01:17	
Arsenic	ug/L	ND	5.0	03/11/10 01:17	
Barium	ug/L	ND	5.0	03/11/10 01:17	
Beryllium	ug/L	ND	1.0	03/11/10 01:17	
Cadmium	ug/L	ND	1.0	03/11/10 01:17	
Chromium	ug/L	ND	5.0	03/11/10 01:17	
Cobalt	ug/L	ND	5.0	03/11/10 01:17	
Copper	ug/L	ND	5.0	03/11/10 01:17	
Lead	ug/L	ND	5.0	03/11/10 01:17	
Nickel	ug/L	ND	5.0	03/11/10 01:17	
Selenium	ug/L	ND	10.0	03/11/10 01:17	
Silver	ug/L	ND	5.0	03/11/10 01:17	
Thallium	ug/L	ND	10.0	03/11/10 01:17	
Tin	ug/L	ND	5.0	03/11/10 01:17	
Vanadium	ug/L	ND	5.0	03/11/10 01:17	
Zinc	ug/L	ND	10.0	03/11/10 01:17	

LABORATORY CONTROL SAMPLE: 409954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4780	96	80-120	
Antimony	ug/L	500	490	98	80-120	
Arsenic	ug/L	500	470	94	80-120	
Barium	ug/L	500	525	105	80-120	
Beryllium	ug/L	500	496	99	80-120	
Cadmium	ug/L	500	472	94	80-120	
Chromium	ug/L	500	476	95	80-120	
Cobalt	ug/L	500	481	96	80-120	
Copper	ug/L	500	475	95	80-120	
Lead	ug/L	500	472	94	80-120	
Nickel	ug/L	500	478	96	80-120	
Selenium	ug/L	500	466	93	80-120	
Silver	ug/L	250	238	95	80-120	
Thallium	ug/L	500	455	91	80-120	
Tin	ug/L	500	488	98	80-120	
Vanadium	ug/L	500	476	95	80-120	
Zinc	ug/L	500	469	94	80-120	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

MATRIX SPIKE SAMPLE: 409955

Parameter	Units	9263975004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	334	5000	5950	112	75-125	
Antimony	ug/L	ND	500	532	106	75-125	
Arsenic	ug/L	ND	500	519	104	75-125	
Barium	ug/L	229	500	717	98	75-125	
Beryllium	ug/L	ND	500	534	107	75-125	
Cadmium	ug/L	ND	500	498	100	75-125	
Chromium	ug/L	1.2J	500	505	101	75-125	
Cobalt	ug/L	10.9	500	515	101	75-125	
Copper	ug/L	3.3J	500	525	104	75-125	
Lead	ug/L	ND	500	491	98	75-125	
Nickel	ug/L	2.7J	500	505	100	75-125	
Selenium	ug/L	ND	500	511	102	75-125	
Silver	ug/L	0.51J	250	254	101	75-125	
Thallium	ug/L	ND	500	476	95	75-125	
Tin	ug/L	ND	500	522	104	75-125	
Vanadium	ug/L	2.9J	500	516	103	75-125	
Zinc	ug/L	7.8J	500	507	100	75-125	

SAMPLE DUPLICATE: 409956

Parameter	Units	9263975005 Result	Dup Result	RPD	Max RPD	Qualifiers
Aluminum	ug/L	ND	ND		20	
Antimony	ug/L	ND	ND		20	
Arsenic	ug/L	ND	ND		20	
Barium	ug/L	68.9	65.3	5	20	
Beryllium	ug/L	0.11J	.15J		20	
Cadmium	ug/L	ND	ND		20	
Chromium	ug/L	0.50J	.48J		20	
Cobalt	ug/L	ND	ND		20	
Copper	ug/L	2.1J	2J		20	
Lead	ug/L	ND	ND		20	
Nickel	ug/L	2.8J	2.7J		20	
Selenium	ug/L	ND	ND		20	
Silver	ug/L	0.10J	.13J		20	
Thallium	ug/L	ND	ND		20	
Tin	ug/L	ND	ND		20	
Vanadium	ug/L	0.93J	1J		20	
Zinc	ug/L	6.3J	6.1J		20	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: MERP/2680
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Associated Lab Samples: 9264000001, 9264000002

METHOD BLANK: 408890 Matrix: Water
Associated Lab Samples: 9264000001, 9264000002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	03/03/10 13:14	

LABORATORY CONTROL SAMPLE: 408891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	3.0	119	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 408892 408893

Parameter	Units	9263975001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.1	2.2	85	86	75-125	1	25	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: MERP/2681 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 9264000003, 9264000004, 9264000005, 9264000006, 9264000007, 9264000008

METHOD BLANK: 408895 Matrix: Water
Associated Lab Samples: 9264000003, 9264000004, 9264000005, 9264000006, 9264000007, 9264000008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	03/04/10 15:45	

LABORATORY CONTROL SAMPLE: 408896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.6	104	80-120	

MATRIX SPIKE SAMPLE: 408897

Parameter	Units	9264000003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.5	96	75-125	

SAMPLE DUPLICATE: 408898

Parameter	Units	9264000004 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	.075J		25	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: MSV/10125
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9264000005, 9264000009

METHOD BLANK: 408831
Matrix: Water
Associated Lab Samples: 9264000005, 9264000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1-Dichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1-Dichloroethene	ug/L	ND	1.0	03/01/10 11:21	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/01/10 11:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichloropropane	ug/L	ND	1.0	03/01/10 11:21	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
2-Butanone (MEK)	ug/L	ND	5.0	03/01/10 11:21	
Acetone	ug/L	ND	25.0	03/01/10 11:21	
Benzene	ug/L	ND	1.0	03/01/10 11:21	
Bromodichloromethane	ug/L	ND	1.0	03/01/10 11:21	
Bromoform	ug/L	ND	1.0	03/01/10 11:21	
Bromomethane	ug/L	ND	5.0	03/01/10 11:21	
Carbon disulfide	ug/L	ND	2.0	03/01/10 11:21	
Carbon tetrachloride	ug/L	ND	1.0	03/01/10 11:21	
Chlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
Chloroethane	ug/L	ND	1.0	03/01/10 11:21	
Chloroform	ug/L	ND	1.0	03/01/10 11:21	
Chloromethane	ug/L	ND	1.0	03/01/10 11:21	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 11:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/01/10 11:21	
Dibromochloromethane	ug/L	ND	1.0	03/01/10 11:21	
Dibromomethane	ug/L	ND	1.0	03/01/10 11:21	
Dichlorodifluoromethane	ug/L	ND	1.0	03/01/10 11:21	
Ethylbenzene	ug/L	ND	1.0	03/01/10 11:21	
m&p-Xylene	ug/L	ND	2.0	03/01/10 11:21	
Methylene Chloride	ug/L	ND	2.0	03/01/10 11:21	
Naphthalene	ug/L	ND	1.0	03/01/10 11:21	
o-Xylene	ug/L	ND	1.0	03/01/10 11:21	
Styrene	ug/L	ND	1.0	03/01/10 11:21	
Tetrachloroethene	ug/L	ND	1.0	03/01/10 11:21	
Toluene	ug/L	ND	1.0	03/01/10 11:21	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 11:21	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/01/10 11:21	
Trichloroethene	ug/L	ND	1.0	03/01/10 11:21	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

METHOD BLANK: 408831 Matrix: Water

Associated Lab Samples: 9264000005, 9264000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	ND	1.0	03/01/10 11:21	
Vinyl chloride	ug/L	ND	1.0	03/01/10 11:21	
Xylene (Total)	ug/L	ND	2.0	03/01/10 11:21	
1,2-Dichloroethane-d4 (S)	%	102	79-120	03/01/10 11:21	
4-Bromofluorobenzene (S)	%	98	87-109	03/01/10 11:21	
Dibromofluoromethane (S)	%	107	85-115	03/01/10 11:21	
Toluene-d8 (S)	%	101	70-120	03/01/10 11:21	

LABORATORY CONTROL SAMPLE: 408832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.0	100	83-125	
1,1,1-Trichloroethane	ug/L	50	53.6	107	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	48.7	97	73-127	
1,1,2-Trichloroethane	ug/L	50	53.5	107	77-123	
1,1-Dichloroethane	ug/L	50	55.7	111	76-129	
1,1-Dichloroethene	ug/L	50	51.5	103	78-146	
1,2,3-Trichloropropane	ug/L	50	51.3	103	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	45.8	92	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	50.6	101	81-125	
1,2-Dichlorobenzene	ug/L	50	50.1	100	82-126	
1,2-Dichloroethane	ug/L	50	50.2	100	72-126	
1,2-Dichloroethene (Total)	ug/L	100	100	100	50-150	
1,2-Dichloropropane	ug/L	50	51.6	103	80-127	
1,3-Dichlorobenzene	ug/L	50	49.8	100	82-124	
1,4-Dichlorobenzene	ug/L	50	49.5	99	79-125	
2-Butanone (MEK)	ug/L	100	117	117	50-134	
Acetone	ug/L	100	138	138	50-146	
Benzene	ug/L	50	51.4	103	78-128	
Bromodichloromethane	ug/L	50	49.8	100	81-125	
Bromoform	ug/L	50	49.6	99	71-125	
Bromomethane	ug/L	50	39.8	80	50-150	
Carbon disulfide	ug/L	50	53.4	107	54-150	
Carbon tetrachloride	ug/L	50	52.3	105	81-137	
Chlorobenzene	ug/L	50	51.2	102	82-126	
Chloroethane	ug/L	50	51.6	103	69-140	
Chloroform	ug/L	50	51.6	103	77-129	
Chloromethane	ug/L	50	48.3	97	54-139	
cis-1,2-Dichloroethene	ug/L	50	48.8	98	76-133	
cis-1,3-Dichloropropene	ug/L	50	53.1	106	76-127	
Dibromochloromethane	ug/L	50	49.3	99	77-125	
Dibromomethane	ug/L	50	52.1	104	77-125	
Dichlorodifluoromethane	ug/L	50	41.8	84	50-150	
Ethylbenzene	ug/L	50	51.1	102	80-127	
m&p-Xylene	ug/L	100	105	105	82-127	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

LABORATORY CONTROL SAMPLE: 408832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	44.7	89	67-133	
Naphthalene	ug/L	50	49.1	98	52-136	
o-Xylene	ug/L	50	52.6	105	83-124	
Styrene	ug/L	50	52.1	104	80-130	
Tetrachloroethene	ug/L	50	51.6	103	78-128	
Toluene	ug/L	50	52.0	104	76-126	
trans-1,2-Dichloroethene	ug/L	50	51.6	103	78-134	
trans-1,3-Dichloropropene	ug/L	50	52.7	105	75-125	
Trichloroethene	ug/L	50	53.3	107	79-127	
Trichlorofluoromethane	ug/L	50	50.4	101	76-148	
Vinyl chloride	ug/L	50	45.4	91	67-143	
Xylene (Total)	ug/L	150	158	105	83-125	
1,2-Dichloroethane-d4 (S)	%			96	79-120	
4-Bromofluorobenzene (S)	%			102	87-109	
Dibromofluoromethane (S)	%			103	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 408833 408834

Parameter	Units	9264090001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	62.8	63.2	126	126	60-150	1	30	
Benzene	ug/L	ND	50	50	54.9	55.2	110	110	74-136	1	30	
Chlorobenzene	ug/L	ND	50	50	53.7	54.6	107	109	79-135	2	30	
Toluene	ug/L	ND	50	50	56.5	56.5	113	113	73-131	0	30	
Trichloroethene	ug/L	ND	50	50	58.3	58.2	115	115	73-131	0	30	
1,2-Dichloroethane-d4 (S)	%						105	104	79-120			
4-Bromofluorobenzene (S)	%						99	100	87-109			
Dibromofluoromethane (S)	%						106	106	85-115			
Toluene-d8 (S)	%						101	99	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: MSV/10126 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9264000002, 9264000003, 9264000004, 9264000007, 9264000008, 9264000010

METHOD BLANK: 408843 Matrix: Water
Associated Lab Samples: 9264000002, 9264000003, 9264000004, 9264000007, 9264000008, 9264000010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1-Dichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1-Dichloroethene	ug/L	ND	1.0	03/01/10 23:37	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/01/10 23:37	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichloropropane	ug/L	ND	1.0	03/01/10 23:37	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	03/01/10 23:37	
2-Butanone (MEK)	ug/L	ND	5.0	03/01/10 23:37	
2-Hexanone	ug/L	ND	5.0	03/01/10 23:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/01/10 23:37	
Acetone	ug/L	ND	25.0	03/01/10 23:37	
Acetonitrile	ug/L	ND	50.0	03/01/10 23:37	
Acrolein	ug/L	ND	10.0	03/01/10 23:37	
Acrylonitrile	ug/L	ND	10.0	03/01/10 23:37	
Allyl chloride	ug/L	ND	2.0	03/01/10 23:37	
Benzene	ug/L	ND	1.0	03/01/10 23:37	
Bromodichloromethane	ug/L	ND	1.0	03/01/10 23:37	
Bromoform	ug/L	ND	1.0	03/01/10 23:37	
Bromomethane	ug/L	ND	5.0	03/01/10 23:37	
Carbon disulfide	ug/L	ND	2.0	03/01/10 23:37	
Carbon tetrachloride	ug/L	ND	1.0	03/01/10 23:37	
Chlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
Chloroethane	ug/L	ND	1.0	03/01/10 23:37	
Chloroform	ug/L	ND	1.0	03/01/10 23:37	
Chloromethane	ug/L	ND	1.0	03/01/10 23:37	
Chloroprene	ug/L	ND	5.0	03/01/10 23:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 23:37	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/01/10 23:37	
Dibromochloromethane	ug/L	ND	1.0	03/01/10 23:37	
Dibromomethane	ug/L	ND	1.0	03/01/10 23:37	
Dichlorodifluoromethane	ug/L	ND	1.0	03/01/10 23:37	
Ethyl methacrylate	ug/L	ND	1.0	03/01/10 23:37	
Ethylbenzene	ug/L	ND	1.0	03/01/10 23:37	
Iodomethane	ug/L	ND	5.0	03/01/10 23:37	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

METHOD BLANK: 408843 Matrix: Water

Associated Lab Samples: 9264000002, 9264000003, 9264000004, 9264000007, 9264000008, 9264000010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isobutanol	ug/L	ND	100	03/01/10 23:37	
m&p-Xylene	ug/L	ND	2.0	03/01/10 23:37	
Methacrylonitrile	ug/L	ND	10.0	03/01/10 23:37	
Methyl methacrylate	ug/L	ND	2.0	03/01/10 23:37	
Methylene Chloride	ug/L	ND	2.0	03/01/10 23:37	
Naphthalene	ug/L	ND	1.0	03/01/10 23:37	
o-Xylene	ug/L	ND	1.0	03/01/10 23:37	
Propionitrile	ug/L	ND	20.0	03/01/10 23:37	
Styrene	ug/L	ND	1.0	03/01/10 23:37	
Tetrachloroethene	ug/L	ND	1.0	03/01/10 23:37	
Toluene	ug/L	ND	1.0	03/01/10 23:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 23:37	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/01/10 23:37	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	03/01/10 23:37	
Trichloroethene	ug/L	ND	1.0	03/01/10 23:37	
Trichlorofluoromethane	ug/L	ND	1.0	03/01/10 23:37	
Vinyl acetate	ug/L	ND	2.0	03/01/10 23:37	
Vinyl chloride	ug/L	ND	1.0	03/01/10 23:37	
Xylene (Total)	ug/L	ND	2.0	03/01/10 23:37	
1,2-Dichloroethane-d4 (S)	%	103	79-120	03/01/10 23:37	
4-Bromofluorobenzene (S)	%	98	87-109	03/01/10 23:37	
Dibromofluoromethane (S)	%	109	85-115	03/01/10 23:37	
Toluene-d8 (S)	%	100	70-120	03/01/10 23:37	

LABORATORY CONTROL SAMPLE: 408844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.5	103	83-125	
1,1,1-Trichloroethane	ug/L	50	55.2	110	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	48.5	97	73-127	
1,1,2-Trichloroethane	ug/L	50	53.3	107	77-123	
1,1-Dichloroethane	ug/L	50	56.6	113	76-129	
1,1-Dichloroethene	ug/L	50	52.7	105	78-146	
1,2,3-Trichloropropane	ug/L	50	51.5	103	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	45.4	91	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	50.7	101	81-125	
1,2-Dichlorobenzene	ug/L	50	50.1	100	82-126	
1,2-Dichloroethane	ug/L	50	51.5	103	72-126	
1,2-Dichloroethene (Total)	ug/L	100	102	102	50-150	
1,2-Dichloropropane	ug/L	50	52.2	104	80-127	
1,3-Dichlorobenzene	ug/L	50	50.2	100	82-124	
1,4-Dichlorobenzene	ug/L	50	49.4	99	79-125	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1250	125	50-150	
2-Butanone (MEK)	ug/L	100	115	115	50-134	
2-Hexanone	ug/L	100	116	116	58-138	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

LABORATORY CONTROL SAMPLE: 408844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	70-131	
Acetone	ug/L	100	128	128	50-146	
Acetonitrile	ug/L	500	545	109	66-124	
Acrolein	ug/L	250	275	110	55-143	
Acrylonitrile	ug/L	250	264	105	66-124	
Allyl chloride	ug/L	50	50.7	101	73-141	
Benzene	ug/L	50	52.2	104	78-128	
Bromodichloromethane	ug/L	50	50.8	102	81-125	
Bromoform	ug/L	50	50.2	100	71-125	
Bromomethane	ug/L	50	43.4	87	50-150	
Carbon disulfide	ug/L	50	54.3	109	54-150	
Carbon tetrachloride	ug/L	50	53.0	106	81-137	
Chlorobenzene	ug/L	50	51.9	104	82-126	
Chloroethane	ug/L	50	53.0	106	69-140	
Chloroform	ug/L	50	53.2	106	77-129	
Chloromethane	ug/L	50	50.8	102	54-139	
Chloroprene	ug/L	50	54.1	108	71-142	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	76-133	
cis-1,3-Dichloropropene	ug/L	50	52.4	105	76-127	
Dibromochloromethane	ug/L	50	49.8	100	77-125	
Dibromomethane	ug/L	50	53.6	107	77-125	
Dichlorodifluoromethane	ug/L	50	42.2	84	50-150	
Ethyl methacrylate	ug/L	50	55.8	112	73-129	
Ethylbenzene	ug/L	50	51.8	104	80-127	
Iodomethane	ug/L	100	104	104	65-172	
Isobutanol	ug/L	1000	1180	118	50-150	
m&p-Xylene	ug/L	100	107	107	82-127	
Methacrylonitrile	ug/L	500	552	110	70-128	
Methyl methacrylate	ug/L	50	59.2	118	79-122	
Methylene Chloride	ug/L	50	44.9	90	67-133	
Naphthalene	ug/L	50	48.6	97	52-136	
o-Xylene	ug/L	50	53.5	107	83-124	
Propionitrile	ug/L	500	574	115	65-129	
Styrene	ug/L	50	53.2	106	80-130	
Tetrachloroethene	ug/L	50	52.8	106	78-128	
Toluene	ug/L	50	53.1	106	76-126	
trans-1,2-Dichloroethene	ug/L	50	52.4	105	78-134	
trans-1,3-Dichloropropene	ug/L	50	51.8	104	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	50.6	101	51-140	
Trichloroethene	ug/L	50	54.9	110	79-127	
Trichlorofluoromethane	ug/L	50	51.6	103	76-148	
Vinyl acetate	ug/L	100	119	119	50-150	
Vinyl chloride	ug/L	50	46.6	93	67-143	
Xylene (Total)	ug/L	150	161	107	83-125	
1,2-Dichloroethane-d4 (S)	%			96	79-120	
4-Bromofluorobenzene (S)	%			102	87-109	
Dibromofluoromethane (S)	%			103	85-115	
Toluene-d8 (S)	%			100	70-120	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 408845 408846

Parameter	Units	9264000007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	67.1	66.3	134	133	60-150	1	30	
Benzene	ug/L	ND	50	50	58.5	57.0	117	114	74-136	3	30	
Chlorobenzene	ug/L	ND	50	50	56.2	55.5	112	111	79-135	1	30	
Toluene	ug/L	ND	50	50	59.9	58.5	120	117	73-131	2	30	
Trichloroethene	ug/L	ND	50	50	60.7	59.8	120	118	73-131	1	30	
1,2-Dichloroethane-d4 (S)	%						104	105	79-120			
4-Bromofluorobenzene (S)	%						101	100	87-109			
Dibromofluoromethane (S)	%						107	108	85-115			
Toluene-d8 (S)	%						100	100	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: MSV/10144
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9264000006

METHOD BLANK: 409447
Matrix: Water
Associated Lab Samples: 9264000006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/03/10 12:24	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/03/10 12:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/03/10 12:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/03/10 12:24	
1,1-Dichloroethane	ug/L	ND	1.0	03/03/10 12:24	
1,1-Dichloroethene	ug/L	ND	1.0	03/03/10 12:24	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/03/10 12:24	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/03/10 12:24	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/03/10 12:24	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/03/10 12:24	
1,2-Dichloroethane	ug/L	ND	1.0	03/03/10 12:24	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	03/03/10 12:24	
1,2-Dichloropropane	ug/L	ND	1.0	03/03/10 12:24	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/03/10 12:24	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/03/10 12:24	
2-Butanone (MEK)	ug/L	ND	5.0	03/03/10 12:24	
Acetone	ug/L	ND	25.0	03/03/10 12:24	
Benzene	ug/L	ND	1.0	03/03/10 12:24	
Bromodichloromethane	ug/L	ND	1.0	03/03/10 12:24	
Bromoform	ug/L	ND	1.0	03/03/10 12:24	
Bromomethane	ug/L	ND	5.0	03/03/10 12:24	
Carbon disulfide	ug/L	ND	2.0	03/03/10 12:24	
Carbon tetrachloride	ug/L	ND	1.0	03/03/10 12:24	
Chlorobenzene	ug/L	ND	1.0	03/03/10 12:24	
Chloroethane	ug/L	ND	1.0	03/03/10 12:24	
Chloroform	ug/L	ND	1.0	03/03/10 12:24	
Chloromethane	ug/L	ND	1.0	03/03/10 12:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/03/10 12:24	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/03/10 12:24	
Dibromochloromethane	ug/L	ND	1.0	03/03/10 12:24	
Dibromomethane	ug/L	ND	1.0	03/03/10 12:24	
Dichlorodifluoromethane	ug/L	ND	1.0	03/03/10 12:24	
Ethylbenzene	ug/L	ND	1.0	03/03/10 12:24	
m&p-Xylene	ug/L	ND	2.0	03/03/10 12:24	
Methylene Chloride	ug/L	ND	2.0	03/03/10 12:24	
Naphthalene	ug/L	ND	1.0	03/03/10 12:24	
o-Xylene	ug/L	ND	1.0	03/03/10 12:24	
Styrene	ug/L	ND	1.0	03/03/10 12:24	
Tetrachloroethene	ug/L	ND	1.0	03/03/10 12:24	
Toluene	ug/L	ND	1.0	03/03/10 12:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/03/10 12:24	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/03/10 12:24	
Trichloroethene	ug/L	ND	1.0	03/03/10 12:24	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

METHOD BLANK: 409447 Matrix: Water

Associated Lab Samples: 9264000006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	ND	1.0	03/03/10 12:24	
Vinyl chloride	ug/L	ND	1.0	03/03/10 12:24	
Xylene (Total)	ug/L	ND	2.0	03/03/10 12:24	
1,2-Dichloroethane-d4 (S)	%	108	79-120	03/03/10 12:24	
4-Bromofluorobenzene (S)	%	96	87-109	03/03/10 12:24	
Dibromofluoromethane (S)	%	105	85-115	03/03/10 12:24	
Toluene-d8 (S)	%	97	70-120	03/03/10 12:24	

LABORATORY CONTROL SAMPLE: 409448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.8	100	83-125	
1,1,1-Trichloroethane	ug/L	50	58.7	117	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	45.5	91	73-127	
1,1,2-Trichloroethane	ug/L	50	53.3	107	77-123	
1,1-Dichloroethane	ug/L	50	57.0	114	76-129	
1,1-Dichloroethene	ug/L	50	54.5	109	78-146	
1,2,3-Trichloropropane	ug/L	50	49.0	98	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	51.8	104	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	49.6	99	81-125	
1,2-Dichlorobenzene	ug/L	50	47.8	96	82-126	
1,2-Dichloroethane	ug/L	50	57.0	114	72-126	
1,2-Dichloroethene (Total)	ug/L	100	110	110	50-150	
1,2-Dichloropropane	ug/L	50	51.1	102	80-127	
1,3-Dichlorobenzene	ug/L	50	47.5	95	82-124	
1,4-Dichlorobenzene	ug/L	50	47.5	95	79-125	
2-Butanone (MEK)	ug/L	100	128	128	50-134	
Acetone	ug/L	100	138	138	50-146	
Benzene	ug/L	50	51.0	102	78-128	
Bromodichloromethane	ug/L	50	51.1	102	81-125	
Bromoform	ug/L	50	46.3	93	71-125	
Bromomethane	ug/L	50	38.6	77	50-150	
Carbon disulfide	ug/L	50	45.3	91	54-150	
Carbon tetrachloride	ug/L	50	55.8	112	81-137	
Chlorobenzene	ug/L	50	49.8	100	82-126	
Chloroethane	ug/L	50	57.6	115	69-140	
Chloroform	ug/L	50	54.5	109	77-129	
Chloromethane	ug/L	50	46.1	92	54-139	
cis-1,2-Dichloroethene	ug/L	50	55.0	110	76-133	
cis-1,3-Dichloropropene	ug/L	50	45.3	91	76-127	
Dibromochloromethane	ug/L	50	47.5	95	77-125	
Dibromomethane	ug/L	50	53.7	107	77-125	
Dichlorodifluoromethane	ug/L	50	47.3	95	50-150	
Ethylbenzene	ug/L	50	48.6	97	80-127	
m&p-Xylene	ug/L	100	99.7	100	82-127	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

LABORATORY CONTROL SAMPLE: 409448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	53.0	106	67-133	
Naphthalene	ug/L	50	56.9	114	52-136	
o-Xylene	ug/L	50	50.2	100	83-124	
Styrene	ug/L	50	52.0	104	80-130	
Tetrachloroethene	ug/L	50	49.7	99	78-128	
Toluene	ug/L	50	50.5	101	76-126	
trans-1,2-Dichloroethene	ug/L	50	54.8	110	78-134	
trans-1,3-Dichloropropene	ug/L	50	47.7	95	75-125	
Trichloroethene	ug/L	50	53.0	106	79-127	
Trichlorofluoromethane	ug/L	50	52.8	106	76-148	
Vinyl chloride	ug/L	50	44.4	89	67-143	
Xylene (Total)	ug/L	150	150	100	83-125	
1,2-Dichloroethane-d4 (S)	%			108	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			108	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 409449 409450

Parameter	Units	9264342006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	56.3	54.6	113	109	60-150	3	30	
Benzene	ug/L	ND	50	50	49.2	48.4	98	97	74-136	2	30	
Chlorobenzene	ug/L	ND	50	50	46.7	45.8	93	92	79-135	2	30	
Toluene	ug/L	ND	50	50	47.0	45.8	94	92	73-131	3	30	
Trichloroethene	ug/L	ND	50	50	49.9	48.4	100	97	73-131	3	30	
1,2-Dichloroethane-d4 (S)	%						108	108	79-120			
4-Bromofluorobenzene (S)	%						95	97	87-109			
Dibromofluoromethane (S)	%						105	105	85-115			
Toluene-d8 (S)	%						97	98	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: MSV/10177
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9264000001

METHOD BLANK: 411322
Matrix: Water
Associated Lab Samples: 9264000001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/05/10 13:38	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/05/10 13:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/05/10 13:38	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/05/10 13:38	
1,1-Dichloroethane	ug/L	ND	1.0	03/05/10 13:38	
1,1-Dichloroethene	ug/L	ND	1.0	03/05/10 13:38	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/05/10 13:38	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/05/10 13:38	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/05/10 13:38	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/05/10 13:38	
1,2-Dichloroethane	ug/L	ND	1.0	03/05/10 13:38	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	03/05/10 13:38	
1,2-Dichloropropane	ug/L	ND	1.0	03/05/10 13:38	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/05/10 13:38	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/05/10 13:38	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	03/05/10 13:38	
2-Butanone (MEK)	ug/L	ND	5.0	03/05/10 13:38	
2-Hexanone	ug/L	ND	5.0	03/05/10 13:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/05/10 13:38	
Acetone	ug/L	ND	25.0	03/05/10 13:38	
Acetonitrile	ug/L	ND	50.0	03/05/10 13:38	
Acrolein	ug/L	ND	10.0	03/05/10 13:38	
Acrylonitrile	ug/L	ND	10.0	03/05/10 13:38	
Allyl chloride	ug/L	ND	2.0	03/05/10 13:38	
Benzene	ug/L	ND	1.0	03/05/10 13:38	
Bromodichloromethane	ug/L	ND	1.0	03/05/10 13:38	
Bromoform	ug/L	ND	1.0	03/05/10 13:38	
Bromomethane	ug/L	ND	5.0	03/05/10 13:38	
Carbon disulfide	ug/L	ND	2.0	03/05/10 13:38	
Carbon tetrachloride	ug/L	ND	1.0	03/05/10 13:38	
Chlorobenzene	ug/L	ND	1.0	03/05/10 13:38	
Chloroethane	ug/L	ND	1.0	03/05/10 13:38	
Chloroform	ug/L	ND	1.0	03/05/10 13:38	
Chloromethane	ug/L	ND	1.0	03/05/10 13:38	
Chloroprene	ug/L	ND	5.0	03/05/10 13:38	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/05/10 13:38	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/05/10 13:38	
Dibromochloromethane	ug/L	ND	1.0	03/05/10 13:38	
Dibromomethane	ug/L	ND	1.0	03/05/10 13:38	
Dichlorodifluoromethane	ug/L	ND	1.0	03/05/10 13:38	
Ethyl methacrylate	ug/L	ND	1.0	03/05/10 13:38	
Ethylbenzene	ug/L	ND	1.0	03/05/10 13:38	
Iodomethane	ug/L	ND	5.0	03/05/10 13:38	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

METHOD BLANK: 411322 Matrix: Water

Associated Lab Samples: 9264000001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isobutanol	ug/L	ND	100	03/05/10 13:38	
m&p-Xylene	ug/L	ND	2.0	03/05/10 13:38	
Methacrylonitrile	ug/L	ND	10.0	03/05/10 13:38	
Methyl methacrylate	ug/L	ND	2.0	03/05/10 13:38	
Methylene Chloride	ug/L	ND	2.0	03/05/10 13:38	
Naphthalene	ug/L	ND	1.0	03/05/10 13:38	
o-Xylene	ug/L	ND	1.0	03/05/10 13:38	
Propionitrile	ug/L	ND	20.0	03/05/10 13:38	
Styrene	ug/L	ND	1.0	03/05/10 13:38	
Tetrachloroethene	ug/L	ND	1.0	03/05/10 13:38	
Toluene	ug/L	ND	1.0	03/05/10 13:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/05/10 13:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/05/10 13:38	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	03/05/10 13:38	
Trichloroethene	ug/L	ND	1.0	03/05/10 13:38	
Trichlorofluoromethane	ug/L	ND	1.0	03/05/10 13:38	
Vinyl acetate	ug/L	ND	2.0	03/05/10 13:38	
Vinyl chloride	ug/L	ND	1.0	03/05/10 13:38	
Xylene (Total)	ug/L	ND	2.0	03/05/10 13:38	
1,2-Dichloroethane-d4 (S)	%	91	79-120	03/05/10 13:38	
4-Bromofluorobenzene (S)	%	97	87-109	03/05/10 13:38	
Dibromofluoromethane (S)	%	100	85-115	03/05/10 13:38	
Toluene-d8 (S)	%	100	70-120	03/05/10 13:38	

LABORATORY CONTROL SAMPLE: 411323

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.2	98	83-125	
1,1,1-Trichloroethane	ug/L	50	48.4	97	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	44.0	88	73-127	
1,1,2-Trichloroethane	ug/L	50	48.9	98	77-123	
1,1-Dichloroethane	ug/L	50	51.1	102	76-129	
1,1-Dichloroethene	ug/L	50	48.2	96	78-146	
1,2,3-Trichloropropane	ug/L	50	45.0	90	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	40.3	81	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	48.5	97	81-125	
1,2-Dichlorobenzene	ug/L	50	50.1	100	82-126	
1,2-Dichloroethane	ug/L	50	43.0	86	72-126	
1,2-Dichloroethene (Total)	ug/L	100	96.9	97	50-150	
1,2-Dichloropropane	ug/L	50	49.2	98	80-127	
1,3-Dichlorobenzene	ug/L	50	49.8	100	82-124	
1,4-Dichlorobenzene	ug/L	50	49.5	99	79-125	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1080	108	50-150	
2-Butanone (MEK)	ug/L	100	91.8	92	50-134	
2-Hexanone	ug/L	100	99.9	100	58-138	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

LABORATORY CONTROL SAMPLE: 411323

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.7	99	70-131	
Acetone	ug/L	100	104	104	50-146	
Acetonitrile	ug/L	500	451	90	66-124	
Acrolein	ug/L	250	272	109	55-143	
Acrylonitrile	ug/L	250	223	89	66-124	
Allyl chloride	ug/L	50	45.5	91	73-141	
Benzene	ug/L	50	50.3	101	78-128	
Bromodichloromethane	ug/L	50	44.9	90	81-125	
Bromoform	ug/L	50	47.8	96	71-125	
Bromomethane	ug/L	50	50.3	101	50-150	
Carbon disulfide	ug/L	50	53.3	107	54-150	
Carbon tetrachloride	ug/L	50	48.0	96	81-137	
Chlorobenzene	ug/L	50	50.1	100	82-126	
Chloroethane	ug/L	50	47.7	95	69-140	
Chloroform	ug/L	50	47.8	96	77-129	
Chloromethane	ug/L	50	36.7	73	54-139	
Chloroprene	ug/L	50	46.6	93	71-142	
cis-1,2-Dichloroethene	ug/L	50	49.2	98	76-133	
cis-1,3-Dichloropropene	ug/L	50	51.1	102	76-127	
Dibromochloromethane	ug/L	50	47.9	96	77-125	
Dibromomethane	ug/L	50	52.4	105	77-125	
Dichlorodifluoromethane	ug/L	50	42.9	86	50-150	
Ethyl methacrylate	ug/L	50	50.8	102	73-129	
Ethylbenzene	ug/L	50	49.6	99	80-127	
Iodomethane	ug/L	100	149	149	65-172	
Isobutanol	ug/L	1000	914	91	50-150	
m&p-Xylene	ug/L	100	104	104	82-127	
Methacrylonitrile	ug/L	500	472	94	70-128	
Methyl methacrylate	ug/L	50	54.8	110	79-122	
Methylene Chloride	ug/L	50	40.5	81	67-133	
Naphthalene	ug/L	50	49.4	99	52-136	
o-Xylene	ug/L	50	51.7	103	83-124	
Propionitrile	ug/L	500	471	94	65-129	
Styrene	ug/L	50	51.4	103	80-130	
Tetrachloroethene	ug/L	50	52.6	105	78-128	
Toluene	ug/L	50	50.0	100	76-126	
trans-1,2-Dichloroethene	ug/L	50	47.7	95	78-134	
trans-1,3-Dichloropropene	ug/L	50	49.8	100	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	47.6	95	51-140	
Trichloroethene	ug/L	50	51.6	103	79-127	
Trichlorofluoromethane	ug/L	50	46.4	93	76-148	
Vinyl acetate	ug/L	100	112	112	50-150	
Vinyl chloride	ug/L	50	45.1	90	67-143	
Xylene (Total)	ug/L	150	156	104	83-125	
1,2-Dichloroethane-d4 (S)	%			89	79-120	
4-Bromofluorobenzene (S)	%			99	87-109	
Dibromofluoromethane (S)	%			96	85-115	
Toluene-d8 (S)	%			100	70-120	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 411324 411325

Parameter	Units	9264307004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	57.9	57.6	116	115	60-150	0	30	
Benzene	ug/L	ND	50	50	57.0	56.9	114	114	74-136	0	30	
Chlorobenzene	ug/L	ND	50	50	55.6	55.4	111	111	79-135	0	30	
Toluene	ug/L	ND	50	50	61.1	64.2	122	128	73-131	5	30	
Trichloroethene	ug/L	ND	50	50	57.6	58.0	115	116	73-131	1	30	
1,2-Dichloroethane-d4 (S)	%						94	93	79-120			
4-Bromofluorobenzene (S)	%						98	99	87-109			
Dibromofluoromethane (S)	%						101	101	85-115			
Toluene-d8 (S)	%						99	100	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: WET/11548 Analysis Method: SM 4500-S2D
QC Batch Method: SM 4500-S2D Analysis Description: 4500S2D Sulfide Water
Associated Lab Samples: 9264000001, 9264000002, 9264000003

METHOD BLANK: 407544 Matrix: Water
Associated Lab Samples: 9264000001, 9264000002, 9264000003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	02/25/10 20:18	

LABORATORY CONTROL SAMPLE: 407545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	.5	0.53	106	90-110	

MATRIX SPIKE SAMPLE: 407546

Parameter	Units	9263975001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	ND	.5	ND	0	75-125	M0

SAMPLE DUPLICATE: 407547

Parameter	Units	9263975002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide	mg/L	ND	ND		20	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

QC Batch: WETA/6839 Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 9264000001, 9264000002, 9264000003

METHOD BLANK: 408690 Matrix: Water
Associated Lab Samples: 9264000001, 9264000002, 9264000003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	03/07/10 11:18	

LABORATORY CONTROL SAMPLE: 408691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.092	92	80-120	

MATRIX SPIKE SAMPLE: 408692

Parameter	Units	9264172001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	14200	100	14200	-60	75-125	M0

SAMPLE DUPLICATE: 408693

Parameter	Units	9264172002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	0.46	0.47	2	20	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: FORMER PARKER HANNIFIN
Pace Project No.: 9264000

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

C9	Common Laboratory Contaminant.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 08, 2010

Brandon Helton
Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville NC 28078

TEL: (704) 875-9092
FAX: (704) 875-9091

RE: 9264000

Dear Brandon Helton: Order No: 1002K40

Analytical Environmental Services, Inc. received 3 samples on 2/26/2010 10:50:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/09-06/30/10.
-AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Janice WinnShilling
Project Manager

1002K40

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 9264000 **Workorder Name:** FORMER PARKER HANNIFIN **Results Requested** 3/11/2010

Report / Invoice To	Subcontract To
Brandon Helton Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092 Email: brandon.helton@pacelabs.com	AES P.O. CHS08328

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: App. IX 8270	App. IX 8151 Herb.	App. IX 8081 Pest.	App. IX 8082 PCB	LAB USE ONLY
1	POC-2A	2/23/2010 11:15	9264000001	Water	6	X	X	X	X	
2	POC-2B	2/23/2010 10:45	9264000002	Water	6	X	X	X	X	
3	POC-1B	2/23/2010 15:25	9264000003	Water	6	X	X	X	X	
~~4~~	~~MW-10~~	~~2/23/2010 10:50~~	~~9264000004~~	~~Water~~						
~~5~~	~~MW-8~~	~~2/23/2010 10:10~~	~~9264000005~~	~~Water~~						
~~6~~	~~MW-5~~	~~2/23/2010 17:30~~	~~9264000006~~	~~Water~~						
~~7~~	~~MW-30~~	~~2/23/2010 10:00~~	~~9264000007~~	~~Water~~						
~~8~~	~~EB-2~~	~~2/23/2010 17:10~~	~~9264000008~~	~~Water~~						
~~9~~	~~MW-10B~~	~~2/23/2010 12:55~~	~~9264000009~~	~~Water~~						
~~10~~	~~TB-0000~~	~~2/23/2010 00:00~~	~~9264000010~~	~~Water~~						
11										
12										
13										
14										

Brandon Helton - PACE	2-25-10 1700		FedEx	2-25-10 1700
FedEx	~~2-25~~ BH 2/24			

2/26/10 10:52

* Use App ~~IX~~ list on all analysis *

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2A
Project:	9264000	**Collection Date:**	2/23/2010 11:15:00 AM
Lab ID:	1002K40-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
POLYCHLORINATED BIPHENYLS SW8082A					**(SW3510B)**				
Aroclor 1016	BRL		0.075	0.50	ug/L	125794	1	03/02/2010 15:01	KD
Aroclor 1221	BRL		0.22	0.50	ug/L	125794	1	03/02/2010 15:01	KD
Aroclor 1232	BRL		0.35	0.50	ug/L	125794	1	03/02/2010 15:01	KD
Aroclor 1242	BRL		0.20	0.50	ug/L	125794	1	03/02/2010 15:01	KD
Aroclor 1248	BRL		0.13	0.50	ug/L	125794	1	03/02/2010 15:01	KD
Aroclor 1254	BRL		0.16	0.50	ug/L	125794	1	03/02/2010 15:01	KD
Aroclor 1260	BRL		0.056	0.50	ug/L	125794	1	03/02/2010 15:01	KD
Surr: Decachlorobiphenyl	72.9		0	10-140	%REC	125794	1	03/02/2010 15:01	KD
Surr: Tetrachloro-m-xylene	87.9		0	14.8-140	%REC	125794	1	03/02/2010 15:01	KD
CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B					**(SW3510B)**				
4,4´-DDD	BRL		0.015	0.10	ug/L	125795	1	03/02/2010 20:48	KD
4,4´-DDE	BRL		0.012	0.10	ug/L	125795	1	03/02/2010 20:48	KD
4,4´-DDT	BRL		0.0097	0.10	ug/L	125795	1	03/02/2010 20:48	KD
Aldrin	BRL		0.0079	0.050	ug/L	125795	1	03/02/2010 20:48	KD
alpha-BHC	BRL		0.0066	0.050	ug/L	125795	1	03/02/2010 20:48	KD
beta-BHC	BRL		0.013	0.050	ug/L	125795	1	03/02/2010 20:48	KD
Chlordane	BRL		0.068	0.50	ug/L	125795	1	03/02/2010 20:48	KD
delta-BHC	BRL		0.0053	0.050	ug/L	125795	1	03/02/2010 20:48	KD
Dieldrin	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 20:48	KD
Endosulfan I	BRL		0.0097	0.050	ug/L	125795	1	03/02/2010 20:48	KD
Endosulfan II	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 20:48	KD
Endosulfan sulfate	BRL		0.017	0.10	ug/L	125795	1	03/02/2010 20:48	KD
Endrin	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 20:48	KD
Endrin aldehyde	BRL		0.031	0.10	ug/L	125795	1	03/02/2010 20:48	KD
gamma-BHC	0.029	J	0.0075	0.050	ug/L	125795	1	03/02/2010 20:48	KD
Heptachlor	BRL		0.010	0.050	ug/L	125795	1	03/02/2010 20:48	KD
Heptachlor epoxide	BRL		0.0079	0.050	ug/L	125795	1	03/02/2010 20:48	KD
Methoxychlor	BRL		0.064	0.50	ug/L	125795	1	03/02/2010 20:48	KD
Toxaphene	BRL		0.17	3.0	ug/L	125795	1	03/02/2010 20:48	KD
Surr: Decachlorobiphenyl	65.9		0	16.1-124	%REC	125795	1	03/02/2010 20:48	KD
Surr: Tetrachloro-m-xylene	83.2		0	16-126	%REC	125795	1	03/02/2010 20:48	KD
CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A					**(SW3510B)**				
2,4,5-T	BRL		0.70	2.0	ug/L	125771	1	03/03/2010 06:49	AK
2,4,5-TP (Silvex)	BRL		0.66	2.0	ug/L	125771	1	03/03/2010 06:49	AK
2,4-D	BRL		1.2	2.0	ug/L	125771	1	03/03/2010 06:49	AK
Dinoseb	BRL		0.55	5.0	ug/L	125771	1	03/03/2010 06:49	AK
Surr: DCAA	78.3		0	50-143	%REC	125771	1	03/03/2010 06:49	AK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2A
Project:	9264000	**Collection Date:**	2/23/2010 11:15:00 AM
Lab ID:	1002K40-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
1,2,4,5-Tetrachlorobenzene	BRL		0.82	10	ug/L	125766	1	03/02/2010 17:44	YH
1,2,4-Trichlorobenzene	BRL		0.95	10	ug/L	125766	1	03/02/2010 17:44	YH
1,2-Dichlorobenzene	BRL		1.3	10	ug/L	125766	1	03/02/2010 17:44	YH
1,3-Dichlorobenzene	BRL		1.3	10	ug/L	125766	1	03/02/2010 17:44	YH
1,3-Dinitrobenzene	BRL		6.9	20	ug/L	125766	1	03/02/2010 17:44	YH
1,4-Dichlorobenzene	BRL		1.4	10	ug/L	125766	1	03/02/2010 17:44	YH
1,4-Napthoquinone	BRL		6.3	10	ug/L	125766	1	03/02/2010 17:44	YH
1-Naphthylamine	BRL		2.5	10	ug/L	125766	1	03/02/2010 17:44	YH
2,3,4,6-Tetrachlorophenol	BRL		0.80	10	ug/L	125766	1	03/02/2010 17:44	YH
2,4,5-Trichlorophenol	BRL		1.5	10	ug/L	125766	1	03/02/2010 17:44	YH
2,4,6-Trichlorophenol	BRL		1.2	10	ug/L	125766	1	03/02/2010 17:44	YH
2,4-Dichlorophenol	BRL		1.3	10	ug/L	125766	1	03/02/2010 17:44	YH
2,4-Dimethylphenol	BRL		0.54	50	ug/L	125766	1	03/02/2010 17:44	YH
2,4-Dinitrophenol	BRL		3.4	50	ug/L	125766	1	03/02/2010 17:44	YH
2,4-Dinitrotoluene	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH
2,6-Dichlorophenol	BRL		1.0	10	ug/L	125766	1	03/02/2010 17:44	YH
2,6-Dinitrotoluene	BRL		0.74	10	ug/L	125766	1	03/02/2010 17:44	YH
2-Acetylaminofluorene	BRL		6.9	20	ug/L	125766	1	03/02/2010 17:44	YH
2-Chloronaphthalene	BRL		0.72	10	ug/L	125766	1	03/02/2010 17:44	YH
2-Chlorophenol	BRL		1.7	10	ug/L	125766	1	03/02/2010 17:44	YH
2-Methylnaphthalene	BRL		0.89	10	ug/L	125766	1	03/02/2010 17:44	YH
2-Methylphenol	BRL		0.98	10	ug/L	125766	1	03/02/2010 17:44	YH
2-Naphthylamine	BRL		2.9	10	ug/L	125766	1	03/02/2010 17:44	YH
2-Nitroaniline	BRL		0.63	50	ug/L	125766	1	03/02/2010 17:44	YH
2-Nitrophenol	BRL		0.66	10	ug/L	125766	1	03/02/2010 17:44	YH
2-Picoline	BRL		6.9	10	ug/L	125766	1	03/02/2010 17:44	YH
3,3´-Dichlorobenzidine	BRL		2.6	20	ug/L	125766	1	03/02/2010 17:44	YH
3,3´-Dimethylbenzidine	BRL		6.3	20	ug/L	125766	1	03/02/2010 17:44	YH
3,4-Methylphenol	BRL		2.4	10	ug/L	125766	1	03/02/2010 17:44	YH
3-Methylcholanthrene	BRL		0.81	10	ug/L	125766	1	03/02/2010 17:44	YH
3-Nitroaniline	BRL		1.1	50	ug/L	125766	1	03/02/2010 17:44	YH
4,6-Dinitro-2-methylphenol	BRL		1.2	50	ug/L	125766	1	03/02/2010 17:44	YH
4-Aminobiphenyl	BRL		2.7	20	ug/L	125766	1	03/02/2010 17:44	YH
4-Bromophenyl phenyl ether	BRL		0.63	10	ug/L	125766	1	03/02/2010 17:44	YH
4-Chloro-3-methylphenol	BRL		1.3	20	ug/L	125766	1	03/02/2010 17:44	YH
4-Chloroaniline	BRL		1.3	20	ug/L	125766	1	03/02/2010 17:44	YH
4-Chlorophenyl phenyl ether	BRL		0.37	10	ug/L	125766	1	03/02/2010 17:44	YH
4-Nitroaniline	BRL		1.4	20	ug/L	125766	1	03/02/2010 17:44	YH
4-Nitrophenol	BRL		5.3	50	ug/L	125766	1	03/02/2010 17:44	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2A
Project:	9264000	**Collection Date:**	2/23/2010 11:15:00 AM
Lab ID:	1002K40-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
4-Nitroquinoline,1-oxide	BRL		4.4	50	ug/L	125766	1	03/02/2010 17:44	YH
5-Nitro-o-toluidine	BRL		6.2	10	ug/L	125766	1	03/02/2010 17:44	YH
7,12-Dimethylbenz(a)anthracene	BRL		6.4	10	ug/L	125766	1	03/02/2010 17:44	YH
a,a-Dimethylphenethylamine	BRL		19	50	ug/L	125766	1	03/02/2010 17:44	YH
Acenaphthene	BRL		0.59	10	ug/L	125766	1	03/02/2010 17:44	YH
Acenaphthylene	BRL		0.36	10	ug/L	125766	1	03/02/2010 17:44	YH
Acetophenone	BRL		2.3	10	ug/L	125766	1	03/02/2010 17:44	YH
Aniline	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH
Anthracene	BRL		0.44	10	ug/L	125766	1	03/02/2010 17:44	YH
Aramite	BRL		8.2	10	ug/L	125766	1	03/02/2010 17:44	YH
Benz(a)anthracene	BRL		0.93	10	ug/L	125766	1	03/02/2010 17:44	YH
Benzo(a)pyrene	BRL		1.2	10	ug/L	125766	1	03/02/2010 17:44	YH
Benzo(b)fluoranthene	BRL		0.67	10	ug/L	125766	1	03/02/2010 17:44	YH
Benzo(g,h,i)perylene	BRL		1.0	10	ug/L	125766	1	03/02/2010 17:44	YH
Benzo(k)fluoranthene	BRL		1.4	10	ug/L	125766	1	03/02/2010 17:44	YH
Benzyl alcohol	BRL		1.3	20	ug/L	125766	1	03/02/2010 17:44	YH
Bis(2-chloroethoxy)methane	BRL		0.99	10	ug/L	125766	1	03/02/2010 17:44	YH
Bis(2-chloroethyl)ether	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH
Bis(2-chloroisopropyl)ether	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH
Bis(2-ethylhexyl)phthalate	BRL		6.7	20	ug/L	125766	1	03/02/2010 17:44	YH
Butyl benzyl phthalate	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH
Chlorobenzilate	BRL		6.2	10	ug/L	125766	1	03/02/2010 17:44	YH
Chrysene	BRL		0.68	10	ug/L	125766	1	03/02/2010 17:44	YH
Di-n-butyl phthalate	BRL		0.93	10	ug/L	125766	1	03/02/2010 17:44	YH
Di-n-octyl phthalate	BRL		1.6	10	ug/L	125766	1	03/02/2010 17:44	YH
Diallate	BRL		5.7	10	ug/L	125766	1	03/02/2010 17:44	YH
Dibenz(a,h)anthracene	BRL		1.5	10	ug/L	125766	1	03/02/2010 17:44	YH
Dibenzofuran	BRL		0.29	10	ug/L	125766	1	03/02/2010 17:44	YH
Diethyl phthalate	BRL		0.49	10	ug/L	125766	1	03/02/2010 17:44	YH
Dimethoate	BRL		6.8	20	ug/L	125766	1	03/02/2010 17:44	YH
Dimethyl phthalate	BRL		0.45	10	ug/L	125766	1	03/02/2010 17:44	YH
Diphenylamine	BRL		0.66	10	ug/L	125766	1	03/02/2010 17:44	YH
Disulfoton	BRL		5.5	10	ug/L	125766	1	03/02/2010 17:44	YH
Ethyl methanesulfonate	BRL		1.4	20	ug/L	125766	1	03/02/2010 17:44	YH
Famphur	BRL		7.6	20	ug/L	125766	1	03/02/2010 17:44	YH
Fluoranthene	BRL		0.75	10	ug/L	125766	1	03/02/2010 17:44	YH
Fluorene	BRL		0.32	10	ug/L	125766	1	03/02/2010 17:44	YH
Hexachlorobenzene	BRL		0.64	10	ug/L	125766	1	03/02/2010 17:44	YH
Hexachlorobutadiene	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2A
Project:	9264000	**Collection Date:**	2/23/2010 11:15:00 AM
Lab ID:	1002K40-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
Hexachlorocyclopentadiene	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH
Hexachloroethane	BRL		1.4	10	ug/L	125766	1	03/02/2010 17:44	YH
Hexachlorophene	BRL		0.36	80	ug/L	125766	1	03/02/2010 17:44	YH
Hexachloropropene	BRL		4.8	10	ug/L	125766	1	03/02/2010 17:44	YH
Indeno(1,2,3-cd)pyrene	BRL		1.3	10	ug/L	125766	1	03/02/2010 17:44	YH
Isodrin	BRL		5.2	20	ug/L	125766	1	03/02/2010 17:44	YH
Isophorone	BRL		0.59	10	ug/L	125766	1	03/02/2010 17:44	YH
Isosafrole	BRL		6.0	10	ug/L	125766	1	03/02/2010 17:44	YH
Kepone	BRL		9.6	50	ug/L	125766	1	03/02/2010 17:44	YH
Methapyrilene	BRL		2.7	20	ug/L	125766	1	03/02/2010 17:44	YH
Methyl methanesulfonate	BRL		1.4	10	ug/L	125766	1	03/02/2010 17:44	YH
Methyl parathion	BRL		7.0	10	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitroso-di-n-butylamine	BRL		1.8	10	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosodi-n-propylamine	BRL		1.5	10	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosodiethylamine	BRL		5.0	20	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosodimethylamine	BRL		1.7	20	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosodiphenylamine	BRL		0.42	50	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosomethylethylamine	BRL		6.0	10	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosomorpholine	BRL		4.5	10	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosopiperidine	BRL		1.2	20	ug/L	125766	1	03/02/2010 17:44	YH
N-Nitrosopyrrolidine	BRL		5.4	40	ug/L	125766	1	03/02/2010 17:44	YH
Naphthalene	BRL		1.0	10	ug/L	125766	1	03/02/2010 17:44	YH
Nitrobenzene	BRL		1.2	10	ug/L	125766	1	03/02/2010 17:44	YH
O,O,O-Triethylphosphorothioate	BRL		3.6	10	ug/L	125766	1	03/02/2010 17:44	YH
o-Toluidine	BRL		3.9	20	ug/L	125766	1	03/02/2010 17:44	YH
p-Dimethylaminoazobenzene	BRL		0.41	10	ug/L	125766	1	03/02/2010 17:44	YH
p-Phenylenediamine	BRL		88	500	ug/L	125766	1	03/02/2010 17:44	YH
Parathion	BRL		6.8	10	ug/L	125766	1	03/02/2010 17:44	YH
Pentachlorobenzene	BRL		0.73	10	ug/L	125766	1	03/02/2010 17:44	YH
Pentachloronitrobenzene	BRL		1.3	20	ug/L	125766	1	03/02/2010 17:44	YH
Pentachlorophenol	BRL		2.7	50	ug/L	125766	1	03/02/2010 17:44	YH
Phenacetin	BRL		1.0	20	ug/L	125766	1	03/02/2010 17:44	YH
Phenanthrene	BRL		0.52	10	ug/L	125766	1	03/02/2010 17:44	YH
Phenol	BRL		1.6	10	ug/L	125766	1	03/02/2010 17:44	YH
Phorate	BRL		6.9	10	ug/L	125766	1	03/02/2010 17:44	YH
Pronamide	BRL		1.1	10	ug/L	125766	1	03/02/2010 17:44	YH
Pyrene	BRL		0.99	10	ug/L	125766	1	03/02/2010 17:44	YH
Pyridine	BRL		2.2	10	ug/L	125766	1	03/02/2010 17:44	YH
Safrole	BRL		5.7	20	ug/L	125766	1	03/02/2010 17:44	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2A
Project:	9264000	**Collection Date:**	2/23/2010 11:15:00 AM
Lab ID:	1002K40-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
Sym-Trinitrobenzene	BRL		5.4	10	ug/L	125766	1	03/02/2010 17:44	YH
Tetraethyl dithiopyrophosphate	BRL		6.6	10	ug/L	125766	1	03/02/2010 17:44	YH
Thionazin	BRL		6.3	20	ug/L	125766	1	03/02/2010 17:44	YH
Surr: 2,4,6-Tribromophenol	95.4		0	54.9-149	%REC	125766	1	03/02/2010 17:44	YH
Surr: 2-Fluorobiphenyl	86		0	51.5-119	%REC	125766	1	03/02/2010 17:44	YH
Surr: 2-Fluorophenol	61.9		0	25.1-115	%REC	125766	1	03/02/2010 17:44	YH
Surr: 4-Terphenyl-d14	95.2		0	37.5-131	%REC	125766	1	03/02/2010 17:44	YH
Surr: Nitrobenzene-d5	77.5		0	42.5-122	%REC	125766	1	03/02/2010 17:44	YH
Surr: Phenol-d5	45.7		0	10-115	%REC	125766	1	03/02/2010 17:44	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2B
Project:	9264000	**Collection Date:**	2/23/2010 10:45:00 AM
Lab ID:	1002K40-002	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
POLYCHLORINATED BIPHENYLS SW8082A					**(SW3510B)**				
Aroclor 1016	BRL		0.075	0.50	ug/L	125794	1	03/02/2010 15:31	KD
Aroclor 1221	BRL		0.22	0.50	ug/L	125794	1	03/02/2010 15:31	KD
Aroclor 1232	BRL		0.35	0.50	ug/L	125794	1	03/02/2010 15:31	KD
Aroclor 1242	BRL		0.20	0.50	ug/L	125794	1	03/02/2010 15:31	KD
Aroclor 1248	BRL		0.13	0.50	ug/L	125794	1	03/02/2010 15:31	KD
Aroclor 1254	BRL		0.16	0.50	ug/L	125794	1	03/02/2010 15:31	KD
Aroclor 1260	BRL		0.056	0.50	ug/L	125794	1	03/02/2010 15:31	KD
Surr: Decachlorobiphenyl	62.5		0	10-140	%REC	125794	1	03/02/2010 15:31	KD
Surr: Tetrachloro-m-xylene	88.7		0	14.8-140	%REC	125794	1	03/02/2010 15:31	KD
CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B					**(SW3510B)**				
4,4´-DDD	BRL		0.015	0.10	ug/L	125795	1	03/02/2010 20:58	KD
4,4´-DDE	BRL		0.012	0.10	ug/L	125795	1	03/02/2010 20:58	KD
4,4´-DDT	BRL		0.0097	0.10	ug/L	125795	1	03/02/2010 20:58	KD
Aldrin	BRL		0.0079	0.050	ug/L	125795	1	03/02/2010 20:58	KD
alpha-BHC	BRL		0.0066	0.050	ug/L	125795	1	03/02/2010 20:58	KD
beta-BHC	BRL		0.013	0.050	ug/L	125795	1	03/02/2010 20:58	KD
Chlordane	BRL		0.068	0.50	ug/L	125795	1	03/02/2010 20:58	KD
delta-BHC	BRL		0.0053	0.050	ug/L	125795	1	03/02/2010 20:58	KD
Dieldrin	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 20:58	KD
Endosulfan I	BRL		0.0097	0.050	ug/L	125795	1	03/02/2010 20:58	KD
Endosulfan II	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 20:58	KD
Endosulfan sulfate	BRL		0.017	0.10	ug/L	125795	1	03/02/2010 20:58	KD
Endrin	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 20:58	KD
Endrin aldehyde	BRL		0.031	0.10	ug/L	125795	1	03/02/2010 20:58	KD
gamma-BHC	BRL		0.0075	0.050	ug/L	125795	1	03/02/2010 20:58	KD
Heptachlor	BRL		0.010	0.050	ug/L	125795	1	03/02/2010 20:58	KD
Heptachlor epoxide	BRL		0.0079	0.050	ug/L	125795	1	03/02/2010 20:58	KD
Methoxychlor	BRL		0.064	0.50	ug/L	125795	1	03/02/2010 20:58	KD
Toxaphene	BRL		0.17	3.0	ug/L	125795	1	03/02/2010 20:58	KD
Surr: Decachlorobiphenyl	57.1		0	16.1-124	%REC	125795	1	03/02/2010 20:58	KD
Surr: Tetrachloro-m-xylene	87.8		0	16-126	%REC	125795	1	03/02/2010 20:58	KD
CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A					**(SW3510B)**				
2,4,5-T	BRL		0.70	2.0	ug/L	125771	1	03/03/2010 07:17	AK
2,4,5-TP (Silvex)	BRL		0.66	2.0	ug/L	125771	1	03/03/2010 07:17	AK
2,4-D	BRL		1.2	2.0	ug/L	125771	1	03/03/2010 07:17	AK
Dinoseb	BRL		0.55	5.0	ug/L	125771	1	03/03/2010 07:17	AK
Surr: DCAA	77.4		0	50-143	%REC	125771	1	03/03/2010 07:17	AK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2B
Project:	9264000	**Collection Date:**	2/23/2010 10:45:00 AM
Lab ID:	1002K40-002	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
1,2,4,5-Tetrachlorobenzene	BRL		0.82	10	ug/L	125766	1	03/02/2010 18:11	YH
1,2,4-Trichlorobenzene	BRL		0.95	10	ug/L	125766	1	03/02/2010 18:11	YH
1,2-Dichlorobenzene	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:11	YH
1,3-Dichlorobenzene	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:11	YH
1,3-Dinitrobenzene	BRL		6.9	20	ug/L	125766	1	03/02/2010 18:11	YH
1,4-Dichlorobenzene	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:11	YH
1,4-Napthoquinone	BRL		6.3	10	ug/L	125766	1	03/02/2010 18:11	YH
1-Naphthylamine	BRL		2.5	10	ug/L	125766	1	03/02/2010 18:11	YH
2,3,4,6-Tetrachlorophenol	BRL		0.80	10	ug/L	125766	1	03/02/2010 18:11	YH
2,4,5-Trichlorophenol	BRL		1.5	10	ug/L	125766	1	03/02/2010 18:11	YH
2,4,6-Trichlorophenol	BRL		1.2	10	ug/L	125766	1	03/02/2010 18:11	YH
2,4-Dichlorophenol	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:11	YH
2,4-Dimethylphenol	BRL		0.54	50	ug/L	125766	1	03/02/2010 18:11	YH
2,4-Dinitrophenol	BRL		3.4	50	ug/L	125766	1	03/02/2010 18:11	YH
2,4-Dinitrotoluene	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH
2,6-Dichlorophenol	BRL		1.0	10	ug/L	125766	1	03/02/2010 18:11	YH
2,6-Dinitrotoluene	BRL		0.74	10	ug/L	125766	1	03/02/2010 18:11	YH
2-Acetylaminofluorene	BRL		6.9	20	ug/L	125766	1	03/02/2010 18:11	YH
2-Chloronaphthalene	BRL		0.72	10	ug/L	125766	1	03/02/2010 18:11	YH
2-Chlorophenol	BRL		1.7	10	ug/L	125766	1	03/02/2010 18:11	YH
2-Methylnaphthalene	BRL		0.89	10	ug/L	125766	1	03/02/2010 18:11	YH
2-Methylphenol	BRL		0.98	10	ug/L	125766	1	03/02/2010 18:11	YH
2-Naphthylamine	BRL		2.9	10	ug/L	125766	1	03/02/2010 18:11	YH
2-Nitroaniline	BRL		0.63	50	ug/L	125766	1	03/02/2010 18:11	YH
2-Nitrophenol	BRL		0.66	10	ug/L	125766	1	03/02/2010 18:11	YH
2-Picoline	BRL		6.9	10	ug/L	125766	1	03/02/2010 18:11	YH
3,3´-Dichlorobenzidine	BRL		2.6	20	ug/L	125766	1	03/02/2010 18:11	YH
3,3´-Dimethylbenzidine	BRL		6.3	20	ug/L	125766	1	03/02/2010 18:11	YH
3,4-Methylphenol	BRL		2.4	10	ug/L	125766	1	03/02/2010 18:11	YH
3-Methylcholanthrene	BRL		0.81	10	ug/L	125766	1	03/02/2010 18:11	YH
3-Nitroaniline	BRL		1.1	50	ug/L	125766	1	03/02/2010 18:11	YH
4,6-Dinitro-2-methylphenol	BRL		1.2	50	ug/L	125766	1	03/02/2010 18:11	YH
4-Aminobiphenyl	BRL		2.7	20	ug/L	125766	1	03/02/2010 18:11	YH
4-Bromophenyl phenyl ether	BRL		0.63	10	ug/L	125766	1	03/02/2010 18:11	YH
4-Chloro-3-methylphenol	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:11	YH
4-Chloroaniline	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:11	YH
4-Chlorophenyl phenyl ether	BRL		0.37	10	ug/L	125766	1	03/02/2010 18:11	YH
4-Nitroaniline	BRL		1.4	20	ug/L	125766	1	03/02/2010 18:11	YH
4-Nitrophenol	BRL		5.3	50	ug/L	125766	1	03/02/2010 18:11	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2B
Project:	9264000	**Collection Date:**	2/23/2010 10:45:00 AM
Lab ID:	1002K40-002	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
4-Nitroquinoline,1-oxide	BRL		4.4	50	ug/L	125766	1	03/02/2010 18:11	YH
5-Nitro-o-toluidine	BRL		6.2	10	ug/L	125766	1	03/02/2010 18:11	YH
7,12-Dimethylbenz(a)anthracene	BRL		6.4	10	ug/L	125766	1	03/02/2010 18:11	YH
a,a-Dimethylphenethylamine	BRL		19	50	ug/L	125766	1	03/02/2010 18:11	YH
Acenaphthene	BRL		0.59	10	ug/L	125766	1	03/02/2010 18:11	YH
Acenaphthylene	BRL		0.36	10	ug/L	125766	1	03/02/2010 18:11	YH
Acetophenone	BRL		2.3	10	ug/L	125766	1	03/02/2010 18:11	YH
Aniline	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH
Anthracene	BRL		0.44	10	ug/L	125766	1	03/02/2010 18:11	YH
Aramite	BRL		8.2	10	ug/L	125766	1	03/02/2010 18:11	YH
Benz(a)anthracene	BRL		0.93	10	ug/L	125766	1	03/02/2010 18:11	YH
Benzo(a)pyrene	BRL		1.2	10	ug/L	125766	1	03/02/2010 18:11	YH
Benzo(b)fluoranthene	BRL		0.67	10	ug/L	125766	1	03/02/2010 18:11	YH
Benzo(g,h,i)perylene	BRL		1.0	10	ug/L	125766	1	03/02/2010 18:11	YH
Benzo(k)fluoranthene	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:11	YH
Benzyl alcohol	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:11	YH
Bis(2-chloroethoxy)methane	BRL		0.99	10	ug/L	125766	1	03/02/2010 18:11	YH
Bis(2-chloroethyl)ether	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH
Bis(2-chloroisopropyl)ether	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH
Bis(2-ethylhexyl)phthalate	BRL		6.7	20	ug/L	125766	1	03/02/2010 18:11	YH
Butyl benzyl phthalate	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH
Chlorobenzilate	BRL		6.2	10	ug/L	125766	1	03/02/2010 18:11	YH
Chrysene	BRL		0.68	10	ug/L	125766	1	03/02/2010 18:11	YH
Di-n-butyl phthalate	BRL		0.93	10	ug/L	125766	1	03/02/2010 18:11	YH
Di-n-octyl phthalate	BRL		1.6	10	ug/L	125766	1	03/02/2010 18:11	YH
Diallate	BRL		5.7	10	ug/L	125766	1	03/02/2010 18:11	YH
Dibenz(a,h)anthracene	BRL		1.5	10	ug/L	125766	1	03/02/2010 18:11	YH
Dibenzofuran	BRL		0.29	10	ug/L	125766	1	03/02/2010 18:11	YH
Diethyl phthalate	BRL		0.49	10	ug/L	125766	1	03/02/2010 18:11	YH
Dimethoate	BRL		6.8	20	ug/L	125766	1	03/02/2010 18:11	YH
Dimethyl phthalate	BRL		0.45	10	ug/L	125766	1	03/02/2010 18:11	YH
Diphenylamine	BRL		0.66	10	ug/L	125766	1	03/02/2010 18:11	YH
Disulfoton	BRL		5.5	10	ug/L	125766	1	03/02/2010 18:11	YH
Ethyl methanesulfonate	BRL		1.4	20	ug/L	125766	1	03/02/2010 18:11	YH
Famphur	BRL		7.6	20	ug/L	125766	1	03/02/2010 18:11	YH
Fluoranthene	BRL		0.75	10	ug/L	125766	1	03/02/2010 18:11	YH
Fluorene	BRL		0.32	10	ug/L	125766	1	03/02/2010 18:11	YH
Hexachlorobenzene	BRL		0.64	10	ug/L	125766	1	03/02/2010 18:11	YH
Hexachlorobutadiene	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2B
Project:	9264000	**Collection Date:**	2/23/2010 10:45:00 AM
Lab ID:	1002K40-002	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
Hexachlorocyclopentadiene	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH
Hexachloroethane	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:11	YH
Hexachlorophene	BRL		0.36	80	ug/L	125766	1	03/02/2010 18:11	YH
Hexachloropropene	BRL		4.8	10	ug/L	125766	1	03/02/2010 18:11	YH
Indeno(1,2,3-cd)pyrene	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:11	YH
Isodrin	BRL		5.2	20	ug/L	125766	1	03/02/2010 18:11	YH
Isophorone	BRL		0.59	10	ug/L	125766	1	03/02/2010 18:11	YH
Isosafrole	BRL		6.0	10	ug/L	125766	1	03/02/2010 18:11	YH
Kepone	BRL		9.6	50	ug/L	125766	1	03/02/2010 18:11	YH
Methapyrilene	BRL		2.7	20	ug/L	125766	1	03/02/2010 18:11	YH
Methyl methanesulfonate	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:11	YH
Methyl parathion	BRL		7.0	10	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitroso-di-n-butylamine	BRL		1.8	10	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosodi-n-propylamine	BRL		1.5	10	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosodiethylamine	BRL		5.0	20	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosodimethylamine	BRL		1.7	20	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosodiphenylamine	BRL		0.42	50	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosomethylethylamine	BRL		6.0	10	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosomorpholine	BRL		4.5	10	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosopiperidine	BRL		1.2	20	ug/L	125766	1	03/02/2010 18:11	YH
N-Nitrosopyrrolidine	BRL		5.4	40	ug/L	125766	1	03/02/2010 18:11	YH
Naphthalene	BRL		1.0	10	ug/L	125766	1	03/02/2010 18:11	YH
Nitrobenzene	BRL		1.2	10	ug/L	125766	1	03/02/2010 18:11	YH
O,O,O-Triethylphosphorothioate	BRL		3.6	10	ug/L	125766	1	03/02/2010 18:11	YH
o-Toluidine	BRL		3.9	20	ug/L	125766	1	03/02/2010 18:11	YH
p-Dimethylaminoazobenzene	BRL		0.41	10	ug/L	125766	1	03/02/2010 18:11	YH
p-Phenylenediamine	BRL		88	500	ug/L	125766	1	03/02/2010 18:11	YH
Parathion	BRL		6.8	10	ug/L	125766	1	03/02/2010 18:11	YH
Pentachlorobenzene	BRL		0.73	10	ug/L	125766	1	03/02/2010 18:11	YH
Pentachloronitrobenzene	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:11	YH
Pentachlorophenol	BRL		2.7	50	ug/L	125766	1	03/02/2010 18:11	YH
Phenacetin	BRL		1.0	20	ug/L	125766	1	03/02/2010 18:11	YH
Phenanthrene	BRL		0.52	10	ug/L	125766	1	03/02/2010 18:11	YH
Phenol	BRL		1.6	10	ug/L	125766	1	03/02/2010 18:11	YH
Phorate	BRL		6.9	10	ug/L	125766	1	03/02/2010 18:11	YH
Pronamide	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:11	YH
Pyrene	BRL		0.99	10	ug/L	125766	1	03/02/2010 18:11	YH
Pyridine	BRL		2.2	10	ug/L	125766	1	03/02/2010 18:11	YH
Safrole	BRL		5.7	20	ug/L	125766	1	03/02/2010 18:11	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-2B
Project:	9264000	**Collection Date:**	2/23/2010 10:45:00 AM
Lab ID:	1002K40-002	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
Sym-Trinitrobenzene	BRL		5.4	10	ug/L	125766	1	03/02/2010 18:11	YH
Tetraethyl dithiopyrophosphate	BRL		6.6	10	ug/L	125766	1	03/02/2010 18:11	YH
Thionazin	BRL		6.3	20	ug/L	125766	1	03/02/2010 18:11	YH
Surr: 2,4,6-Tribromophenol	73.2		0	54.9-149	%REC	125766	1	03/02/2010 18:11	YH
Surr: 2-Fluorobiphenyl	66		0	51.5-119	%REC	125766	1	03/02/2010 18:11	YH
Surr: 2-Fluorophenol	37		0	25.1-115	%REC	125766	1	03/02/2010 18:11	YH
Surr: 4-Terphenyl-d14	79.7		0	37.5-131	%REC	125766	1	03/02/2010 18:11	YH
Surr: Nitrobenzene-d5	57.2		0	42.5-122	%REC	125766	1	03/02/2010 18:11	YH
Surr: Phenol-d5	23.1		0	10-115	%REC	125766	1	03/02/2010 18:11	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-1B
Project:	9264000	**Collection Date:**	2/23/2010 3:25:00 PM
Lab ID:	1002K40-003	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
POLYCHLORINATED BIPHENYLS SW8082A					**(SW3510B)**				
Aroclor 1016	BRL		0.075	0.50	ug/L	125794	1	03/02/2010 11:34	KD
Aroclor 1221	BRL		0.22	0.50	ug/L	125794	1	03/02/2010 11:34	KD
Aroclor 1232	BRL		0.35	0.50	ug/L	125794	1	03/02/2010 11:34	KD
Aroclor 1242	BRL		0.20	0.50	ug/L	125794	1	03/02/2010 11:34	KD
Aroclor 1248	BRL		0.13	0.50	ug/L	125794	1	03/02/2010 11:34	KD
Aroclor 1254	BRL		0.16	0.50	ug/L	125794	1	03/02/2010 11:34	KD
Aroclor 1260	BRL		0.056	0.50	ug/L	125794	1	03/02/2010 11:34	KD
Surr: Decachlorobiphenyl	40.6		0	10-140	%REC	125794	1	03/02/2010 11:34	KD
Surr: Tetrachloro-m-xylene	93.9		0	14.8-140	%REC	125794	1	03/02/2010 11:34	KD
CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B					**(SW3510B)**				
4,4´-DDD	BRL		0.015	0.10	ug/L	125795	1	03/02/2010 21:09	KD
4,4´-DDE	BRL		0.012	0.10	ug/L	125795	1	03/02/2010 21:09	KD
4,4´-DDT	BRL		0.0097	0.10	ug/L	125795	1	03/02/2010 21:09	KD
Aldrin	BRL		0.0079	0.050	ug/L	125795	1	03/02/2010 21:09	KD
alpha-BHC	BRL		0.0066	0.050	ug/L	125795	1	03/02/2010 21:09	KD
beta-BHC	BRL		0.013	0.050	ug/L	125795	1	03/02/2010 21:09	KD
Chlordane	BRL		0.068	0.50	ug/L	125795	1	03/02/2010 21:09	KD
delta-BHC	BRL		0.0053	0.050	ug/L	125795	1	03/02/2010 21:09	KD
Dieldrin	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 21:09	KD
Endosulfan I	BRL		0.0097	0.050	ug/L	125795	1	03/02/2010 21:09	KD
Endosulfan II	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 21:09	KD
Endosulfan sulfate	BRL		0.017	0.10	ug/L	125795	1	03/02/2010 21:09	KD
Endrin	BRL		0.014	0.10	ug/L	125795	1	03/02/2010 21:09	KD
Endrin aldehyde	BRL		0.031	0.10	ug/L	125795	1	03/02/2010 21:09	KD
gamma-BHC	BRL		0.0075	0.050	ug/L	125795	1	03/02/2010 21:09	KD
Heptachlor	BRL		0.010	0.050	ug/L	125795	1	03/02/2010 21:09	KD
Heptachlor epoxide	BRL		0.0079	0.050	ug/L	125795	1	03/02/2010 21:09	KD
Methoxychlor	BRL		0.064	0.50	ug/L	125795	1	03/02/2010 21:09	KD
Toxaphene	BRL		0.17	3.0	ug/L	125795	1	03/02/2010 21:09	KD
Surr: Decachlorobiphenyl	36.8		0	16.1-124	%REC	125795	1	03/02/2010 21:09	KD
Surr: Tetrachloro-m-xylene	87.9		0	16-126	%REC	125795	1	03/02/2010 21:09	KD
CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A					**(SW3510B)**				
2,4,5-T	BRL		0.70	2.0	ug/L	125771	1	03/02/2010 23:44	AK
2,4,5-TP (Silvex)	BRL		0.66	2.0	ug/L	125771	1	03/02/2010 23:44	AK
2,4-D	BRL		1.2	2.0	ug/L	125771	1	03/02/2010 23:44	AK
Dinoseb	BRL		0.55	5.0	ug/L	125771	1	03/02/2010 23:44	AK
Surr: DCAA	90.5		0	50-143	%REC	125771	1	03/02/2010 23:44	AK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-1B
Project:	9264000	**Collection Date:**	2/23/2010 3:25:00 PM
Lab ID:	1002K40-003	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
1,2,4,5-Tetrachlorobenzene	BRL		0.82	10	ug/L	125766	1	03/02/2010 18:38	YH
1,2,4-Trichlorobenzene	BRL		0.95	10	ug/L	125766	1	03/02/2010 18:38	YH
1,2-Dichlorobenzene	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:38	YH
1,3-Dichlorobenzene	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:38	YH
1,3-Dinitrobenzene	BRL		6.9	20	ug/L	125766	1	03/02/2010 18:38	YH
1,4-Dichlorobenzene	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:38	YH
1,4-Napthoquinone	BRL		6.3	10	ug/L	125766	1	03/02/2010 18:38	YH
1-Naphthylamine	BRL		2.5	10	ug/L	125766	1	03/02/2010 18:38	YH
2,3,4,6-Tetrachlorophenol	BRL		0.80	10	ug/L	125766	1	03/02/2010 18:38	YH
2,4,5-Trichlorophenol	BRL		1.5	10	ug/L	125766	1	03/02/2010 18:38	YH
2,4,6-Trichlorophenol	BRL		1.2	10	ug/L	125766	1	03/02/2010 18:38	YH
2,4-Dichlorophenol	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:38	YH
2,4-Dimethylphenol	BRL		0.54	50	ug/L	125766	1	03/02/2010 18:38	YH
2,4-Dinitrophenol	BRL		3.4	50	ug/L	125766	1	03/02/2010 18:38	YH
2,4-Dinitrotoluene	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH
2,6-Dichlorophenol	BRL		1.0	10	ug/L	125766	1	03/02/2010 18:38	YH
2,6-Dinitrotoluene	BRL		0.74	10	ug/L	125766	1	03/02/2010 18:38	YH
2-Acetylaminofluorene	BRL		6.9	20	ug/L	125766	1	03/02/2010 18:38	YH
2-Chloronaphthalene	BRL		0.72	10	ug/L	125766	1	03/02/2010 18:38	YH
2-Chlorophenol	BRL		1.7	10	ug/L	125766	1	03/02/2010 18:38	YH
2-Methylnaphthalene	BRL		0.89	10	ug/L	125766	1	03/02/2010 18:38	YH
2-Methylphenol	BRL		0.98	10	ug/L	125766	1	03/02/2010 18:38	YH
2-Naphthylamine	BRL		2.9	10	ug/L	125766	1	03/02/2010 18:38	YH
2-Nitroaniline	BRL		0.63	50	ug/L	125766	1	03/02/2010 18:38	YH
2-Nitrophenol	BRL		0.66	10	ug/L	125766	1	03/02/2010 18:38	YH
2-Picoline	BRL		6.9	10	ug/L	125766	1	03/02/2010 18:38	YH
3,3´-Dichlorobenzidine	BRL		2.6	20	ug/L	125766	1	03/02/2010 18:38	YH
3,3´-Dimethylbenzidine	BRL		6.3	20	ug/L	125766	1	03/02/2010 18:38	YH
3,4-Methylphenol	BRL		2.4	10	ug/L	125766	1	03/02/2010 18:38	YH
3-Methylcholanthrene	BRL		0.81	10	ug/L	125766	1	03/02/2010 18:38	YH
3-Nitroaniline	BRL		1.1	50	ug/L	125766	1	03/02/2010 18:38	YH
4,6-Dinitro-2-methylphenol	BRL		1.2	50	ug/L	125766	1	03/02/2010 18:38	YH
4-Aminobiphenyl	BRL		2.7	20	ug/L	125766	1	03/02/2010 18:38	YH
4-Bromophenyl phenyl ether	BRL		0.63	10	ug/L	125766	1	03/02/2010 18:38	YH
4-Chloro-3-methylphenol	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:38	YH
4-Chloroaniline	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:38	YH
4-Chlorophenyl phenyl ether	BRL		0.37	10	ug/L	125766	1	03/02/2010 18:38	YH
4-Nitroaniline	BRL		1.4	20	ug/L	125766	1	03/02/2010 18:38	YH
4-Nitrophenol	BRL		5.3	50	ug/L	125766	1	03/02/2010 18:38	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-1B
Project:	9264000	**Collection Date:**	2/23/2010 3:25:00 PM
Lab ID:	1002K40-003	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
4-Nitroquinoline,1-oxide	BRL		4.4	50	ug/L	125766	1	03/02/2010 18:38	YH
5-Nitro-o-toluidine	BRL		6.2	10	ug/L	125766	1	03/02/2010 18:38	YH
7,12-Dimethylbenz(a)anthracene	BRL		6.4	10	ug/L	125766	1	03/02/2010 18:38	YH
a,a-Dimethylphenethylamine	BRL		19	50	ug/L	125766	1	03/02/2010 18:38	YH
Acenaphthene	BRL		0.59	10	ug/L	125766	1	03/02/2010 18:38	YH
Acenaphthylene	BRL		0.36	10	ug/L	125766	1	03/02/2010 18:38	YH
Acetophenone	BRL		2.3	10	ug/L	125766	1	03/02/2010 18:38	YH
Aniline	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH
Anthracene	BRL		0.44	10	ug/L	125766	1	03/02/2010 18:38	YH
Aramite	BRL		8.2	10	ug/L	125766	1	03/02/2010 18:38	YH
Benz(a)anthracene	BRL		0.93	10	ug/L	125766	1	03/02/2010 18:38	YH
Benzo(a)pyrene	BRL		1.2	10	ug/L	125766	1	03/02/2010 18:38	YH
Benzo(b)fluoranthene	BRL		0.67	10	ug/L	125766	1	03/02/2010 18:38	YH
Benzo(g,h,i)perylene	BRL		1.0	10	ug/L	125766	1	03/02/2010 18:38	YH
Benzo(k)fluoranthene	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:38	YH
Benzyl alcohol	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:38	YH
Bis(2-chloroethoxy)methane	BRL		0.99	10	ug/L	125766	1	03/02/2010 18:38	YH
Bis(2-chloroethyl)ether	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH
Bis(2-chloroisopropyl)ether	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH
Bis(2-ethylhexyl)phthalate	BRL		6.7	20	ug/L	125766	1	03/02/2010 18:38	YH
Butyl benzyl phthalate	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH
Chlorobenzilate	BRL		6.2	10	ug/L	125766	1	03/02/2010 18:38	YH
Chrysene	BRL		0.68	10	ug/L	125766	1	03/02/2010 18:38	YH
Di-n-butyl phthalate	BRL		0.93	10	ug/L	125766	1	03/02/2010 18:38	YH
Di-n-octyl phthalate	BRL		1.6	10	ug/L	125766	1	03/02/2010 18:38	YH
Diallate	BRL		5.7	10	ug/L	125766	1	03/02/2010 18:38	YH
Dibenz(a,h)anthracene	BRL		1.5	10	ug/L	125766	1	03/02/2010 18:38	YH
Dibenzofuran	BRL		0.29	10	ug/L	125766	1	03/02/2010 18:38	YH
Diethyl phthalate	BRL		0.49	10	ug/L	125766	1	03/02/2010 18:38	YH
Dimethoate	BRL		6.8	20	ug/L	125766	1	03/02/2010 18:38	YH
Dimethyl phthalate	BRL		0.45	10	ug/L	125766	1	03/02/2010 18:38	YH
Diphenylamine	BRL		0.66	10	ug/L	125766	1	03/02/2010 18:38	YH
Disulfoton	BRL		5.5	10	ug/L	125766	1	03/02/2010 18:38	YH
Ethyl methanesulfonate	BRL		1.4	20	ug/L	125766	1	03/02/2010 18:38	YH
Famphur	BRL		7.6	20	ug/L	125766	1	03/02/2010 18:38	YH
Fluoranthene	BRL		0.75	10	ug/L	125766	1	03/02/2010 18:38	YH
Fluorene	BRL		0.32	10	ug/L	125766	1	03/02/2010 18:38	YH
Hexachlorobenzene	BRL		0.64	10	ug/L	125766	1	03/02/2010 18:38	YH
Hexachlorobutadiene	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-1B
Project:	9264000	**Collection Date:**	2/23/2010 3:25:00 PM
Lab ID:	1002K40-003	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
Hexachlorocyclopentadiene	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH
Hexachloroethane	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:38	YH
Hexachlorophene	BRL		0.36	80	ug/L	125766	1	03/02/2010 18:38	YH
Hexachloropropene	BRL		4.8	10	ug/L	125766	1	03/02/2010 18:38	YH
Indeno(1,2,3-cd)pyrene	BRL		1.3	10	ug/L	125766	1	03/02/2010 18:38	YH
Isodrin	BRL		5.2	20	ug/L	125766	1	03/02/2010 18:38	YH
Isophorone	BRL		0.59	10	ug/L	125766	1	03/02/2010 18:38	YH
Isosafrole	BRL		6.0	10	ug/L	125766	1	03/02/2010 18:38	YH
Kepone	BRL		9.6	50	ug/L	125766	1	03/02/2010 18:38	YH
Methapyrilene	BRL		2.7	20	ug/L	125766	1	03/02/2010 18:38	YH
Methyl methanesulfonate	BRL		1.4	10	ug/L	125766	1	03/02/2010 18:38	YH
Methyl parathion	BRL		7.0	10	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitroso-di-n-butylamine	BRL		1.8	10	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosodi-n-propylamine	BRL		1.5	10	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosodiethylamine	BRL		5.0	20	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosodimethylamine	BRL		1.7	20	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosodiphenylamine	BRL		0.42	50	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosomethylethylamine	BRL		6.0	10	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosomorpholine	BRL		4.5	10	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosopiperidine	BRL		1.2	20	ug/L	125766	1	03/02/2010 18:38	YH
N-Nitrosopyrrolidine	BRL		5.4	40	ug/L	125766	1	03/02/2010 18:38	YH
Naphthalene	BRL		1.0	10	ug/L	125766	1	03/02/2010 18:38	YH
Nitrobenzene	BRL		1.2	10	ug/L	125766	1	03/02/2010 18:38	YH
O,O,O-Triethylphosphorothioate	BRL		3.6	10	ug/L	125766	1	03/02/2010 18:38	YH
o-Toluidine	BRL		3.9	20	ug/L	125766	1	03/02/2010 18:38	YH
p-Dimethylaminoazobenzene	BRL		0.41	10	ug/L	125766	1	03/02/2010 18:38	YH
p-Phenylenediamine	BRL		88	500	ug/L	125766	1	03/02/2010 18:38	YH
Parathion	BRL		6.8	10	ug/L	125766	1	03/02/2010 18:38	YH
Pentachlorobenzene	BRL		0.73	10	ug/L	125766	1	03/02/2010 18:38	YH
Pentachloronitrobenzene	BRL		1.3	20	ug/L	125766	1	03/02/2010 18:38	YH
Pentachlorophenol	BRL		2.7	50	ug/L	125766	1	03/02/2010 18:38	YH
Phenacetin	BRL		1.0	20	ug/L	125766	1	03/02/2010 18:38	YH
Phenanthrene	BRL		0.52	10	ug/L	125766	1	03/02/2010 18:38	YH
Phenol	BRL		1.6	10	ug/L	125766	1	03/02/2010 18:38	YH
Phorate	BRL		6.9	10	ug/L	125766	1	03/02/2010 18:38	YH
Pronamide	BRL		1.1	10	ug/L	125766	1	03/02/2010 18:38	YH
Pyrene	BRL		0.99	10	ug/L	125766	1	03/02/2010 18:38	YH
Pyridine	BRL		2.2	10	ug/L	125766	1	03/02/2010 18:38	YH
Safrole	BRL		5.7	20	ug/L	125766	1	03/02/2010 18:38	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client:	Pace Analytical Services, Inc.	**Client Sample ID:**	POC-1B
Project:	9264000	**Collection Date:**	2/23/2010 3:25:00 PM
Lab ID:	1002K40-003	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510)									
Sym-Trinitrobenzene	BRL		5.4	10	ug/L	125766	1	03/02/2010 18:38	YH
Tetraethyl dithiopyrophosphate	BRL		6.6	10	ug/L	125766	1	03/02/2010 18:38	YH
Thionazin	BRL		6.3	20	ug/L	125766	1	03/02/2010 18:38	YH
Surr: 2,4,6-Tribromophenol	104		0	54.9-149	%REC	125766	1	03/02/2010 18:38	YH
Surr: 2-Fluorobiphenyl	97.1		0	51.5-119	%REC	125766	1	03/02/2010 18:38	YH
Surr: 2-Fluorophenol	58.2		0	25.1-115	%REC	125766	1	03/02/2010 18:38	YH
Surr: 4-Terphenyl-d14	107		0	37.5-131	%REC	125766	1	03/02/2010 18:38	YH
Surr: Nitrobenzene-d5	83.7		0	42.5-122	%REC	125766	1	03/02/2010 18:38	YH
Surr: Phenol-d5	37		0	10-115	%REC	125766	1	03/02/2010 18:38	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Pace Work Order Number 1002K40

Checklist completed by _____ 2/26/10
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.4°C Cooler #2 3.2°C Cooler #3 3.5°C Cooler #4 3.3°C Cooler#5 3.6°C Cooler #6 3.3°C

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by PI

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 8-Mar-10

Client: Pace Analytical Services, Inc.
Project: 9264000
Lab Order: 1002K40

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1002K40-001A	POC-2A	2/23/2010 11:15:00AM	Aqueous	Semivolatile Org. Comp. by GC/MS		03/01/2010	03/02/2010
1002K40-001A	POC-2A	2/23/2010 11:15:00AM	Aqueous	APPENDIX XI-SEMIVOLATILE ORGANICS		03/01/2010	03/02/2010
1002K40-001A	POC-2A	2/23/2010 11:15:00AM	Aqueous	APPENDIX IX CHLORINATED PESTICIDES		03/01/2010	03/02/2010
1002K40-001A	POC-2A	2/23/2010 11:15:00AM	Aqueous	CHLORINATED HERBICIDES, APPENDIX IX LIS		03/01/2010	03/03/2010
1002K40-001A	POC-2A	2/23/2010 11:15:00AM	Aqueous	POLYCHLORINATED BIPHENYLS		03/01/2010	03/02/2010
1002K40-002A	POC-2B	2/23/2010 10:45:00AM	Aqueous	APPENDIX XI-SEMIVOLATILE ORGANICS		03/01/2010	03/02/2010
1002K40-002A	POC-2B	2/23/2010 10:45:00AM	Aqueous	APPENDIX IX CHLORINATED PESTICIDES		03/01/2010	03/02/2010
1002K40-002A	POC-2B	2/23/2010 10:45:00AM	Aqueous	CHLORINATED HERBICIDES, APPENDIX IX LIS		03/01/2010	03/03/2010
1002K40-002A	POC-2B	2/23/2010 10:45:00AM	Aqueous	POLYCHLORINATED BIPHENYLS		03/01/2010	03/02/2010
1002K40-003A	POC-1B	2/23/2010 3:25:00PM	Aqueous	APPENDIX XI-SEMIVOLATILE ORGANICS		03/01/2010	03/02/2010
1002K40-003A	POC-1B	2/23/2010 3:25:00PM	Aqueous	APPENDIX IX CHLORINATED PESTICIDES		03/01/2010	03/02/2010
1002K40-003A	POC-1B	2/23/2010 3:25:00PM	Aqueous	CHLORINATED HERBICIDES, APPENDIX IX LIS		03/01/2010	03/02/2010
1002K40-003A	POC-1B	2/23/2010 3:25:00PM	Aqueous	POLYCHLORINATED BIPHENYLS		03/01/2010	03/02/2010

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Sample ID: **MB-125766** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166688**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **125766** Analysis Date: **03/02/2010** Seq No: **3455088**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4,5-Tetrachlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
1,2,4-Trichlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
1,2-Dichlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
1,3-Dichlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
1,3-Dinitrobenzene	BRL	20	0	0	0	0	0	0	0	0	
1,4-Dichlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
1,4-Napthoquinone	BRL	10	0	0	0	0	0	0	0	0	
1-Naphthylamine	BRL	10	0	0	0	0	0	0	0	0	
2,3,4,6-Tetrachlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4,5-Trichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4,6-Trichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4-Dichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4-Dimethylphenol	BRL	50	0	0	0	0	0	0	0	0	
2,4-Dinitrophenol	BRL	50	0	0	0	0	0	0	0	0	
2,4-Dinitrotoluene	BRL	10	0	0	0	0	0	0	0	0	
2,6-Dichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,6-Dinitrotoluene	BRL	10	0	0	0	0	0	0	0	0	
2-Acetylaminofluorene	BRL	20	0	0	0	0	0	0	0	0	
2-Chloronaphthalene	BRL	10	0	0	0	0	0	0	0	0	
2-Chlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2-Methylnaphthalene	BRL	10	0	0	0	0	0	0	0	0	
2-Methylphenol	BRL	10	0	0	0	0	0	0	0	0	
2-Naphthylamine	BRL	10	0	0	0	0	0	0	0	0	
2-Nitroaniline	BRL	50	0	0	0	0	0	0	0	0	
2-Nitrophenol	BRL	10	0	0	0	0	0	0	0	0	
2-Picoline	BRL	10	0	0	0	0	0	0	0	0	
3,3´-Dichlorobenzidine	BRL	20	0	0	0	0	0	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Sample ID: **MB-125766** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166688**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **125766** Analysis Date: **03/02/2010** Seq No: **3455088**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3´-Dimethylbenzidine	BRL	20	0	0	0	0	0	0	0	0	
3,4-Methylphenol	BRL	10	0	0	0	0	0	0	0	0	
3-Methylcholanthrene	BRL	10	0	0	0	0	0	0	0	0	
3-Nitroaniline	BRL	50	0	0	0	0	0	0	0	0	
4,6-Dinitro-2-methylphenol	BRL	50	0	0	0	0	0	0	0	0	
4-Aminobiphenyl	BRL	20	0	0	0	0	0	0	0	0	
4-Bromophenyl phenyl ether	BRL	10	0	0	0	0	0	0	0	0	
4-Chloro-3-methylphenol	BRL	20	0	0	0	0	0	0	0	0	
4-Chloroaniline	BRL	20	0	0	0	0	0	0	0	0	
4-Chlorophenyl phenyl ether	BRL	10	0	0	0	0	0	0	0	0	
4-Nitroaniline	BRL	20	0	0	0	0	0	0	0	0	
4-Nitrophenol	BRL	50	0	0	0	0	0	0	0	0	
4-Nitroquinoline,1-oxide	BRL	50	0	0	0	0	0	0	0	0	
5-Nitro-o-toluidine	BRL	10	0	0	0	0	0	0	0	0	
7,12-Dimethylbenz(a)anthracene	BRL	10	0	0	0	0	0	0	0	0	
a,a-Dimethylphenethylamine	BRL	50	0	0	0	0	0	0	0	0	
Acenaphthene	BRL	10	0	0	0	0	0	0	0	0	
Acenaphthylene	BRL	10	0	0	0	0	0	0	0	0	
Acetophenone	BRL	10	0	0	0	0	0	0	0	0	
Aniline	BRL	10	0	0	0	0	0	0	0	0	
Anthracene	BRL	10	0	0	0	0	0	0	0	0	
Aramite	BRL	10	0	0	0	0	0	0	0	0	
Benz(a)anthracene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(a)pyrene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(b)fluoranthene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(g,h,i)perylene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(k)fluoranthene	BRL	10	0	0	0	0	0	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Sample ID: **MB-125766** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166688**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **125766** Analysis Date: **03/02/2010** Seq No: **3455088**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzyl alcohol	BRL	20	0	0	0	0	0	0	0	0	
Bis(2-chloroethoxy)methane	BRL	10	0	0	0	0	0	0	0	0	
Bis(2-chloroethyl)ether	BRL	10	0	0	0	0	0	0	0	0	
Bis(2-chloroisopropyl)ether	BRL	10	0	0	0	0	0	0	0	0	
Bis(2-ethylhexyl)phthalate	BRL	20	0	0	0	0	0	0	0	0	
Butyl benzyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Chlorobenzilate	BRL	10	0	0	0	0	0	0	0	0	
Chrysene	BRL	10	0	0	0	0	0	0	0	0	
Di-n-butyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Di-n-octyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Diallate	BRL	10	0	0	0	0	0	0	0	0	
Dibenz(a,h)anthracene	BRL	10	0	0	0	0	0	0	0	0	
Dibenzofuran	BRL	10	0	0	0	0	0	0	0	0	
Diethyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Dimethoate	BRL	20	0	0	0	0	0	0	0	0	
Dimethyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Diphenylamine	BRL	10	0	0	0	0	0	0	0	0	
Disulfoton	BRL	10	0	0	0	0	0	0	0	0	
Ethyl methanesulfonate	BRL	20	0	0	0	0	0	0	0	0	
Famphur	BRL	20	0	0	0	0	0	0	0	0	
Fluoranthene	BRL	10	0	0	0	0	0	0	0	0	
Fluorene	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorobutadiene	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorocyclopentadiene	BRL	10	0	0	0	0	0	0	0	0	
Hexachloroethane	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorophene	BRL	80	0	0	0	0	0	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Sample ID: **MB-125766** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166688**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **125766** Analysis Date: **03/02/2010** Seq No: **3455088**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloropropene	BRL	10	0	0	0	0	0	0	0	0	
Indeno(1,2,3-cd)pyrene	BRL	10	0	0	0	0	0	0	0	0	
Isodrin	BRL	20	0	0	0	0	0	0	0	0	
Isophorone	BRL	10	0	0	0	0	0	0	0	0	
Isosafrole	BRL	10	0	0	0	0	0	0	0	0	
Kepone	BRL	50	0	0	0	0	0	0	0	0	
Methapyrilene	BRL	20	0	0	0	0	0	0	0	0	
Methyl methanesulfonate	BRL	10	0	0	0	0	0	0	0	0	
Methyl parathion	BRL	10	0	0	0	0	0	0	0	0	
N-Nitroso-di-n-butylamine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosodi-n-propylamine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosodiethylamine	BRL	20	0	0	0	0	0	0	0	0	
N-Nitrosodimethylamine	BRL	20	0	0	0	0	0	0	0	0	
N-Nitrosodiphenylamine	BRL	50	0	0	0	0	0	0	0	0	
N-Nitrosomethylethylamine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosomorpholine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosopiperidine	BRL	20	0	0	0	0	0	0	0	0	
N-Nitrosopyrrolidine	BRL	40	0	0	0	0	0	0	0	0	
Naphthalene	BRL	10	0	0	0	0	0	0	0	0	
Nitrobenzene	BRL	10	0	0	0	0	0	0	0	0	
O,O,O-Triethylphosphorothioate	BRL	10	0	0	0	0	0	0	0	0	
o-Toluidine	BRL	20	0	0	0	0	0	0	0	0	
p-Dimethylaminoazobenzene	BRL	10	0	0	0	0	0	0	0	0	
p-Phenylenediamine	BRL	500	0	0	0	0	0	0	0	0	
Parathion	BRL	10	0	0	0	0	0	0	0	0	
Pentachlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
Pentachloronitrobenzene	BRL	20	0	0	0	0	0	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Sample ID: **MB-125766**	Client ID:		Units: **ug/L**	Prep Date: **03/01/2010**	Run No: **166688**
SampleType: **MBLK**	TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D**		BatchID: **125766**	Analysis Date: **03/02/2010**	Seq No: **3455088**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Pentachlorophenol	BRL	50	0	0	0	0	0	0	0	0	
Phenacetin	BRL	20	0	0	0	0	0	0	0	0	
Phenanthrene	BRL	10	0	0	0	0	0	0	0	0	
Phenol	BRL	10	0	0	0	0	0	0	0	0	
Phorate	BRL	10	0	0	0	0	0	0	0	0	
Pronamide	BRL	10	0	0	0	0	0	0	0	0	
Pyrene	BRL	10	0	0	0	0	0	0	0	0	
Pyridine	BRL	10	0	0	0	0	0	0	0	0	
Safrole	BRL	20	0	0	0	0	0	0	0	0	
Sym-Trinitrobenzene	BRL	10	0	0	0	0	0	0	0	0	
Tetraethyl dithiopyrophosphate	BRL	10	0	0	0	0	0	0	0	0	
Thionazin	BRL	20	0	0	0	0	0	0	0	0	
Surr: 2,4,6-Tribromophenol	96.29	0	100	0	96.3	54.9	149	0	0	0	
Surr: 2-Fluorobiphenyl	44.49	0	50	0	89	51.5	119	0	0	0	
Surr: 2-Fluorophenol	63.22	0	100	0	63.2	25.1	115	0	0	0	
Surr: 4-Terphenyl-d14	53.97	0	50	0	108	37.5	131	0	0	0	
Surr: Nitrobenzene-d5	39.78	0	50	0	79.6	42.5	122	0	0	0	
Surr: Phenol-d5	43.29	0	100	0	43.3	10	115	0	0	0	

Sample ID: **LCS-125766**	Client ID:		Units: **ug/L**	Prep Date: **03/01/2010**	Run No: **166688**
SampleType: **LCS**	TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D**		BatchID: **125766**	Analysis Date: **03/02/2010**	Seq No: **3455090**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	97.93	10	100	0	97.9	60.2	120	0	0	0	
1,4-Dichlorobenzene	79.20	10	100	0	79.2	53.8	120	0	0	0	
2,4-Dinitrotoluene	101.4	10	100	0	101	70	120	0	0	0	
2-Chlorophenol	85.34	10	100	0	85.3	61	120	0	0	0	
4-Chloro-3-methylphenol	98.84	20	100	0	98.8	72	123	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Sample ID: **LCS-125766** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166688**
SampleType: **LCS** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **125766** Analysis Date: **03/02/2010** Seq No: **3455090**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4-Nitrophenol	57.68	50	100	0	57.7	22.1	120	0	0	0	
Acenaphthene	97.22	10	100	0	97.2	68.5	120	0	0	0	
N-Nitrosodi-n-propylamine	77.55	10	100	0	77.6	60.1	131	0	0	0	
Pentachlorophenol	97.22	50	100	0	97.2	53.6	130	0	0	0	
Phenol	47.17	10	100	0	47.2	28.7	120	0	0	0	
Pyrene	115.1	10	100	0	115	69.6	128	0	0	0	
Surr: 2,4,6-Tribromophenol	115.4	0	100	0	115	54.9	149	0	0	0	
Surr: 2-Fluorobiphenyl	53.02	0	50	0	106	51.5	119	0	0	0	
Surr: 2-Fluorophenol	69.38	0	100	0	69.4	25.1	115	0	0	0	
Surr: 4-Terphenyl-d14	63.02	0	50	0	126	37.5	131	0	0	0	
Surr: Nitrobenzene-d5	46.45	0	50	0	92.9	42.5	122	0	0	0	
Surr: Phenol-d5	50.94	0	100	0	50.9	10	115	0	0	0	

Sample ID: **1002K40-001AMS** Client ID: **POC-2A** Units: **ug/L** Prep Date: **03/01/2010** Run No: **166688**
SampleType: **MS** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **125766** Analysis Date: **03/02/2010** Seq No: **3455102**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	75.48	10	100	0	75.5	53.7	120	0	0	0	
1,4-Dichlorobenzene	64.71	10	100	0	64.7	47.5	120	0	0	0	
2,4-Dinitrotoluene	82.47	10	100	0	82.5	53	118	0	0	0	
2-Chlorophenol	70.04	10	100	0	70	51.6	120	0	0	0	
4-Chloro-3-methylphenol	79.46	20	100	0	79.5	53.1	128	0	0	0	
4-Nitrophenol	52.32	50	100	0	52.3	20.1	120	0	0	0	
Acenaphthene	77.25	10	100	0	77.2	57.2	120	0	0	0	
N-Nitrosodi-n-propylamine	61.34	10	100	0	61.3	45.2	127	0	0	0	
Pentachlorophenol	80.74	50	100	0	80.7	41.6	136	0	0	0	
Phenol	42.18	10	100	0	42.2	23.2	120	0	0	0	
Pyrene	95.58	10	100	0	95.6	55.3	120	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Sample ID: **1002K40-001AMS**	Client ID: **POC-2A**			Units: **ug/L**	Prep Date: **03/01/2010**	Run No: **166688**
SampleType: **MS**	TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D**			BatchID: **125766**	Analysis Date: **03/02/2010**	Seq No: **3455102**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 2,4,6-Tribromophenol	94.04	0	100	0	94	54.9	149	0	0	0	
Surr: 2-Fluorobiphenyl	42.78	0	50	0	85.6	51.5	119	0	0	0	
Surr: 2-Fluorophenol	58.13	0	100	0	58.1	25.1	115	0	0	0	
Surr: 4-Terphenyl-d14	47.52	0	50	0	95	37.5	131	0	0	0	
Surr: Nitrobenzene-d5	35.75	0	50	0	71.5	42.5	122	0	0	0	
Surr: Phenol-d5	44.99	0	100	0	45	10	115	0	0	0	

Sample ID: **1002K40-001AMSD**	Client ID: **POC-2A**			Units: **ug/L**	Prep Date: **03/01/2010**	Run No: **166688**
SampleType: **MSD**	TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D**			BatchID: **125766**	Analysis Date: **03/02/2010**	Seq No: **3455104**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	68.49	10	100	0	68.5	53.7	120	75.48	9.71	28.5	
1,4-Dichlorobenzene	58.45	10	100	0	58.4	47.5	120	64.71	10.2	30.6	
2,4-Dinitrotoluene	78.83	10	100	0	78.8	53	118	82.47	4.51	24	
2-Chlorophenol	62.05	10	100	0	62	51.6	120	70.04	12.1	28.3	
4-Chloro-3-methylphenol	74.91	20	100	0	74.9	53.1	128	79.46	5.89	29.6	
4-Nitrophenol	44.33	50	100	0	44.3	20.1	120	52.32	0	26.9	J
Acenaphthene	70.67	10	100	0	70.7	57.2	120	77.25	8.9	21.8	
N-Nitrosodi-n-propylamine	54.59	10	100	0	54.6	45.2	127	61.34	11.6	22.9	
Pentachlorophenol	78.47	50	100	0	78.5	41.6	136	80.74	2.85	21.6	
Phenol	32.28	10	100	0	32.3	23.2	120	42.18	26.6	29	
Pyrene	92.28	10	100	0	92.3	55.3	120	95.58	3.51	25.3	
Surr: 2,4,6-Tribromophenol	89.96	0	100	0	90	54.9	149	94.04	0	0	
Surr: 2-Fluorobiphenyl	38.77	0	50	0	77.5	51.5	119	42.78	0	0	
Surr: 2-Fluorophenol	49.35	0	100	0	49.4	25.1	115	58.13	0	0	
Surr: 4-Terphenyl-d14	45.79	0	50	0	91.6	37.5	131	47.52	0	0	
Surr: Nitrobenzene-d5	32.00	0	50	0	64	42.5	122	35.75	0	0	
Surr: Phenol-d5	35.80	0	100	0	35.8	10	115	44.99	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125766

Analytical Environmental Services, Inc **Date:** 8-Mar-10

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125771

Sample ID: **MB-125771** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166743**
SampleType: **MBLK** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **125771** Analysis Date: **03/02/2010** Seq No: **3456030**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	BRL	2.0	0	0	0	0	0	0	0	0	
2,4,5-TP (Silvex)	BRL	2.0	0	0	0	0	0	0	0	0	
2,4-D	BRL	2.0	0	0	0	0	0	0	0	0	
Dinoseb	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: DCAA	3.850	0	5	0	77	50	143	0	0	0	

Sample ID: **LCS-125771** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166743**
SampleType: **LCS** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **125771** Analysis Date: **03/02/2010** Seq No: **3456033**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	4.091	2.0	5	0	81.8	62.7	125	0	0	0	
2,4,5-TP (Silvex)	4.218	2.0	5	0	84.4	64.2	124	0	0	0	
2,4-D	4.335	2.0	5	0	86.7	58.6	131	0	0	0	
Surr: DCAA	4.576	0	5	0	91.5	50	143	0	0	0	

Sample ID: **1002K39-001AMS** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166743**
SampleType: **MS** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **125771** Analysis Date: **03/02/2010** Seq No: **3456039**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	3.365	2.0	5	0	67.3	49.2	135	0	0	0	
2,4,5-TP (Silvex)	4.474	2.0	5	0	89.5	58.8	133	0	0	0	
2,4-D	3.867	2.0	5	0	77.3	48.9	141	0	0	0	
Surr: DCAA	3.436	0	5	0	68.7	50	143	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125771

Sample ID: **1002K39-001AMSD** Client ID:
SampleType: **MSD** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A**
Units: **ug/L** BatchID: **125771**
Prep Date: **03/01/2010** Analysis Date: **03/02/2010**
Run No: **166743** Seq No: **3456041**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	3.138	2.0	5	0	62.8	49.2	135	3.365	6.97	25.4	
2,4,5-TP (Silvex)	4.493	2.0	5	0	89.9	58.8	133	4.474	0.426	26.7	
2,4-D	3.713	2.0	5	0	74.3	48.9	141	3.867	4.07	37.7	
Surr: DCAA	3.763	0	5	0	75.3	50	143	3.436	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125794

Sample ID: **MB-125794**	Client ID:				Units: **ug/L**		Prep Date: **03/01/2010**		Run No: **166885**	
SampleType: **MBLK**	TestCode: **POLYCHLORINATED BIPHENYLS SW8082A**				BatchID: **125794**		Analysis Date: **03/02/2010**		Seq No: **3459426**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Aroclor 1016	BRL	0.50	0	0	0	0	0	0	0	0
Aroclor 1221	BRL	0.50	0	0	0	0	0	0	0	0
Aroclor 1232	BRL	0.50	0	0	0	0	0	0	0	0
Aroclor 1242	BRL	0.50	0	0	0	0	0	0	0	0
Aroclor 1248	BRL	0.50	0	0	0	0	0	0	0	0
Aroclor 1254	BRL	0.50	0	0	0	0	0	0	0	0
Aroclor 1260	BRL	0.50	0	0	0	0	0	0	0	0
Surr: Decachlorobiphenyl	0.4940	0	0.5	0	98.8	10	140	0	0	0
Surr: Tetrachloro-m-xylene	0.4089	0	0.5	0	81.8	14.8	140	0	0	0

Sample ID: **LCS-125794**	Client ID:				Units: **ug/L**		Prep Date: **03/01/2010**		Run No: **166885**	
SampleType: **LCS**	TestCode: **POLYCHLORINATED BIPHENYLS SW8082A**				BatchID: **125794**		Analysis Date: **03/02/2010**		Seq No: **3459429**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Aroclor 1016	4.535	0.50	5	0	90.7	55.4	132	0	0	0
Aroclor 1260	5.115	0.50	5	0	102	55.8	134	0	0	0
Surr: Decachlorobiphenyl	0.2743	0	0.5	0	54.9	10	140	0	0	0
Surr: Tetrachloro-m-xylene	0.4400	0	0.5	0	88	14.8	140	0	0	0

Sample ID: **1002K40-003AMS**	Client ID: **POC-1B**				Units: **ug/L**		Prep Date: **03/01/2010**		Run No: **166885**	
SampleType: **MS**	TestCode: **POLYCHLORINATED BIPHENYLS SW8082A**				BatchID: **125794**		Analysis Date: **03/02/2010**		Seq No: **3459435**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Aroclor 1016	4.762	0.50	5	0	95.2	34.3	152	0	0	0
Aroclor 1260	5.210	0.50	5	0	104	28	147	0	0	0
Surr: Decachlorobiphenyl	0.3568	0	0.5	0	71.4	10	140	0	0	0
Surr: Tetrachloro-m-xylene	0.4263	0	0.5	0	85.3	14.8	140	0	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125794

Sample ID: **1002K40-003AMSD** Client ID: **POC-1B** Units: **ug/L** Prep Date: **03/01/2010** Run No: **166885**
SampleType: **MSD** TestCode: **POLYCHLORINATED BIPHENYLS SW8082A** BatchID: **125794** Analysis Date: **03/02/2010** Seq No: **3459438**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	4.588	0.50	5	0	91.8	34.3	152	4.762	3.73	36.9	
Aroclor 1260	4.642	0.50	5	0	92.8	28	147	5.210	11.5	27.9	
Surr: Decachlorobiphenyl	0.3147	0	0.5	0	62.9	10	140	0.3568	0	0	
Surr: Tetrachloro-m-xylene	0.4439	0	0.5	0	88.8	14.8	140	0.4263	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125795

Sample ID: **MB-125795** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166726**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B** BatchID: **125795** Analysis Date: **03/02/2010** Seq No: **3455474**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.10	0	0	0	0	0	0	0	0	
4,4´-DDE	BRL	0.10	0	0	0	0	0	0	0	0	
4,4´-DDT	BRL	0.10	0	0	0	0	0	0	0	0	
Aldrin	BRL	0.050	0	0	0	0	0	0	0	0	
alpha-BHC	BRL	0.050	0	0	0	0	0	0	0	0	
beta-BHC	BRL	0.050	0	0	0	0	0	0	0	0	
Chlordane	BRL	0.50	0	0	0	0	0	0	0	0	
delta-BHC	BRL	0.050	0	0	0	0	0	0	0	0	
Dieldrin	BRL	0.10	0	0	0	0	0	0	0	0	
Endosulfan I	BRL	0.050	0	0	0	0	0	0	0	0	
Endosulfan II	BRL	0.10	0	0	0	0	0	0	0	0	
Endosulfan sulfate	BRL	0.10	0	0	0	0	0	0	0	0	
Endrin	BRL	0.10	0	0	0	0	0	0	0	0	
Endrin aldehyde	BRL	0.10	0	0	0	0	0	0	0	0	
gamma-BHC	BRL	0.050	0	0	0	0	0	0	0	0	
Heptachlor	BRL	0.050	0	0	0	0	0	0	0	0	
Heptachlor epoxide	BRL	0.050	0	0	0	0	0	0	0	0	
Methoxychlor	BRL	0.50	0	0	0	0	0	0	0	0	
Toxaphene	BRL	3.0	0	0	0	0	0	0	0	0	
Surr: Decachlorobiphenyl	0.3815	0	0.5	0	76.3	16.1	124	0	0	0	
Surr: Tetrachloro-m-xylene	0.3713	0	0.5	0	74.3	16	126	0	0	0	

Sample ID: **LCS-125795** Client ID: Units: **ug/L** Prep Date: **03/01/2010** Run No: **166726**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B** BatchID: **125795** Analysis Date: **03/02/2010** Seq No: **3455475**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	1.127	0.10	1	0	113	57.2	133	0	0	0	
Aldrin	1.102	0.050	1	0	110	43.2	131	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125795

Sample ID: **LCS-125795**	Client ID:		Units: **ug/L**	Prep Date: **03/01/2010**	Run No: **166726**
SampleType: **LCS**	TestCode: **CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B**		BatchID: **125795**	Analysis Date: **03/02/2010**	Seq No: **3455475**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	1.264	0.10	1	0	126	60.4	138	0	0	0	
Endrin	1.331	0.10	1	0	133	59.6	135	0	0	0	
gamma-BHC	1.236	0.050	1	0	124	48.6	138	0	0	0	
Heptachlor	1.104	0.050	1	0	110	46.6	129	0	0	0	
Surr: Decachlorobiphenyl	0.4160	0	0.5	0	83.2	16.1	124	0	0	0	
Surr: Tetrachloro-m-xylene	0.4311	0	0.5	0	86.2	16	126	0	0	0	

Sample ID: **1002K01-001DMS**	Client ID:		Units: **ug/L**	Prep Date: **03/01/2010**	Run No: **166726**
SampleType: **MS**	TestCode: **CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B**		BatchID: **125795**	Analysis Date: **03/02/2010**	Seq No: **3455477**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.9726	0.10	1	0	97.3	18.4	148	0	0	0	
Aldrin	0.9456	0.050	1	0	94.6	25.5	135	0	0	0	
Dieldrin	1.256	0.10	1	0	126	40.6	148	0	0	0	
Endrin	1.310	0.10	1	0	131	45.1	145	0	0	0	
gamma-BHC	1.178	0.050	1	0	118	41.2	147	0	0	0	
Heptachlor	1.083	0.050	1	0	108	34.8	135	0	0	0	
Surr: Decachlorobiphenyl	0.3764	0	0.5	0	75.3	16.1	124	0	0	0	
Surr: Tetrachloro-m-xylene	0.4110	0	0.5	0	82.2	16	126	0	0	0	

Sample ID: **1002K01-001DMSD**	Client ID:		Units: **ug/L**	Prep Date: **03/01/2010**	Run No: **166726**
SampleType: **MSD**	TestCode: **CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B**		BatchID: **125795**	Analysis Date: **03/02/2010**	Seq No: **3455478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.9040	0.10	1	0	90.4	18.4	148	0.9726	7.31	24.2	
Aldrin	1.003	0.050	1	0	100	25.5	135	0.9456	5.87	28	
Dieldrin	1.147	0.10	1	0	115	40.6	148	1.256	9.07	20.5	
Endrin	1.229	0.10	1	0	123	45.1	145	1.310	6.32	20.3	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Services, Inc.
Project Name: 9264000
Workorder: 1002K40

ANALYTICAL QC SUMMARY REPORT

BatchID: 125795

Sample ID: **1002K01-001DMSD** Client ID:
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, APPENDIX IX LIST SW8081B**
Units: **ug/L** BatchID: **125795**
Prep Date: **03/01/2010** Analysis Date: **03/02/2010**
Run No: **166726** Seq No: **3455478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
gamma-BHC	1.016	0.050	1	0	102	41.2	147	1.178	14.8	26.5	
Heptachlor	0.9240	0.050	1	0	92.4	34.8	135	1.083	15.9	31.3	
Surr: Decachlorobiphenyl	0.3681	0	0.5	0	73.6	16.1	124	0.3764	0	0	
Surr: Tetrachloro-m-xylene	0.3277	0	0.5	0	65.5	16	126	0.4110	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

April 12, 2010

Mr. Matt Allen
AECOM Environment
8540 Colonnade Center Drive
Suite 306
Raleigh, NC 27615

RE: Project: PARKER HANNIFIN
Pace Project No.: 9264079

Dear Mr. Allen:
Enclosed are the analytical results for sample(s) received by the laboratory on February 25, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Helton

brandon.helton@pacelabs.com
Project Manager

Enclosures

cc: Mr. Bob Wyrick, AECOM Environment

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Charlotte Certification IDs

Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
West Virginia Certification #: 357
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 990060003
South Carolina Certification #: 990060001
Pennsylvania Certification #: 68-00784
North Carolina Wastewater Certification #: 12
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706
New Jersey Certification #: NC012
Louisiana/LELAP Certification #: 04034
Kentucky UST Certification #: 84

Asheville Certification IDs

Connecticut Certification #: PH-0106
2225 Riverside Dr. Asheville, NC 28804
Virginia Certification #: 00072
Tennessee Certification #: 2980
South Carolina Certification #: 99030001
South Carolina Bioassay Certification #: 99030002
Pennsylvania Certification #: 68-03578
North Carolina Wastewater Certification #: 40
North Carolina Drinking Water Certification #: 37712
North Carolina Bioassay Certification #: 9
New Jersey Certification #: NC011
Massachusetts Certification #: M-NC030
Louisiana/LELAP Certification #: 03095
Florida/NELAP Certification #: E87648
West Virginia Certification #: 356

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9264079001	**MW-8**	Water	02/24/10 10:35	02/25/10 14:25
9264079002	**MW-8D**	Water	02/24/10 12:50	02/25/10 14:25
9264079003	**DUP-1**	Water	02/24/10 00:00	02/25/10 14:25
9264079004	**MW-8DR**	Water	02/24/10 10:25	02/25/10 14:25
9264079005	**RW-19**	Water	02/24/10 15:35	02/25/10 14:25
9264079006	**MW-6DR**	Water	02/24/10 16:40	02/25/10 14:25
9264079007	**RW-6**	Water	02/24/10 16:55	02/25/10 14:25
9264079008	**EB-3**	Water	02/24/10 17:23	02/25/10 14:25
9264079009	**MW-6D**	Water	02/24/10 11:35	02/25/10 14:25
9264079010	**POC-1A**	Water	02/24/10 10:05	02/25/10 14:25
9264079011	**TB-0070**	Water	02/24/10 00:00	02/25/10 14:25

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9264079001	**MW-8**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079002	**MW-8D**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079003	**DUP-1**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079004	**MW-8DR**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079005	**RW-19**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079006	**MW-6DR**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079007	**RW-6**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079008	**EB-3**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079009	**MW-6D**	EPA 6010	EWS	9	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	67	PASI-C
9264079010	**POC-1A**	EPA 6010	EWS	17	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	65	PASI-C
		SM 4500-S2D	SHB	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A
9264079011	**TB-0070**	EPA 8260	MCK	67	PASI-C

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-8 **Lab ID: 9264079001** Collected: 02/24/10 10:35 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:42	7440-38-2	
Barium	**17.5**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:42	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 04:42	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:42	7440-47-3	
Copper	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:42	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:42	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:42	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:42	7440-22-4	
Zinc	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:42	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:28	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/01/10 13:21	67-64-1	
Benzene	ND	ug/L	1.0	1		03/01/10 13:21	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/01/10 13:21	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/01/10 13:21	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/01/10 13:21	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/01/10 13:21	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/01/10 13:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/01/10 13:21	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		03/01/10 13:21	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		03/01/10 13:21	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		03/01/10 13:21	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		03/01/10 13:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/01/10 13:21	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/01/10 13:21	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/01/10 13:21	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/01/10 13:21	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/01/10 13:21	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/01/10 13:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/01/10 13:21	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/01/10 13:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/01/10 13:21	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/01/10 13:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/01/10 13:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/01/10 13:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/01/10 13:21	107-06-2	
1,2-Dichloroethene (Total)	**3.6**	ug/L	1.0	1		03/01/10 13:21	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/01/10 13:21	75-35-4	
cis-1,2-Dichloroethene	**3.6**	ug/L	1.0	1		03/01/10 13:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/01/10 13:21	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-8 **Lab ID: 9264079001** Collected: 02/24/10 10:35 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	1.0	1		03/01/10 13:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/01/10 13:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/01/10 13:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/01/10 13:21	563-58-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/01/10 13:21	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		03/01/10 13:21	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/01/10 13:21	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/01/10 13:21	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/01/10 13:21	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/01/10 13:21	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/01/10 13:21	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/01/10 13:21	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		03/01/10 13:21	103-65-1	
Styrene	ND	ug/L	1.0	1		03/01/10 13:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 13:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 13:21	79-34-5	
Tetrachloroethene	**7.1**	ug/L	1.0	1		03/01/10 13:21	127-18-4	
Toluene	ND	ug/L	1.0	1		03/01/10 13:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/01/10 13:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/01/10 13:21	79-00-5	
Trichloroethene	**7.6**	ug/L	1.0	1		03/01/10 13:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/01/10 13:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/01/10 13:21	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		03/01/10 13:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		03/01/10 13:21	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		03/01/10 13:21	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/01/10 13:21	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/01/10 13:21	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/01/10 13:21	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109	1		03/01/10 13:21	460-00-4	
Dibromofluoromethane (S)	106	%	85-115	1		03/01/10 13:21	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	79-120	1		03/01/10 13:21	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		03/01/10 13:21	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-8D **Lab ID: 9264079002** Collected: 02/24/10 12:50 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:46	7440-38-2	
Barium	**59.6**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:46	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 04:46	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:46	7440-47-3	
Copper	**42.0**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:46	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:46	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:46	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:46	7440-22-4	
Zinc	**27.6**	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:46	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:30	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/01/10 13:45	67-64-1	
Benzene	ND	ug/L	1.0	1		03/01/10 13:45	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/01/10 13:45	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/01/10 13:45	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/01/10 13:45	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/01/10 13:45	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/01/10 13:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/01/10 13:45	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		03/01/10 13:45	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		03/01/10 13:45	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		03/01/10 13:45	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		03/01/10 13:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/01/10 13:45	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/01/10 13:45	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/01/10 13:45	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/01/10 13:45	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/01/10 13:45	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/01/10 13:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/01/10 13:45	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/01/10 13:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/01/10 13:45	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/01/10 13:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:45	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/01/10 13:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/01/10 13:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/01/10 13:45	107-06-2	
1,2-Dichloroethene (Total)	**11.3**	ug/L	1.0	1		03/01/10 13:45	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/01/10 13:45	75-35-4	
cis-1,2-Dichloroethene	**11.3**	ug/L	1.0	1		03/01/10 13:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/01/10 13:45	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-8D **Lab ID: 9264079002** Collected: 02/24/10 12:50 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	1.0	1		03/01/10 13:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/01/10 13:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/01/10 13:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/01/10 13:45	563-58-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/01/10 13:45	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		03/01/10 13:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/01/10 13:45	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/01/10 13:45	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/01/10 13:45	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/01/10 13:45	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/01/10 13:45	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/01/10 13:45	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		03/01/10 13:45	103-65-1	
Styrene	ND	ug/L	1.0	1		03/01/10 13:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 13:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 13:45	79-34-5	
Tetrachloroethene	**3.6**	ug/L	1.0	1		03/01/10 13:45	127-18-4	
Toluene	ND	ug/L	1.0	1		03/01/10 13:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/01/10 13:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/01/10 13:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/01/10 13:45	79-00-5	
Trichloroethene	**15.9**	ug/L	1.0	1		03/01/10 13:45	79-01-6	
Trichlorofluoromethane	**3.3**	ug/L	1.0	1		03/01/10 13:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/01/10 13:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		03/01/10 13:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		03/01/10 13:45	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		03/01/10 13:45	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/01/10 13:45	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/01/10 13:45	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/01/10 13:45	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109	1		03/01/10 13:45	460-00-4	
Dibromofluoromethane (S)	108	%	85-115	1		03/01/10 13:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	79-120	1		03/01/10 13:45	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		03/01/10 13:45	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: DUP-1 **Lab ID: 9264079003** Collected: 02/24/10 00:00 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:51	7440-38-2	
Barium	**59.2**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:51	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 04:51	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:51	7440-47-3	
Copper	**40.0**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:51	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:51	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:51	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:51	7440-22-4	
Zinc	**28.0**	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:51	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:33	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/03/10 12:48	67-64-1	
Benzene	ND	ug/L	1.0	1		03/03/10 12:48	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/03/10 12:48	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/03/10 12:48	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/03/10 12:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/03/10 12:48	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/03/10 12:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/03/10 12:48	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		03/03/10 12:48	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		03/03/10 12:48	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		03/03/10 12:48	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		03/03/10 12:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/03/10 12:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/03/10 12:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/03/10 12:48	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/03/10 12:48	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/03/10 12:48	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/03/10 12:48	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/03/10 12:48	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/03/10 12:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/03/10 12:48	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/03/10 12:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/03/10 12:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/03/10 12:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/03/10 12:48	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/03/10 12:48	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/03/10 12:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/03/10 12:48	107-06-2	
1,2-Dichloroethene (Total)	**10.5**	ug/L	1.0	1		03/03/10 12:48	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/03/10 12:48	75-35-4	
cis-1,2-Dichloroethene	**10.5**	ug/L	1.0	1		03/03/10 12:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/03/10 12:48	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: DUP-1 **Lab ID: 9264079003** Collected: 02/24/10 00:00 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	1.0	1		03/03/10 12:48	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/03/10 12:48	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/03/10 12:48	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/03/10 12:48	563-58-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/03/10 12:48	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		03/03/10 12:48	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/03/10 12:48	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/03/10 12:48	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/03/10 12:48	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/03/10 12:48	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/03/10 12:48	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/03/10 12:48	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		03/03/10 12:48	103-65-1	
Styrene	ND	ug/L	1.0	1		03/03/10 12:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/03/10 12:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/03/10 12:48	79-34-5	
Tetrachloroethene	**3.4**	ug/L	1.0	1		03/03/10 12:48	127-18-4	
Toluene	ND	ug/L	1.0	1		03/03/10 12:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/03/10 12:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/03/10 12:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/03/10 12:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/03/10 12:48	79-00-5	
Trichloroethene	**14.7**	ug/L	1.0	1		03/03/10 12:48	79-01-6	
Trichlorofluoromethane	**2.7**	ug/L	1.0	1		03/03/10 12:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/03/10 12:48	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		03/03/10 12:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		03/03/10 12:48	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		03/03/10 12:48	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/03/10 12:48	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/03/10 12:48	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/03/10 12:48	95-47-6	
4-Bromofluorobenzene (S)	95	%	87-109	1		03/03/10 12:48	460-00-4	
Dibromofluoromethane (S)	110	%	85-115	1		03/03/10 12:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120	1		03/03/10 12:48	17060-07-0	
Toluene-d8 (S)	93	%	70-120	1		03/03/10 12:48	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-8DR **Lab ID: 9264079004** Collected: 02/24/10 10:25 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:55	7440-38-2	
Barium	**23.9**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:55	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 04:55	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:55	7440-47-3	
Copper	**11.3**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:55	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:55	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:55	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:55	7440-22-4	
Zinc	**14.0**	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:55	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:35	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/01/10 14:10	67-64-1	
Benzene	ND	ug/L	1.0	1		03/01/10 14:10	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/01/10 14:10	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/01/10 14:10	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/01/10 14:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/01/10 14:10	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/01/10 14:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/01/10 14:10	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		03/01/10 14:10	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		03/01/10 14:10	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		03/01/10 14:10	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		03/01/10 14:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/01/10 14:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/01/10 14:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/01/10 14:10	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/01/10 14:10	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/01/10 14:10	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/01/10 14:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/01/10 14:10	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/01/10 14:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/01/10 14:10	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/01/10 14:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 14:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 14:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/01/10 14:10	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/01/10 14:10	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/01/10 14:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/01/10 14:10	107-06-2	
1,2-Dichloroethene (Total)	**15.1**	ug/L	1.0	1		03/01/10 14:10	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/01/10 14:10	75-35-4	
cis-1,2-Dichloroethene	**15.0**	ug/L	1.0	1		03/01/10 14:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/01/10 14:10	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-8DR **Lab ID: 9264079004** Collected: 02/24/10 10:25 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	1.0	1		03/01/10 14:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/01/10 14:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/01/10 14:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/01/10 14:10	563-58-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/01/10 14:10	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		03/01/10 14:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/01/10 14:10	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/01/10 14:10	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/01/10 14:10	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/01/10 14:10	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/01/10 14:10	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/01/10 14:10	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		03/01/10 14:10	103-65-1	
Styrene	ND	ug/L	1.0	1		03/01/10 14:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 14:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/01/10 14:10	79-34-5	
Tetrachloroethene	**6.3**	ug/L	1.0	1		03/01/10 14:10	127-18-4	
Toluene	ND	ug/L	1.0	1		03/01/10 14:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/01/10 14:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/01/10 14:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/01/10 14:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/01/10 14:10	79-00-5	
Trichloroethene	**36.2**	ug/L	1.0	1		03/01/10 14:10	79-01-6	
Trichlorofluoromethane	**3.4**	ug/L	1.0	1		03/01/10 14:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/01/10 14:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		03/01/10 14:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		03/01/10 14:10	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		03/01/10 14:10	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/01/10 14:10	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/01/10 14:10	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/01/10 14:10	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109	1		03/01/10 14:10	460-00-4	
Dibromofluoromethane (S)	107	%	85-115	1		03/01/10 14:10	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120	1		03/01/10 14:10	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		03/01/10 14:10	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: RW-19 **Lab ID: 9264079005** Collected: 02/24/10 15:35 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:59	7440-38-2	
Barium	**37.7**	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:59	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 04:59	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:59	7440-47-3	
Copper	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:59	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:59	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:59	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 04:59	7440-22-4	
Zinc	**31.8**	ug/L	10.0	1	03/03/10 13:59	03/11/10 04:59	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:38	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	125	5		03/01/10 15:03	67-64-1	
Benzene	ND	ug/L	5.0	5		03/01/10 15:03	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		03/01/10 15:03	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		03/01/10 15:03	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	5		03/01/10 15:03	75-27-4	
Bromoform	ND	ug/L	5.0	5		03/01/10 15:03	75-25-2	
Bromomethane	ND	ug/L	25.0	5		03/01/10 15:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	5		03/01/10 15:03	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	5		03/01/10 15:03	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	5		03/01/10 15:03	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	5		03/01/10 15:03	98-06-6	
Carbon tetrachloride	ND	ug/L	5.0	5		03/01/10 15:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		03/01/10 15:03	108-90-7	
Chloroethane	ND	ug/L	5.0	5		03/01/10 15:03	75-00-3	
Chloroform	ND	ug/L	5.0	5		03/01/10 15:03	67-66-3	
Chloromethane	ND	ug/L	5.0	5		03/01/10 15:03	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	5		03/01/10 15:03	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		03/01/10 15:03	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	15.0	5		03/01/10 15:03	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		03/01/10 15:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		03/01/10 15:03	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		03/01/10 15:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		03/01/10 15:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		03/01/10 15:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		03/01/10 15:03	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		03/01/10 15:03	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	5		03/01/10 15:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		03/01/10 15:03	107-06-2	
1,2-Dichloroethene (Total)	**108**	ug/L	5.0	5		03/01/10 15:03	540-59-0	
1,1-Dichloroethene	ND	ug/L	5.0	5		03/01/10 15:03	75-35-4	
cis-1,2-Dichloroethene	**108**	ug/L	5.0	5		03/01/10 15:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		03/01/10 15:03	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: RW-19 **Lab ID: 9264079005** Collected: 02/24/10 15:35 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	5.0	5		03/01/10 15:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		03/01/10 15:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		03/01/10 15:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		03/01/10 15:03	563-58-6	
Diisopropyl ether	ND	ug/L	5.0	5		03/01/10 15:03	108-20-3	
Ethylbenzene	ND	ug/L	5.0	5		03/01/10 15:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	5		03/01/10 15:03	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	5		03/01/10 15:03	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	5		03/01/10 15:03	99-87-6	
Methylene Chloride	ND	ug/L	10.0	5		03/01/10 15:03	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		03/01/10 15:03	1634-04-4	
Naphthalene	ND	ug/L	5.0	5		03/01/10 15:03	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	5		03/01/10 15:03	103-65-1	
Styrene	ND	ug/L	5.0	5		03/01/10 15:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		03/01/10 15:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		03/01/10 15:03	79-34-5	
Tetrachloroethene	**66.9**	ug/L	5.0	5		03/01/10 15:03	127-18-4	
Toluene	ND	ug/L	5.0	5		03/01/10 15:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		03/01/10 15:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		03/01/10 15:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	5		03/01/10 15:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	5		03/01/10 15:03	79-00-5	
Trichloroethene	**924**	ug/L	5.0	5		03/01/10 15:03	79-01-6	
Trichlorofluoromethane	**7.9**	ug/L	5.0	5		03/01/10 15:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	5		03/01/10 15:03	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	5		03/01/10 15:03	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	5		03/01/10 15:03	108-67-8	
Vinyl chloride	ND	ug/L	5.0	5		03/01/10 15:03	75-01-4	
Xylene (Total)	ND	ug/L	10.0	5		03/01/10 15:03	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		03/01/10 15:03	1330-20-7	
o-Xylene	ND	ug/L	5.0	5		03/01/10 15:03	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109	5		03/01/10 15:03	460-00-4	
Dibromofluoromethane (S)	106	%	85-115	5		03/01/10 15:03	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	79-120	5		03/01/10 15:03	17060-07-0	
Toluene-d8 (S)	99	%	70-120	5		03/01/10 15:03	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-6DR **Lab ID: 9264079006** Collected: 02/24/10 16:40 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:04	7440-38-2	
Barium	**48.5**	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:04	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 05:04	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:04	7440-47-3	
Copper	**18.6**	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:04	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:04	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:04	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:04	7440-22-4	
Zinc	**83.7**	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:04	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:40	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	125	5		03/01/10 14:36	67-64-1	
Benzene	ND	ug/L	5.0	5		03/01/10 14:36	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		03/01/10 14:36	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		03/01/10 14:36	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	5		03/01/10 14:36	75-27-4	
Bromoform	ND	ug/L	5.0	5		03/01/10 14:36	75-25-2	
Bromomethane	ND	ug/L	25.0	5		03/01/10 14:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	5		03/01/10 14:36	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	5		03/01/10 14:36	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	5		03/01/10 14:36	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	5		03/01/10 14:36	98-06-6	
Carbon tetrachloride	ND	ug/L	5.0	5		03/01/10 14:36	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		03/01/10 14:36	108-90-7	
Chloroethane	ND	ug/L	5.0	5		03/01/10 14:36	75-00-3	
Chloroform	ND	ug/L	5.0	5		03/01/10 14:36	67-66-3	
Chloromethane	ND	ug/L	5.0	5		03/01/10 14:36	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	5		03/01/10 14:36	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		03/01/10 14:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	15.0	5		03/01/10 14:36	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		03/01/10 14:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		03/01/10 14:36	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		03/01/10 14:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		03/01/10 14:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		03/01/10 14:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		03/01/10 14:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		03/01/10 14:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	5		03/01/10 14:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		03/01/10 14:36	107-06-2	
1,2-Dichloroethene (Total)	**28.7**	ug/L	5.0	5		03/01/10 14:36	540-59-0	
1,1-Dichloroethene	ND	ug/L	5.0	5		03/01/10 14:36	75-35-4	
cis-1,2-Dichloroethene	**28.7**	ug/L	5.0	5		03/01/10 14:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		03/01/10 14:36	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-6DR **Lab ID: 9264079006** Collected: 02/24/10 16:40 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	5.0	5		03/01/10 14:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		03/01/10 14:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		03/01/10 14:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		03/01/10 14:36	563-58-6	
Diisopropyl ether	ND	ug/L	5.0	5		03/01/10 14:36	108-20-3	
Ethylbenzene	ND	ug/L	5.0	5		03/01/10 14:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	5		03/01/10 14:36	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	5		03/01/10 14:36	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	5		03/01/10 14:36	99-87-6	
Methylene Chloride	ND	ug/L	10.0	5		03/01/10 14:36	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		03/01/10 14:36	1634-04-4	
Naphthalene	ND	ug/L	5.0	5		03/01/10 14:36	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	5		03/01/10 14:36	103-65-1	
Styrene	ND	ug/L	5.0	5		03/01/10 14:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		03/01/10 14:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		03/01/10 14:36	79-34-5	
Tetrachloroethene	**7.2**	ug/L	5.0	5		03/01/10 14:36	127-18-4	
Toluene	ND	ug/L	5.0	5		03/01/10 14:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		03/01/10 14:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		03/01/10 14:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	5		03/01/10 14:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	5		03/01/10 14:36	79-00-5	
Trichloroethene	**3900**	ug/L	50.0	50		03/02/10 16:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	5		03/01/10 14:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	5		03/01/10 14:36	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	5		03/01/10 14:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	5		03/01/10 14:36	108-67-8	
Vinyl chloride	ND	ug/L	5.0	5		03/01/10 14:36	75-01-4	
Xylene (Total)	ND	ug/L	10.0	5		03/01/10 14:36	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		03/01/10 14:36	1330-20-7	
o-Xylene	ND	ug/L	5.0	5		03/01/10 14:36	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109	5		03/01/10 14:36	460-00-4	
Dibromofluoromethane (S)	108	%	85-115	5		03/01/10 14:36	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	79-120	5		03/01/10 14:36	17060-07-0	
Toluene-d8 (S)	99	%	70-120	5		03/01/10 14:36	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: RW-6 **Lab ID: 9264079007** Collected: 02/24/10 16:55 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:07	7440-38-2	
Barium	**112**	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:07	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 05:07	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:07	7440-47-3	
Copper	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:07	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:07	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:07	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:07	7440-22-4	
Zinc	**16.2**	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:07	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/01/10 12:30	03/04/10 15:43	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	250	10		03/01/10 15:29	67-64-1	
Benzene	ND	ug/L	10.0	10		03/01/10 15:29	71-43-2	
Bromobenzene	ND	ug/L	10.0	10		03/01/10 15:29	108-86-1	
Bromochloromethane	ND	ug/L	10.0	10		03/01/10 15:29	74-97-5	
Bromodichloromethane	ND	ug/L	10.0	10		03/01/10 15:29	75-27-4	
Bromoform	ND	ug/L	10.0	10		03/01/10 15:29	75-25-2	
Bromomethane	ND	ug/L	50.0	10		03/01/10 15:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	10		03/01/10 15:29	78-93-3	
n-Butylbenzene	ND	ug/L	10.0	10		03/01/10 15:29	104-51-8	
sec-Butylbenzene	ND	ug/L	10.0	10		03/01/10 15:29	135-98-8	
tert-Butylbenzene	ND	ug/L	10.0	10		03/01/10 15:29	98-06-6	
Carbon tetrachloride	ND	ug/L	10.0	10		03/01/10 15:29	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		03/01/10 15:29	108-90-7	
Chloroethane	ND	ug/L	10.0	10		03/01/10 15:29	75-00-3	
Chloroform	ND	ug/L	10.0	10		03/01/10 15:29	67-66-3	
Chloromethane	ND	ug/L	10.0	10		03/01/10 15:29	74-87-3	
2-Chlorotoluene	ND	ug/L	10.0	10		03/01/10 15:29	95-49-8	
4-Chlorotoluene	ND	ug/L	10.0	10		03/01/10 15:29	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	30.0	10		03/01/10 15:29	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		03/01/10 15:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		03/01/10 15:29	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		03/01/10 15:29	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:29	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	10		03/01/10 15:29	75-71-8	
1,1-Dichloroethane	ND	ug/L	10.0	10		03/01/10 15:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	10		03/01/10 15:29	107-06-2	
1,2-Dichloroethene (Total)	**65.6**	ug/L	10.0	10		03/01/10 15:29	540-59-0	
1,1-Dichloroethene	ND	ug/L	10.0	10		03/01/10 15:29	75-35-4	
cis-1,2-Dichloroethene	**65.6**	ug/L	10.0	10		03/01/10 15:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	10.0	10		03/01/10 15:29	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: RW-6 **Lab ID: 9264079007** Collected: 02/24/10 16:55 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	10.0	10		03/01/10 15:29	78-87-5	
1,3-Dichloropropane	ND	ug/L	10.0	10		03/01/10 15:29	142-28-9	
2,2-Dichloropropane	ND	ug/L	10.0	10		03/01/10 15:29	594-20-7	
1,1-Dichloropropene	ND	ug/L	10.0	10		03/01/10 15:29	563-58-6	
Diisopropyl ether	ND	ug/L	10.0	10		03/01/10 15:29	108-20-3	
Ethylbenzene	ND	ug/L	10.0	10		03/01/10 15:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	10		03/01/10 15:29	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	10.0	10		03/01/10 15:29	98-82-8	
p-Isopropyltoluene	ND	ug/L	10.0	10		03/01/10 15:29	99-87-6	
Methylene Chloride	ND	ug/L	20.0	10		03/01/10 15:29	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	10.0	10		03/01/10 15:29	1634-04-4	
Naphthalene	ND	ug/L	10.0	10		03/01/10 15:29	91-20-3	
n-Propylbenzene	ND	ug/L	10.0	10		03/01/10 15:29	103-65-1	
Styrene	ND	ug/L	10.0	10		03/01/10 15:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 15:29	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 15:29	79-34-5	
Tetrachloroethene	**12.5**	ug/L	10.0	10		03/01/10 15:29	127-18-4	
Toluene	ND	ug/L	10.0	10		03/01/10 15:29	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:29	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:29	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	10.0	10		03/01/10 15:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		03/01/10 15:29	79-00-5	
Trichloroethene	**4300**	ug/L	50.0	50		03/02/10 16:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		03/01/10 15:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	10.0	10		03/01/10 15:29	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	10.0	10		03/01/10 15:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	10.0	10		03/01/10 15:29	108-67-8	
Vinyl chloride	ND	ug/L	10.0	10		03/01/10 15:29	75-01-4	
Xylene (Total)	ND	ug/L	20.0	10		03/01/10 15:29	1330-20-7	
m&p-Xylene	ND	ug/L	20.0	10		03/01/10 15:29	1330-20-7	
o-Xylene	ND	ug/L	10.0	10		03/01/10 15:29	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109	10		03/01/10 15:29	460-00-4	
Dibromofluoromethane (S)	105	%	85-115	10		03/01/10 15:29	1868-53-7	
1,2-Dichloroethane-d4 (S)	101	%	79-120	10		03/01/10 15:29	17060-07-0	
Toluene-d8 (S)	100	%	70-120	10		03/01/10 15:29	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: EB-3 **Lab ID: 9264079008** Collected: 02/24/10 17:23 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:24	7440-38-2	
Barium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:24	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 05:24	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:24	7440-47-3	
Copper	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:24	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:24	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:24	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:24	7440-22-4	
Zinc	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:24	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/03/10 12:15	03/05/10 14:41	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		03/02/10 01:13	67-64-1	
Benzene	ND	ug/L	1.0	1		03/02/10 01:13	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/02/10 01:13	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/02/10 01:13	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/02/10 01:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/02/10 01:13	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/02/10 01:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/02/10 01:13	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		03/02/10 01:13	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		03/02/10 01:13	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		03/02/10 01:13	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		03/02/10 01:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/02/10 01:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/02/10 01:13	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/02/10 01:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/02/10 01:13	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/02/10 01:13	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/02/10 01:13	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/02/10 01:13	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/02/10 01:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/10 01:13	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/02/10 01:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:13	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/02/10 01:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/02/10 01:13	75-34-3	
1,2-Dichloroethane	**1.5**	ug/L	1.0	1		03/02/10 01:13	107-06-2	C9
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		03/02/10 01:13	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/02/10 01:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 01:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 01:13	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: EB-3 **Lab ID: 9264079008** Collected: 02/24/10 17:23 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 01:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/02/10 01:13	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 01:13	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/02/10 01:13	563-58-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/02/10 01:13	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		03/02/10 01:13	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/02/10 01:13	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/02/10 01:13	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/02/10 01:13	99-87-6	
Methylene Chloride	**2.8**	ug/L	2.0	1		03/02/10 01:13	75-09-2	C9
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/02/10 01:13	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/02/10 01:13	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		03/02/10 01:13	103-65-1	
Styrene	ND	ug/L	1.0	1		03/02/10 01:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 01:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 01:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/02/10 01:13	127-18-4	
Toluene	ND	ug/L	1.0	1		03/02/10 01:13	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:13	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:13	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/02/10 01:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/02/10 01:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/02/10 01:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/02/10 01:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/02/10 01:13	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		03/02/10 01:13	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		03/02/10 01:13	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		03/02/10 01:13	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/02/10 01:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/02/10 01:13	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/02/10 01:13	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109	1		03/02/10 01:13	460-00-4	
Dibromofluoromethane (S)	109	%	85-115	1		03/02/10 01:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120	1		03/02/10 01:13	17060-07-0	
Toluene-d8 (S)	102	%	70-120	1		03/02/10 01:13	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-6D **Lab ID: 9264079009** Collected: 02/24/10 11:35 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:28	7440-38-2	
Barium	**278**	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:28	7440-39-3	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 05:28	7440-43-9	
Chromium	**6.2**	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:28	7440-47-3	
Copper	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:28	7440-50-8	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:28	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:28	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:28	7440-22-4	
Zinc	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:28	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/03/10 12:15	03/05/10 14:44	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	250	10		03/01/10 16:49	67-64-1	
Benzene	ND	ug/L	10.0	10		03/01/10 16:49	71-43-2	
Bromobenzene	ND	ug/L	10.0	10		03/01/10 16:49	108-86-1	
Bromochloromethane	ND	ug/L	10.0	10		03/01/10 16:49	74-97-5	
Bromodichloromethane	ND	ug/L	10.0	10		03/01/10 16:49	75-27-4	
Bromoform	ND	ug/L	10.0	10		03/01/10 16:49	75-25-2	
Bromomethane	ND	ug/L	50.0	10		03/01/10 16:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	10		03/01/10 16:49	78-93-3	
n-Butylbenzene	ND	ug/L	10.0	10		03/01/10 16:49	104-51-8	
sec-Butylbenzene	ND	ug/L	10.0	10		03/01/10 16:49	135-98-8	
tert-Butylbenzene	ND	ug/L	10.0	10		03/01/10 16:49	98-06-6	
Carbon tetrachloride	ND	ug/L	10.0	10		03/01/10 16:49	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		03/01/10 16:49	108-90-7	
Chloroethane	ND	ug/L	10.0	10		03/01/10 16:49	75-00-3	
Chloroform	ND	ug/L	10.0	10		03/01/10 16:49	67-66-3	
Chloromethane	ND	ug/L	10.0	10		03/01/10 16:49	74-87-3	
2-Chlorotoluene	ND	ug/L	10.0	10		03/01/10 16:49	95-49-8	
4-Chlorotoluene	ND	ug/L	10.0	10		03/01/10 16:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	30.0	10		03/01/10 16:49	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		03/01/10 16:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		03/01/10 16:49	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		03/01/10 16:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	10		03/01/10 16:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	10.0	10		03/01/10 16:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	10		03/01/10 16:49	107-06-2	
1,2-Dichloroethene (Total)	**208**	ug/L	10.0	10		03/01/10 16:49	540-59-0	
1,1-Dichloroethene	ND	ug/L	10.0	10		03/01/10 16:49	75-35-4	
cis-1,2-Dichloroethene	**204**	ug/L	10.0	10		03/01/10 16:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	10.0	10		03/01/10 16:49	156-60-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: MW-6D **Lab ID: 9264079009** Collected: 02/24/10 11:35 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND	ug/L	10.0	10		03/01/10 16:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	10.0	10		03/01/10 16:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	10.0	10		03/01/10 16:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	10.0	10		03/01/10 16:49	563-58-6	
Diisopropyl ether	ND	ug/L	10.0	10		03/01/10 16:49	108-20-3	
Ethylbenzene	ND	ug/L	10.0	10		03/01/10 16:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	10		03/01/10 16:49	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	10.0	10		03/01/10 16:49	98-82-8	
p-Isopropyltoluene	ND	ug/L	10.0	10		03/01/10 16:49	99-87-6	
Methylene Chloride	ND	ug/L	20.0	10		03/01/10 16:49	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	10.0	10		03/01/10 16:49	1634-04-4	
Naphthalene	ND	ug/L	10.0	10		03/01/10 16:49	91-20-3	
n-Propylbenzene	ND	ug/L	10.0	10		03/01/10 16:49	103-65-1	
Styrene	ND	ug/L	10.0	10		03/01/10 16:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 16:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 16:49	79-34-5	
Tetrachloroethene	ND	ug/L	10.0	10		03/01/10 16:49	127-18-4	
Toluene	ND	ug/L	10.0	10		03/01/10 16:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	10		03/01/10 16:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	10.0	10		03/01/10 16:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		03/01/10 16:49	79-00-5	
Trichloroethene	**2090**	ug/L	50.0	50		03/03/10 07:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		03/01/10 16:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	10.0	10		03/01/10 16:49	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	10.0	10		03/01/10 16:49	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	10.0	10		03/01/10 16:49	108-67-8	
Vinyl chloride	ND	ug/L	10.0	10		03/01/10 16:49	75-01-4	
Xylene (Total)	ND	ug/L	20.0	10		03/01/10 16:49	1330-20-7	
m&p-Xylene	ND	ug/L	20.0	10		03/01/10 16:49	1330-20-7	
o-Xylene	ND	ug/L	10.0	10		03/01/10 16:49	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109	10		03/01/10 16:49	460-00-4	
Dibromofluoromethane (S)	107	%	85-115	10		03/01/10 16:49	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	79-120	10		03/01/10 16:49	17060-07-0	
Toluene-d8 (S)	100	%	70-120	10		03/01/10 16:49	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: POC-1A **Lab ID: 9264079010** Collected: 02/24/10 10:05 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Aluminum	**238**	ug/L	100	1	03/03/10 13:59	03/11/10 05:32	7429-90-5	
Antimony	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-36-0	
Arsenic	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-38-2	
Barium	**93.9**	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-39-3	
Beryllium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 05:32	7440-41-7	
Cadmium	ND	ug/L	1.0	1	03/03/10 13:59	03/11/10 05:32	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-47-3	
Cobalt	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-48-4	
Copper	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-50-8	
Lead	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7439-92-1	
Nickel	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-02-0	
Selenium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:32	7782-49-2	
Silver	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-22-4	
Thallium	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:32	7440-28-0	
Tin	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-31-5	
Vanadium	ND	ug/L	5.0	1	03/03/10 13:59	03/11/10 05:32	7440-62-2	
Zinc	ND	ug/L	10.0	1	03/03/10 13:59	03/11/10 05:32	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	**2.6**	ug/L	0.20	1	03/03/10 12:15	03/05/10 14:46	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetonitrile	ND	ug/L	500	10		03/01/10 15:56	75-05-8	
Acrolein	ND	ug/L	100	10		03/01/10 15:56	107-02-8	
Acrylonitrile	ND	ug/L	100	10		03/01/10 15:56	107-13-1	
Allyl chloride	ND	ug/L	20.0	10		03/01/10 15:56	107-05-1	
Benzene	ND	ug/L	10.0	10		03/01/10 15:56	71-43-2	
Bromodichloromethane	ND	ug/L	10.0	10		03/01/10 15:56	75-27-4	
Bromoform	ND	ug/L	10.0	10		03/01/10 15:56	75-25-2	
Bromomethane	ND	ug/L	50.0	10		03/01/10 15:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	10		03/01/10 15:56	78-93-3	
Carbon disulfide	ND	ug/L	20.0	10		03/01/10 15:56	75-15-0	
Carbon tetrachloride	ND	ug/L	10.0	10		03/01/10 15:56	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		03/01/10 15:56	108-90-7	
Chloroethane	ND	ug/L	10.0	10		03/01/10 15:56	75-00-3	
Chloroform	ND	ug/L	10.0	10		03/01/10 15:56	67-66-3	
Chloromethane	ND	ug/L	10.0	10		03/01/10 15:56	74-87-3	
Chloroprene	ND	ug/L	50.0	10		03/01/10 15:56	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	30.0	10		03/01/10 15:56	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		03/01/10 15:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		03/01/10 15:56	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		03/01/10 15:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		03/01/10 15:56	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	10.0	10		03/01/10 15:56	110-57-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: POC-1A **Lab ID: 9264079010** Collected: 02/24/10 10:05 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Dichlorodifluoromethane	ND	ug/L	10.0	10		03/01/10 15:56	75-71-8	
1,1-Dichloroethane	ND	ug/L	10.0	10		03/01/10 15:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	10		03/01/10 15:56	107-06-2	
1,2-Dichloroethene (Total)	**353**	ug/L	10.0	10		03/01/10 15:56	540-59-0	
1,1-Dichloroethene	ND	ug/L	10.0	10		03/01/10 15:56	75-35-4	
cis-1,2-Dichloroethene	**350**	ug/L	10.0	10		03/01/10 15:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	10.0	10		03/01/10 15:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	10.0	10		03/01/10 15:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	10.0	10		03/01/10 15:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	10.0	10		03/01/10 15:56	10061-02-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	1500	10		03/01/10 15:56	123-91-1	
Ethylbenzene	ND	ug/L	10.0	10		03/01/10 15:56	100-41-4	
Ethyl methacrylate	ND	ug/L	10.0	10		03/01/10 15:56	97-63-2	
2-Hexanone	ND	ug/L	50.0	10		03/01/10 15:56	591-78-6	
Iodomethane	ND	ug/L	50.0	10		03/01/10 15:56	74-88-4	
Isobutanol	ND	ug/L	1000	10		03/01/10 15:56	78-83-1	
Methacrylonitrile	ND	ug/L	100	10		03/01/10 15:56	126-98-7	
Methylene Chloride	ND	ug/L	20.0	10		03/01/10 15:56	75-09-2	
Methyl methacrylate	ND	ug/L	20.0	10		03/01/10 15:56	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0	10		03/01/10 15:56	108-10-1	
Naphthalene	ND	ug/L	10.0	10		03/01/10 15:56	91-20-3	
Propionitrile	ND	ug/L	200	10		03/01/10 15:56	107-12-0	
Styrene	ND	ug/L	10.0	10		03/01/10 15:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 15:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	10		03/01/10 15:56	79-34-5	
Tetrachloroethene	ND	ug/L	10.0	10		03/01/10 15:56	127-18-4	
Toluene	ND	ug/L	10.0	10		03/01/10 15:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	10.0	10		03/01/10 15:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		03/01/10 15:56	79-00-5	
Trichloroethene	**3440**	ug/L	50.0	50		03/02/10 17:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		03/01/10 15:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	10.0	10		03/01/10 15:56	96-18-4	
Vinyl acetate	ND	ug/L	20.0	10		03/01/10 15:56	108-05-4	
Vinyl chloride	ND	ug/L	10.0	10		03/01/10 15:56	75-01-4	
Xylene (Total)	ND	ug/L	20.0	10		03/01/10 15:56	1330-20-7	
m&p-Xylene	ND	ug/L	20.0	10		03/01/10 15:56	1330-20-7	
o-Xylene	ND	ug/L	10.0	10		03/01/10 15:56	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109	10		03/01/10 15:56	460-00-4	
Dibromofluoromethane (S)	107	%	85-115	10		03/01/10 15:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	79-120	10		03/01/10 15:56	17060-07-0	
Toluene-d8 (S)	99	%	70-120	10		03/01/10 15:56	2037-26-5	
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	1		03/03/10 17:30		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: POC-1A **Lab ID: 9264079010** Collected: 02/24/10 10:05 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		03/05/10 10:00	57-12-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: TB-0070 **Lab ID: 9264079011** Collected: 02/24/10 00:00 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	**36.8**	ug/L	25.0	1		03/02/10 01:37	67-64-1	C9
Benzene	ND	ug/L	1.0	1		03/02/10 01:37	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/02/10 01:37	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/02/10 01:37	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/02/10 01:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/02/10 01:37	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/02/10 01:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/02/10 01:37	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		03/02/10 01:37	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		03/02/10 01:37	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		03/02/10 01:37	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		03/02/10 01:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/02/10 01:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/02/10 01:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/02/10 01:37	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/02/10 01:37	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/02/10 01:37	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/02/10 01:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		03/02/10 01:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/02/10 01:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/10 01:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/02/10 01:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/02/10 01:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/02/10 01:37	75-34-3	
1,2-Dichloroethane	**1.6**	ug/L	1.0	1		03/02/10 01:37	107-06-2	C9
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		03/02/10 01:37	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/02/10 01:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 01:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/02/10 01:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 01:37	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/02/10 01:37	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/02/10 01:37	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/02/10 01:37	563-58-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/02/10 01:37	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		03/02/10 01:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/02/10 01:37	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/02/10 01:37	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/02/10 01:37	99-87-6	
Methylene Chloride	**2.7**	ug/L	2.0	1		03/02/10 01:37	75-09-2	C9
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/02/10 01:37	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/02/10 01:37	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		03/02/10 01:37	103-65-1	
Styrene	ND	ug/L	1.0	1		03/02/10 01:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 01:37	630-20-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

Sample: TB-0070 **Lab ID: 9264079011** Collected: 02/24/10 00:00 Received: 02/25/10 14:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/02/10 01:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/02/10 01:37	127-18-4	
Toluene	ND	ug/L	1.0	1		03/02/10 01:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/02/10 01:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/02/10 01:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/02/10 01:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/02/10 01:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/02/10 01:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/02/10 01:37	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		03/02/10 01:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		03/02/10 01:37	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		03/02/10 01:37	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/02/10 01:37	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/02/10 01:37	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		03/02/10 01:37	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109	1		03/02/10 01:37	460-00-4	
Dibromofluoromethane (S)	110	%	85-115	1		03/02/10 01:37	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	79-120	1		03/02/10 01:37	17060-07-0	
Toluene-d8 (S)	102	%	70-120	1		03/02/10 01:37	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: MPRP/5905 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 9264079001, 9264079002, 9264079003, 9264079004, 9264079005, 9264079006, 9264079007, 9264079008, 9264079009, 9264079010

METHOD BLANK: 409972 Matrix: Water
Associated Lab Samples: 9264079001, 9264079002, 9264079003, 9264079004, 9264079005, 9264079006, 9264079007, 9264079008, 9264079009, 9264079010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	100	03/11/10 03:53	
Antimony	ug/L	ND	5.0	03/11/10 03:53	
Arsenic	ug/L	ND	5.0	03/11/10 03:53	
Barium	ug/L	ND	5.0	03/11/10 03:53	
Beryllium	ug/L	ND	1.0	03/11/10 03:53	
Cadmium	ug/L	ND	1.0	03/11/10 03:53	
Chromium	ug/L	ND	5.0	03/11/10 03:53	
Cobalt	ug/L	ND	5.0	03/11/10 03:53	
Copper	ug/L	ND	5.0	03/11/10 03:53	
Lead	ug/L	ND	5.0	03/11/10 03:53	
Nickel	ug/L	ND	5.0	03/11/10 03:53	
Selenium	ug/L	ND	10.0	03/11/10 03:53	
Silver	ug/L	ND	5.0	03/11/10 03:53	
Thallium	ug/L	ND	10.0	03/11/10 03:53	
Tin	ug/L	ND	5.0	03/11/10 03:53	
Vanadium	ug/L	ND	5.0	03/11/10 03:53	
Zinc	ug/L	ND	10.0	03/11/10 03:53	

LABORATORY CONTROL SAMPLE: 409973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4840	97	80-120	
Antimony	ug/L	500	498	100	80-120	
Arsenic	ug/L	500	483	97	80-120	
Barium	ug/L	500	509	102	80-120	
Beryllium	ug/L	500	508	102	80-120	
Cadmium	ug/L	500	484	97	80-120	
Chromium	ug/L	500	484	97	80-120	
Cobalt	ug/L	500	491	98	80-120	
Copper	ug/L	500	474	95	80-120	
Lead	ug/L	500	480	96	80-120	
Nickel	ug/L	500	487	97	80-120	
Selenium	ug/L	500	465	93	80-120	
Silver	ug/L	250	244	98	80-120	
Thallium	ug/L	500	460	92	80-120	
Tin	ug/L	500	503	101	80-120	
Vanadium	ug/L	500	483	97	80-120	
Zinc	ug/L	500	485	97	80-120	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 409980 409981

Parameter	Units	9264091002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	ND	5000	5000	4870	4890	97	98	75-125	0	20	
Antimony	ug/L	ND	500	500	493	493	99	99	75-125	0	20	
Arsenic	ug/L	3.8J	500	500	480	484	95	96	75-125	1	20	
Barium	ug/L	153	500	500	648	688	99	107	75-125	6	20	
Beryllium	ug/L	ND	500	500	500	498	100	100	75-125	0	20	
Cadmium	ug/L	ND	500	500	467	467	93	93	75-125	0	20	
Chromium	ug/L	ND	500	500	475	472	95	94	75-125	1	20	
Cobalt	ug/L	5.2	500	500	478	479	95	95	75-125	0	20	
Copper	ug/L	ND	500	500	474	477	95	95	75-125	1	20	
Lead	ug/L	ND	500	500	456	456	91	91	75-125	0	20	
Nickel	ug/L	ND	500	500	472	471	94	94	75-125	0	20	
Selenium	ug/L	ND	500	500	471	472	94	94	75-125	0	20	
Silver	ug/L	0.38J	250	250	238	238	95	95	75-125	0	20	
Thallium	ug/L	ND	500	500	444	449	89	90	75-125	1	20	
Tin	ug/L	ND	500	500	486	484	97	97	75-125	0	20	
Vanadium	ug/L	0.22J	500	500	476	475	95	95	75-125	0	20	
Zinc	ug/L	ND	500	500	472	469	94	94	75-125	1	20	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: MERP/2681 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 9264079001, 9264079002, 9264079003, 9264079004, 9264079005, 9264079006, 9264079007

METHOD BLANK: 408895 Matrix: Water
Associated Lab Samples: 9264079001, 9264079002, 9264079003, 9264079004, 9264079005, 9264079006, 9264079007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	03/04/10 15:45	

LABORATORY CONTROL SAMPLE: 408896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.6	104	80-120	

MATRIX SPIKE SAMPLE: 408897

Parameter	Units	9264000003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.5	96	75-125	

SAMPLE DUPLICATE: 408898

Parameter	Units	9264000004 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	.075J		25	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: MERP/2686 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 9264079008, 9264079009, 9264079010

METHOD BLANK: 409768 Matrix: Water
Associated Lab Samples: 9264079008, 9264079009, 9264079010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	03/05/10 14:36	

LABORATORY CONTROL SAMPLE: 409769

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 409770 409771

Parameter	Units	9264091002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.6	2.6	103	104	75-125	1	25	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: MSV/10125 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9264079001, 9264079002, 9264079004, 9264079005, 9264079006, 9264079007, 9264079009, 9264079010

METHOD BLANK: 408831 Matrix: Water
Associated Lab Samples: 9264079001, 9264079002, 9264079004, 9264079005, 9264079006, 9264079007, 9264079009, 9264079010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1-Dichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,1-Dichloroethene	ug/L	ND	1.0	03/01/10 11:21	
1,1-Dichloropropene	ug/L	ND	1.0	03/01/10 11:21	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/01/10 11:21	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/01/10 11:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichloroethane	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	03/01/10 11:21	
1,2-Dichloropropane	ug/L	ND	1.0	03/01/10 11:21	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	03/01/10 11:21	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
1,3-Dichloropropane	ug/L	ND	1.0	03/01/10 11:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	03/01/10 11:21	
2,2-Dichloropropane	ug/L	ND	1.0	03/01/10 11:21	
2-Butanone (MEK)	ug/L	ND	5.0	03/01/10 11:21	
2-Chlorotoluene	ug/L	ND	1.0	03/01/10 11:21	
2-Hexanone	ug/L	ND	5.0	03/01/10 11:21	
4-Chlorotoluene	ug/L	ND	1.0	03/01/10 11:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/01/10 11:21	
Acetone	ug/L	ND	25.0	03/01/10 11:21	
Acetonitrile	ug/L	ND	50.0	03/01/10 11:21	
Acrolein	ug/L	ND	10.0	03/01/10 11:21	
Acrylonitrile	ug/L	ND	10.0	03/01/10 11:21	
Allyl chloride	ug/L	ND	2.0	03/01/10 11:21	
Benzene	ug/L	ND	1.0	03/01/10 11:21	
Bromobenzene	ug/L	ND	1.0	03/01/10 11:21	
Bromochloromethane	ug/L	ND	1.0	03/01/10 11:21	
Bromodichloromethane	ug/L	ND	1.0	03/01/10 11:21	
Bromoform	ug/L	ND	1.0	03/01/10 11:21	
Bromomethane	ug/L	ND	5.0	03/01/10 11:21	
Carbon disulfide	ug/L	ND	2.0	03/01/10 11:21	
Carbon tetrachloride	ug/L	ND	1.0	03/01/10 11:21	
Chlorobenzene	ug/L	ND	1.0	03/01/10 11:21	
Chloroethane	ug/L	ND	1.0	03/01/10 11:21	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

METHOD BLANK: 408831 Matrix: Water

Associated Lab Samples: 9264079001, 9264079002, 9264079004, 9264079005, 9264079006, 9264079007, 9264079009, 9264079010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	1.0	03/01/10 11:21	
Chloromethane	ug/L	ND	1.0	03/01/10 11:21	
Chloroprene	ug/L	ND	5.0	03/01/10 11:21	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 11:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/01/10 11:21	
Dibromochloromethane	ug/L	ND	1.0	03/01/10 11:21	
Dibromomethane	ug/L	ND	1.0	03/01/10 11:21	
Dichlorodifluoromethane	ug/L	ND	1.0	03/01/10 11:21	
Diisopropyl ether	ug/L	ND	1.0	03/01/10 11:21	
Ethyl methacrylate	ug/L	ND	1.0	03/01/10 11:21	
Ethylbenzene	ug/L	ND	1.0	03/01/10 11:21	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	03/01/10 11:21	
Iodomethane	ug/L	ND	5.0	03/01/10 11:21	
Isobutanol	ug/L	ND	100	03/01/10 11:21	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	03/01/10 11:21	
m&p-Xylene	ug/L	ND	2.0	03/01/10 11:21	
Methacrylonitrile	ug/L	ND	10.0	03/01/10 11:21	
Methyl methacrylate	ug/L	ND	2.0	03/01/10 11:21	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/01/10 11:21	
Methylene Chloride	ug/L	ND	2.0	03/01/10 11:21	
n-Butylbenzene	ug/L	ND	1.0	03/01/10 11:21	
n-Propylbenzene	ug/L	ND	1.0	03/01/10 11:21	
Naphthalene	ug/L	ND	1.0	03/01/10 11:21	
o-Xylene	ug/L	ND	1.0	03/01/10 11:21	
p-Isopropyltoluene	ug/L	ND	1.0	03/01/10 11:21	
Propionitrile	ug/L	ND	20.0	03/01/10 11:21	
sec-Butylbenzene	ug/L	ND	1.0	03/01/10 11:21	
Styrene	ug/L	ND	1.0	03/01/10 11:21	
tert-Butylbenzene	ug/L	ND	1.0	03/01/10 11:21	
Tetrachloroethene	ug/L	ND	1.0	03/01/10 11:21	
Toluene	ug/L	ND	1.0	03/01/10 11:21	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 11:21	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/01/10 11:21	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	03/01/10 11:21	
Trichloroethene	ug/L	ND	1.0	03/01/10 11:21	
Trichlorofluoromethane	ug/L	ND	1.0	03/01/10 11:21	
Vinyl acetate	ug/L	ND	2.0	03/01/10 11:21	
Vinyl chloride	ug/L	ND	1.0	03/01/10 11:21	
Xylene (Total)	ug/L	ND	2.0	03/01/10 11:21	
1,2-Dichloroethane-d4 (S)	%	102	79-120	03/01/10 11:21	
4-Bromofluorobenzene (S)	%	98	87-109	03/01/10 11:21	
Dibromofluoromethane (S)	%	107	85-115	03/01/10 11:21	
Toluene-d8 (S)	%	101	70-120	03/01/10 11:21	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

LABORATORY CONTROL SAMPLE: 408832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.0	100	83-125	
1,1,1-Trichloroethane	ug/L	50	53.6	107	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	48.7	97	73-127	
1,1,2-Trichloroethane	ug/L	50	53.5	107	77-123	
1,1-Dichloroethane	ug/L	50	55.7	111	76-129	
1,1-Dichloroethene	ug/L	50	51.5	103	78-146	
1,1-Dichloropropene	ug/L	50	52.6	105	79-134	
1,2,3-Trichlorobenzene	ug/L	50	54.7	109	70-150	
1,2,3-Trichloropropane	ug/L	50	51.3	103	72-125	
1,2,4-Trichlorobenzene	ug/L	50	53.8	108	68-127	
1,2,4-Trimethylbenzene	ug/L	50	52.6	105	78-138	
1,2-Dibromo-3-chloropropane	ug/L	50	45.8	92	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	50.6	101	81-125	
1,2-Dichlorobenzene	ug/L	50	50.1	100	82-126	
1,2-Dichloroethane	ug/L	50	50.2	100	72-126	
1,2-Dichloroethene (Total)	ug/L	100	100	100	50-150	
1,2-Dichloropropane	ug/L	50	51.6	103	80-127	
1,3,5-Trimethylbenzene	ug/L	50	51.0	102	73-118	
1,3-Dichlorobenzene	ug/L	50	49.8	100	82-124	
1,3-Dichloropropane	ug/L	50	48.9	98	79-124	
1,4-Dichlorobenzene	ug/L	50	49.5	99	79-125	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1250	125	50-150	
2,2-Dichloropropane	ug/L	50	58.2	116	58-140	
2-Butanone (MEK)	ug/L	100	117	117	50-134	
2-Chlorotoluene	ug/L	50	49.8	100	81-126	
2-Hexanone	ug/L	100	119	119	58-138	
4-Chlorotoluene	ug/L	50	51.5	103	82-126	
4-Methyl-2-pentanone (MIBK)	ug/L	100	116	116	70-131	
Acetone	ug/L	100	138	138	50-146	
Acetonitrile	ug/L	500	543	109	66-124	
Acrolein	ug/L	250	298	119	55-143	
Acrylonitrile	ug/L	250	291	117	66-124	
Allyl chloride	ug/L	50	47.5	95	73-141	
Benzene	ug/L	50	51.4	103	78-128	
Bromobenzene	ug/L	50	49.9	100	81-127	
Bromochloromethane	ug/L	50	54.6	109	73-124	
Bromodichloromethane	ug/L	50	49.8	100	81-125	
Bromoform	ug/L	50	49.6	99	71-125	
Bromomethane	ug/L	50	39.8	80	50-150	
Carbon disulfide	ug/L	50	53.4	107	54-150	
Carbon tetrachloride	ug/L	50	52.3	105	81-137	
Chlorobenzene	ug/L	50	51.2	102	82-126	
Chloroethane	ug/L	50	51.6	103	69-140	
Chloroform	ug/L	50	51.6	103	77-129	
Chloromethane	ug/L	50	48.3	97	54-139	
Chloroprene	ug/L	50	52.4	105	71-142	
cis-1,2-Dichloroethene	ug/L	50	48.8	98	76-133	
cis-1,3-Dichloropropene	ug/L	50	53.1	106	76-127	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

LABORATORY CONTROL SAMPLE: 408832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/L	50	49.3	99	77-125	
Dibromomethane	ug/L	50	52.1	104	77-125	
Dichlorodifluoromethane	ug/L	50	41.8	84	50-150	
Diisopropyl ether	ug/L	50	51.2	102	74-131	
Ethyl methacrylate	ug/L	50	56.6	113	73-129	
Ethylbenzene	ug/L	50	51.1	102	80-127	
Hexachloro-1,3-butadiene	ug/L	50	49.4	99	78-145	
Iodomethane	ug/L	100	98.9	99	65-172	
Isobutanol	ug/L	1000	1190	119	50-150	
Isopropylbenzene (Cumene)	ug/L	50	54.4	109	84-135	
m&p-Xylene	ug/L	100	105	105	82-127	
Methacrylonitrile	ug/L	500	550	110	70-128	
Methyl methacrylate	ug/L	50	59.6	119	79-122	
Methyl-tert-butyl ether	ug/L	50	54.9	110	71-130	
Methylene Chloride	ug/L	50	44.7	89	67-133	
n-Butylbenzene	ug/L	50	51.7	103	73-122	
n-Propylbenzene	ug/L	50	52.7	105	82-129	
Naphthalene	ug/L	50	49.1	98	52-136	
o-Xylene	ug/L	50	52.6	105	83-124	
p-Isopropyltoluene	ug/L	50	53.0	106	73-122	
Propionitrile	ug/L	500	576	115	65-129	
sec-Butylbenzene	ug/L	50	52.8	106	82-131	
Styrene	ug/L	50	52.1	104	80-130	
tert-Butylbenzene	ug/L	50	53.3	107	80-130	
Tetrachloroethene	ug/L	50	51.6	103	78-128	
Toluene	ug/L	50	52.0	104	76-126	
trans-1,2-Dichloroethene	ug/L	50	51.6	103	78-134	
trans-1,3-Dichloropropene	ug/L	50	52.7	105	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	54.5	109	51-140	
Trichloroethene	ug/L	50	53.3	107	79-127	
Trichlorofluoromethane	ug/L	50	50.4	101	76-148	
Vinyl acetate	ug/L	100	128	128	50-150	
Vinyl chloride	ug/L	50	45.4	91	67-143	
Xylene (Total)	ug/L	150	158	105	83-125	
1,2-Dichloroethane-d4 (S)	%			96	79-120	
4-Bromofluorobenzene (S)	%			102	87-109	
Dibromofluoromethane (S)	%			103	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 408833 408834

Parameter	Units	9264090001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	62.8	63.2	126	126	60-150	1	30	
Benzene	ug/L	ND	50	50	54.9	55.2	110	110	74-136	1	30	
Chlorobenzene	ug/L	ND	50	50	53.7	54.6	107	109	79-135	2	30	
Toluene	ug/L	ND	50	50	56.5	56.5	113	113	73-131	0	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 408833 408834

Parameter	Units	9264090001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Trichloroethene	ug/L	ND	50	50	58.3	58.2	115	115	73-131	0	30	
1,2-Dichloroethane-d4 (S)	%						105	104	79-120			
4-Bromofluorobenzene (S)	%						99	100	87-109			
Dibromofluoromethane (S)	%						106	106	85-115			
Toluene-d8 (S)	%						101	99	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: MSV/10126
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9264079008, 9264079011

METHOD BLANK: 408843
Matrix: Water
Associated Lab Samples: 9264079008, 9264079011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1-Dichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,1-Dichloroethene	ug/L	ND	1.0	03/01/10 23:37	
1,1-Dichloropropene	ug/L	ND	1.0	03/01/10 23:37	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/01/10 23:37	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/01/10 23:37	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichloroethane	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	03/01/10 23:37	
1,2-Dichloropropane	ug/L	ND	1.0	03/01/10 23:37	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	03/01/10 23:37	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
1,3-Dichloropropane	ug/L	ND	1.0	03/01/10 23:37	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
2,2-Dichloropropane	ug/L	ND	1.0	03/01/10 23:37	
2-Butanone (MEK)	ug/L	ND	5.0	03/01/10 23:37	
2-Chlorotoluene	ug/L	ND	1.0	03/01/10 23:37	
4-Chlorotoluene	ug/L	ND	1.0	03/01/10 23:37	
Acetone	ug/L	ND	25.0	03/01/10 23:37	
Benzene	ug/L	ND	1.0	03/01/10 23:37	
Bromobenzene	ug/L	ND	1.0	03/01/10 23:37	
Bromochloromethane	ug/L	ND	1.0	03/01/10 23:37	
Bromodichloromethane	ug/L	ND	1.0	03/01/10 23:37	
Bromoform	ug/L	ND	1.0	03/01/10 23:37	
Bromomethane	ug/L	ND	5.0	03/01/10 23:37	
Carbon tetrachloride	ug/L	ND	1.0	03/01/10 23:37	
Chlorobenzene	ug/L	ND	1.0	03/01/10 23:37	
Chloroethane	ug/L	ND	1.0	03/01/10 23:37	
Chloroform	ug/L	ND	1.0	03/01/10 23:37	
Chloromethane	ug/L	ND	1.0	03/01/10 23:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 23:37	
Dibromochloromethane	ug/L	ND	1.0	03/01/10 23:37	
Dibromomethane	ug/L	ND	1.0	03/01/10 23:37	
Dichlorodifluoromethane	ug/L	ND	1.0	03/01/10 23:37	
Diisopropyl ether	ug/L	ND	1.0	03/01/10 23:37	
Ethylbenzene	ug/L	ND	1.0	03/01/10 23:37	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

METHOD BLANK: 408843 Matrix: Water

Associated Lab Samples: 9264079008, 9264079011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	ND	1.0	03/01/10 23:37	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	03/01/10 23:37	
m&p-Xylene	ug/L	ND	2.0	03/01/10 23:37	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/01/10 23:37	
Methylene Chloride	ug/L	ND	2.0	03/01/10 23:37	
n-Butylbenzene	ug/L	ND	1.0	03/01/10 23:37	
n-Propylbenzene	ug/L	ND	1.0	03/01/10 23:37	
Naphthalene	ug/L	ND	1.0	03/01/10 23:37	
o-Xylene	ug/L	ND	1.0	03/01/10 23:37	
p-Isopropyltoluene	ug/L	ND	1.0	03/01/10 23:37	
sec-Butylbenzene	ug/L	ND	1.0	03/01/10 23:37	
Styrene	ug/L	ND	1.0	03/01/10 23:37	
tert-Butylbenzene	ug/L	ND	1.0	03/01/10 23:37	
Tetrachloroethene	ug/L	ND	1.0	03/01/10 23:37	
Toluene	ug/L	ND	1.0	03/01/10 23:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/01/10 23:37	
Trichloroethene	ug/L	ND	1.0	03/01/10 23:37	
Trichlorofluoromethane	ug/L	ND	1.0	03/01/10 23:37	
Vinyl chloride	ug/L	ND	1.0	03/01/10 23:37	
Xylene (Total)	ug/L	ND	2.0	03/01/10 23:37	
1,2-Dichloroethane-d4 (S)	%	103	79-120	03/01/10 23:37	
4-Bromofluorobenzene (S)	%	98	87-109	03/01/10 23:37	
Dibromofluoromethane (S)	%	109	85-115	03/01/10 23:37	
Toluene-d8 (S)	%	100	70-120	03/01/10 23:37	

LABORATORY CONTROL SAMPLE: 408844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.5	103	83-125	
1,1,1-Trichloroethane	ug/L	50	55.2	110	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	48.5	97	73-127	
1,1,2-Trichloroethane	ug/L	50	53.3	107	77-123	
1,1-Dichloroethane	ug/L	50	56.6	113	76-129	
1,1-Dichloroethene	ug/L	50	52.7	105	78-146	
1,1-Dichloropropene	ug/L	50	52.8	106	79-134	
1,2,3-Trichlorobenzene	ug/L	50	54.5	109	70-150	
1,2,3-Trichloropropane	ug/L	50	51.5	103	72-125	
1,2,4-Trichlorobenzene	ug/L	50	53.6	107	68-127	
1,2,4-Trimethylbenzene	ug/L	50	53.5	107	78-138	
1,2-Dibromo-3-chloropropane	ug/L	50	45.4	91	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	50.7	101	81-125	
1,2-Dichlorobenzene	ug/L	50	50.1	100	82-126	
1,2-Dichloroethane	ug/L	50	51.5	103	72-126	
1,2-Dichloroethene (Total)	ug/L	100	102	102	50-150	
1,2-Dichloropropane	ug/L	50	52.2	104	80-127	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

LABORATORY CONTROL SAMPLE: 408844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3,5-Trimethylbenzene	ug/L	50	51.0	102	73-118	
1,3-Dichlorobenzene	ug/L	50	50.2	100	82-124	
1,3-Dichloropropane	ug/L	50	49.0	98	79-124	
1,4-Dichlorobenzene	ug/L	50	49.4	99	79-125	
2,2-Dichloropropane	ug/L	50	50.7	101	58-140	
2-Butanone (MEK)	ug/L	100	115	115	50-134	
2-Chlorotoluene	ug/L	50	50.6	101	81-126	
4-Chlorotoluene	ug/L	50	51.8	104	82-126	
Acetone	ug/L	100	128	128	50-146	
Benzene	ug/L	50	52.2	104	78-128	
Bromobenzene	ug/L	50	48.7	97	81-127	
Bromochloromethane	ug/L	50	55.8	112	73-124	
Bromodichloromethane	ug/L	50	50.8	102	81-125	
Bromoform	ug/L	50	50.2	100	71-125	
Bromomethane	ug/L	50	43.4	87	50-150	
Carbon tetrachloride	ug/L	50	53.0	106	81-137	
Chlorobenzene	ug/L	50	51.9	104	82-126	
Chloroethane	ug/L	50	53.0	106	69-140	
Chloroform	ug/L	50	53.2	106	77-129	
Chloromethane	ug/L	50	50.8	102	54-139	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	76-133	
Dibromochloromethane	ug/L	50	49.8	100	77-125	
Dibromomethane	ug/L	50	53.6	107	77-125	
Dichlorodifluoromethane	ug/L	50	42.2	84	50-150	
Diisopropyl ether	ug/L	50	52.6	105	74-131	
Ethylbenzene	ug/L	50	51.8	104	80-127	
Hexachloro-1,3-butadiene	ug/L	50	48.2	96	78-145	
Isopropylbenzene (Cumene)	ug/L	50	55.3	111	84-135	
m&p-Xylene	ug/L	100	107	107	82-127	
Methyl-tert-butyl ether	ug/L	50	56.7	113	71-130	
Methylene Chloride	ug/L	50	44.9	90	67-133	
n-Butylbenzene	ug/L	50	50.4	101	73-122	
n-Propylbenzene	ug/L	50	52.1	104	82-129	
Naphthalene	ug/L	50	48.6	97	52-136	
o-Xylene	ug/L	50	53.5	107	83-124	
p-Isopropyltoluene	ug/L	50	52.4	105	73-122	
sec-Butylbenzene	ug/L	50	52.8	106	82-131	
Styrene	ug/L	50	53.2	106	80-130	
tert-Butylbenzene	ug/L	50	54.2	108	80-130	
Tetrachloroethene	ug/L	50	52.8	106	78-128	
Toluene	ug/L	50	53.1	106	76-126	
trans-1,2-Dichloroethene	ug/L	50	52.4	105	78-134	
Trichloroethene	ug/L	50	54.9	110	79-127	
Trichlorofluoromethane	ug/L	50	51.6	103	76-148	
Vinyl chloride	ug/L	50	46.6	93	67-143	
Xylene (Total)	ug/L	150	161	107	83-125	
1,2-Dichloroethane-d4 (S)	%			96	79-120	
4-Bromofluorobenzene (S)	%			102	87-109	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

LABORATORY CONTROL SAMPLE: 408844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromofluoromethane (S)	%			103	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 408845 408846

Parameter	Units	9264000007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	67.1	66.3	134	133	60-150	1	30	
Benzene	ug/L	ND	50	50	58.5	57.0	117	114	74-136	3	30	
Chlorobenzene	ug/L	ND	50	50	56.2	55.5	112	111	79-135	1	30	
Toluene	ug/L	ND	50	50	59.9	58.5	120	117	73-131	2	30	
Trichloroethene	ug/L	ND	50	50	60.7	59.8	120	118	73-131	1	30	
1,2-Dichloroethane-d4 (S)	%						104	105	79-120			
4-Bromofluorobenzene (S)	%						101	100	87-109			
Dibromofluoromethane (S)	%						107	108	85-115			
Toluene-d8 (S)	%						100	100	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: MSV/10139
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9264079003

METHOD BLANK: 409356
Matrix: Water
Associated Lab Samples: 9264079003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/03/10 00:12	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/03/10 00:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/03/10 00:12	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/03/10 00:12	
1,1-Dichloroethane	ug/L	ND	1.0	03/03/10 00:12	
1,1-Dichloroethene	ug/L	ND	1.0	03/03/10 00:12	
1,1-Dichloropropene	ug/L	ND	1.0	03/03/10 00:12	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/03/10 00:12	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/03/10 00:12	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/03/10 00:12	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	03/03/10 00:12	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/03/10 00:12	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/03/10 00:12	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/03/10 00:12	
1,2-Dichloroethane	ug/L	ND	1.0	03/03/10 00:12	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	03/03/10 00:12	
1,2-Dichloropropane	ug/L	ND	1.0	03/03/10 00:12	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	03/03/10 00:12	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/03/10 00:12	
1,3-Dichloropropane	ug/L	ND	1.0	03/03/10 00:12	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/03/10 00:12	
2,2-Dichloropropane	ug/L	ND	1.0	03/03/10 00:12	
2-Butanone (MEK)	ug/L	ND	5.0	03/03/10 00:12	
2-Chlorotoluene	ug/L	ND	1.0	03/03/10 00:12	
4-Chlorotoluene	ug/L	ND	1.0	03/03/10 00:12	
Acetone	ug/L	ND	25.0	03/03/10 00:12	
Benzene	ug/L	ND	1.0	03/03/10 00:12	
Bromobenzene	ug/L	ND	1.0	03/03/10 00:12	
Bromochloromethane	ug/L	ND	1.0	03/03/10 00:12	
Bromodichloromethane	ug/L	ND	1.0	03/03/10 00:12	
Bromoform	ug/L	ND	1.0	03/03/10 00:12	
Bromomethane	ug/L	ND	5.0	03/03/10 00:12	
Carbon tetrachloride	ug/L	ND	1.0	03/03/10 00:12	
Chlorobenzene	ug/L	ND	1.0	03/03/10 00:12	
Chloroethane	ug/L	ND	1.0	03/03/10 00:12	
Chloroform	ug/L	ND	1.0	03/03/10 00:12	
Chloromethane	ug/L	ND	1.0	03/03/10 00:12	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/03/10 00:12	
Dibromochloromethane	ug/L	ND	1.0	03/03/10 00:12	
Dibromomethane	ug/L	ND	1.0	03/03/10 00:12	
Dichlorodifluoromethane	ug/L	ND	1.0	03/03/10 00:12	
Diisopropyl ether	ug/L	ND	1.0	03/03/10 00:12	
Ethylbenzene	ug/L	ND	1.0	03/03/10 00:12	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

METHOD BLANK: 409356 Matrix: Water

Associated Lab Samples: 9264079003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	ND	1.0	03/03/10 00:12	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	03/03/10 00:12	
m&p-Xylene	ug/L	ND	2.0	03/03/10 00:12	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/03/10 00:12	
Methylene Chloride	ug/L	ND	2.0	03/03/10 00:12	
n-Butylbenzene	ug/L	ND	1.0	03/03/10 00:12	
n-Propylbenzene	ug/L	ND	1.0	03/03/10 00:12	
Naphthalene	ug/L	ND	1.0	03/03/10 00:12	
o-Xylene	ug/L	ND	1.0	03/03/10 00:12	
p-Isopropyltoluene	ug/L	ND	1.0	03/03/10 00:12	
sec-Butylbenzene	ug/L	ND	1.0	03/03/10 00:12	
Styrene	ug/L	ND	1.0	03/03/10 00:12	
tert-Butylbenzene	ug/L	ND	1.0	03/03/10 00:12	
Tetrachloroethene	ug/L	ND	1.0	03/03/10 00:12	
Toluene	ug/L	ND	1.0	03/03/10 00:12	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/03/10 00:12	
Trichloroethene	ug/L	ND	1.0	03/03/10 00:12	
Trichlorofluoromethane	ug/L	ND	1.0	03/03/10 00:12	
Vinyl chloride	ug/L	ND	1.0	03/03/10 00:12	
Xylene (Total)	ug/L	ND	2.0	03/03/10 00:12	
1,2-Dichloroethane-d4 (S)	%	105	79-120	03/03/10 00:12	
4-Bromofluorobenzene (S)	%	97	87-109	03/03/10 00:12	
Dibromofluoromethane (S)	%	105	85-115	03/03/10 00:12	
Toluene-d8 (S)	%	101	70-120	03/03/10 00:12	

LABORATORY CONTROL SAMPLE: 409357

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.9	102	83-125	
1,1,1-Trichloroethane	ug/L	50	51.2	102	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	48.4	97	73-127	
1,1,2-Trichloroethane	ug/L	50	51.4	103	77-123	
1,1-Dichloroethane	ug/L	50	53.7	107	76-129	
1,1-Dichloroethene	ug/L	50	50.8	102	78-146	
1,1-Dichloropropene	ug/L	50	48.7	97	79-134	
1,2,3-Trichlorobenzene	ug/L	50	56.1	112	70-150	
1,2,3-Trichloropropane	ug/L	50	50.3	101	72-125	
1,2,4-Trichlorobenzene	ug/L	50	55.1	110	68-127	
1,2,4-Trimethylbenzene	ug/L	50	53.6	107	78-138	
1,2-Dibromo-3-chloropropane	ug/L	50	51.1	102	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	51.2	102	81-125	
1,2-Dichlorobenzene	ug/L	50	51.1	102	82-126	
1,2-Dichloroethane	ug/L	50	48.5	97	72-126	
1,2-Dichloroethene (Total)	ug/L	100	99.8	100	50-150	
1,2-Dichloropropane	ug/L	50	50.8	102	80-127	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

LABORATORY CONTROL SAMPLE: 409357

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3,5-Trimethylbenzene	ug/L	50	51.5	103	73-118	
1,3-Dichlorobenzene	ug/L	50	50.4	101	82-124	
1,3-Dichloropropane	ug/L	50	50.1	100	79-124	
1,4-Dichlorobenzene	ug/L	50	50.1	100	79-125	
2,2-Dichloropropane	ug/L	50	51.7	103	58-140	
2-Butanone (MEK)	ug/L	100	111	111	50-134	
2-Chlorotoluene	ug/L	50	51.0	102	81-126	
4-Chlorotoluene	ug/L	50	52.2	104	82-126	
Acetone	ug/L	100	118	118	50-146	
Benzene	ug/L	50	50.7	101	78-128	
Bromobenzene	ug/L	50	51.6	103	81-127	
Bromochloromethane	ug/L	50	52.5	105	73-124	
Bromodichloromethane	ug/L	50	47.8	96	81-125	
Bromoform	ug/L	50	50.9	102	71-125	
Bromomethane	ug/L	50	56.9	114	50-150	
Carbon tetrachloride	ug/L	50	50.0	100	81-137	
Chlorobenzene	ug/L	50	50.4	101	82-126	
Chloroethane	ug/L	50	47.9	96	69-140	
Chloroform	ug/L	50	49.9	100	77-129	
Chloromethane	ug/L	50	48.4	97	54-139	
cis-1,2-Dichloroethene	ug/L	50	50.1	100	76-133	
Dibromochloromethane	ug/L	50	50.1	100	77-125	
Dibromomethane	ug/L	50	53.0	106	77-125	
Dichlorodifluoromethane	ug/L	50	42.4	85	50-150	
Diisopropyl ether	ug/L	50	51.7	103	74-131	
Ethylbenzene	ug/L	50	51.2	102	80-127	
Hexachloro-1,3-butadiene	ug/L	50	48.8	98	78-145	
Isopropylbenzene (Cumene)	ug/L	50	54.1	108	84-135	
m&p-Xylene	ug/L	100	106	106	82-127	
Methyl-tert-butyl ether	ug/L	50	53.9	108	71-130	
Methylene Chloride	ug/L	50	45.3	91	67-133	
n-Butylbenzene	ug/L	50	51.1	102	73-122	
n-Propylbenzene	ug/L	50	52.8	106	82-129	
Naphthalene	ug/L	50	50.2	100	52-136	
o-Xylene	ug/L	50	53.2	106	83-124	
p-Isopropyltoluene	ug/L	50	52.9	106	73-122	
sec-Butylbenzene	ug/L	50	53.1	106	82-131	
Styrene	ug/L	50	51.8	104	80-130	
tert-Butylbenzene	ug/L	50	54.1	108	80-130	
Tetrachloroethene	ug/L	50	51.7	103	78-128	
Toluene	ug/L	50	50.5	101	76-126	
trans-1,2-Dichloroethene	ug/L	50	49.7	99	78-134	
Trichloroethene	ug/L	50	51.9	104	79-127	
Trichlorofluoromethane	ug/L	50	48.6	97	76-148	
Vinyl chloride	ug/L	50	44.9	90	67-143	
Xylene (Total)	ug/L	150	159	106	83-125	
1,2-Dichloroethane-d4 (S)	%			98	79-120	
4-Bromofluorobenzene (S)	%			100	87-109	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

LABORATORY CONTROL SAMPLE: 409357

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 409358 409359

Parameter	Units	9264243010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	42.8	51.7	86	103	60-150	19	30	
Benzene	ug/L	ND	50	50	36.7	44.5	73	89	74-136	19	30	M0
Chlorobenzene	ug/L	ND	50	50	36.7	45.1	73	90	79-135	20	30	M0
Toluene	ug/L	ND	50	50	37.4	45.2	75	90	73-131	19	30	
Trichloroethene	ug/L	ND	50	50	37.7	45.8	75	92	73-131	19	30	
1,2-Dichloroethane-d4 (S)	%						108	108	79-120			
4-Bromofluorobenzene (S)	%						98	98	87-109			
Dibromofluoromethane (S)	%						105	107	85-115			
Toluene-d8 (S)	%						100	99	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: WET/11587
QC Batch Method: SM 4500-S2D
Analysis Method: SM 4500-S2D
Analysis Description: 4500S2D Sulfide Water
Associated Lab Samples: 9264079010

METHOD BLANK: 409773 Matrix: Water
Associated Lab Samples: 9264079010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	03/03/10 17:30	

LABORATORY CONTROL SAMPLE: 409774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	.5	0.53	107	90-110	

MATRIX SPIKE SAMPLE: 409775

Parameter	Units	9264068001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	ND	.5	ND	0	75-125	M0

SAMPLE DUPLICATE: 409776

Parameter	Units	9264068006 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide	mg/L	ND	ND		20	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: PARKER HANNIFIN
Pace Project No.: 9264079

QC Batch: WETA/6848
QC Batch Method: SM 4500-CN-E
Analysis Method: SM 4500-CN-E
Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 9264079010

METHOD BLANK: 409093 Matrix: Water
Associated Lab Samples: 9264079010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	03/05/10 09:51	

LABORATORY CONTROL SAMPLE: 409094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	101	80-120	

MATRIX SPIKE SAMPLE: 409095

Parameter	Units	9264313001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.072	70	75-125	M0

SAMPLE DUPLICATE: 409096

Parameter	Units	9264068007 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	ND		20	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: PARKER HANNIFIN
Pace Project No.: 9264079

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

C9	Common Laboratory Contaminant.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Appendix L.
Sampling and Analysis Plan

AECOM **Environment**

Submitted to
Parker Hannifin Corporation
Cleveland, Ohio

Submitted by
AECOM
Morrisville, NC
60432139.1
January 2016

Groundwater Sampling and Analysis Plan

Former Parker Hannifin Facility
NCD-002-591-014
Wake Forest, North Carolina

AECOM **Environment**

Submitted to
Parker Hannifin Corporation
Cleveland, Ohio

Submitted by
AECOM
Morrisville, NC
60432139.1
January 2016

Groundwater Sampling and Analysis Plan

Prepared By Nick Shore, PG, Environmental Scientist

Reviewed By Bob Wyrick, PG, Senior Project Manager

Former Parker Hannifin Facility
NCD-002-591-014
Wake Forest, North Carolina

Table of Contents

1 Introduction 1-1
2 Sampling Locations and Analytical Parameters 2-1

2.1 Well Gauging 2-1
2.2 Sampling Locations 2-1
2.3 Field Parameters 2-2
2.4 Analytical Parameters 2-2

3 Sampling Procedures 3-1

3.1 Health and Safety Procedures 3-1
3.2 Equipment List 3-1
3.3 Field Preparation 3-1
3.4 Water Level Measurements 3-2
3.5 Monitoring Well Purging/Sampling 3-2

3.5.1 Groundwater Extraction Wells 3-3
3.5.2 Residential Potable Water Supply Wells 3-3
3.5.3 Surface Water Sample Locations 3-4
3.5.4 Groundwater Treatment System Influent/Effluent Sampling 3-4

4 Sample Handling and Packaging 4-1

4.1 Sample Containers, Preservations, and Holding Times 4-1
4.2 Custody Procedures 4-1

4.2.1 Field Custody Procedures 4-1
4.2.2 Laboratory Custody Procedures 4-1

4.3 Sample Shipping Procedures 4-2

5 Sample Documentation 5-1

5.1 Sample Identification Procedures 5-1
5.2 Field Notebook 5-1
5.3 Sample Labels 5-2
5.4 Chain-of-Custody Record 5-2
5.5 Sample Custody Seals 5-2
5.6 Corrections to Documentation 5-2

6 Quality Assurance/Quality Control 6-1

6.1 Field Duplicates 6-1
6.2 Trip Blanks 6-1
6.3 Equipment Blanks 6-1
6.4 Matrix Spike/Matrix Spike Duplicate 6-1

7 References 7-1

List of Appendices

Appendix A. Groundwater Collection Record
Appendix B. Chain of Custody Record

List of Tables

Table 2-1. Well Construction Table
Table 2-2. Permit Required Groundwater Monitoring and Recovery Wells, Parameters, and Sampling Frequency
Table 4-1. Recommended Containers, Holding Times, and Prevention

List of Figures

Figure 1-1. Site Location Map
Figure 1-2. Site Map

List of Acronyms

COC	Chain-of-custody
CORPUD	City of Raleigh Public Utilities Department
DO	Dissolved oxygen
EPA	United States Environmental Protection Agency
GWTS	Groundwater treatment system
HASP	Health and Safety Plan
MS/MSD	Matrix spike/matrix spike duplicate
ORP	Oxidation-reduction potential
POTW	Publically owned treatment works
QA	Quality assurance
QC	Quality control
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SESD	Science and Ecosystem Support Division
Site	12415 Capital Boulevard in Wake Forest, Wake County, North Carolina
SU	standard unit
EPA	United States Environmental Protection Agency
VOC	volatile organic compound

1 Introduction

The former Parker Hannifin facility is located 12415 Capital Boulevard in Wake Forest, Wake County, North Carolina (the Site). The facility covers approximately 15.25 acres and is located at latitude 35°59'N and longitude 78°32'W. The facility was formerly owned by Scovill Corporation (Schrader Bellows) and manufactured air control devices. The property is currently vacant. A site location map and site map are included as Figure 1-1 and 1-2, respectively.

The Sampling and Analysis Plan (SAP) is a detailed description of groundwater and treated groundwater discharge sampling procedures that will be followed in compliance with the Facility's Resource, Conservation, and Recovery Act (RCRA) Part B Post Closure Permit. This SAP addresses sampling and analysis of water only.

Annual groundwater monitoring is required to evaluate that the facility's groundwater corrective action system is effective. Wells to be gauged and sampled are discussed in Section 2.0. Groundwater monitoring procedures are described in Section 3.0. Sample handling and documentation procedures are presented in Sections 4.0 and 5.0, respectively. Quality assurance (QA)/quality control (QC) procedures are outlined in Section 6.0.

2 Sampling Locations and Analytical Parameters

Groundwater sample collection locations, schedules, and analytical parameters are specified in this section.

2.1 Well Gauging

Water level measurements will be collected from up to 57 wells during each annual groundwater sampling event. The wells to be gauged include point of compliance wells, corrective action effectiveness wells, groundwater extraction wells (listed below), as well as other optional, non-RCRA permit wells located on the site. Water levels will be measured using an electronic water level meter by measuring the distance from the top of casing to the top of the water in the well. Groundwater elevations will be calculated by subtracting the distance to the top of water from the elevation of the top of casing, as surveyed by a professional surveyor. The monitoring wells to be gauged are listed on Table 2-1 and are illustrated on Figure 1-2.

Groundwater elevation data will be utilized to evaluate the direction of groundwater flow in the shallow and intermediate/deep aquifers; hydraulic gradient; and hydraulic capture zone of the extraction wells. After each well is gauged, the water level meter will be decontaminated using Alconox detergent solution followed by a rinse of deionized water.

2.2 Groundwater Sampling Locations

Annual groundwater monitoring at the Site will include the following Point of Compliance, Corrective Action Effectiveness, and Extraction wells (shown on Figure 1-2). Other optional non-permit monitoring wells may be sampled to evaluate groundwater quality.

Redevelopment activities, including new building construction, have been proposed by the current property owner. Parker will work with the property owner/developer to identify and protect site wells to the extent possible. In the event that a Point of Compliance, Corrective Action Effectiveness, or Extraction well is damaged or destroyed during site redevelopment, Parker will initiate repairs or installation of a replacement well. If a replacement well cannot be sited adjacent to the former well location, a permit modification will be submitted to adjust the location or request removal from the monitoring program. The goal of the replacement well would be to provide equivalent or sufficient data to monitoring groundwater quality.

Point of Compliance Wells: Four point of compliance wells have been designated for the Parker-Hannifin site. These four wells will be sampled on an annual basis for the parameters listed in Table 2-2. These wells will also be sampled for the compounds on the Appendix IX list once every five years. A list of the Appendix IX compounds is contained in 40 CFR 264 Appendix IX. The following wells are included in this group:

- POC-1A
- POC-1B
- POC-2A
- POC-2B

Corrective Action Effectiveness Wells: Sixteen (16) wells have been designated as corrective action system effectiveness monitoring wells in the Part B Permit (Part IV-E.8). These wells will be sampled on an annual basis. The following wells are included in this group:

- MW-3
- MW-4
- MW-6
- MW-6DR3
- MW-8
- MW-8D
- MW-8DR
- MW-15
- MW-21
- MW-21D
- MW-33
- MW-34
- MW-36
- MW-38
- MW-39D
- MW-40D

The following wells were previously identified as corrective action effectiveness wells: MW-6D, MW-6DR, and MW-9. Monitoring wells MW-6D and MW-6DR were dropped as they intermediate wells in the same bedrock aquifer as well MW-6DR3. Wells MW-6 and MW-6DR3 were retained to monitor the saprolite aquifer and bedrock aquifer. Monitoring well MW-9 is typically dry and cannot be sampled; therefore this well was removed as a corrective action well. Monitoring well MW-15 is located near monitoring well MW-9 and was added to provide data in this area.

Monitoring wells MW-33, MW-34, MW-36, MW-38, MW-39D, and MW-40D were installed after the 2006 permit and were added as corrective action wells.

Extraction Wells: Currently, there are three groundwater extraction wells that are part of the groundwater remediation system. Individual water samples will be collected from these extraction wells at the well head on an annual basis. The following wells are included in this group:

- RW-4
- RW-6
- RW-19

Groundwater Treatment System Influent/Effluent Sampling: Groundwater from the active groundwater extraction wells is treated in the site groundwater treatment system (GWTS). Influent and effluent samples are collected every other month from the system to evaluate system performance. Water discharges from Parker's GWTS to the City of Raleigh Public Utilities Department (CORPUD).

The discharge has been authorized by the CORPUD and parameters for analysis of effluent samples have been established. Samples are collected on an "every-other month" basis (six samples per year). If future adjustments are necessary and/or a publically owned treatment works (POTW) permit is issued, this section will be modified.

2.3 Field Parameters

Field parameters of dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, temperature, specific conductance, and turbidity will be measured using a multi-parameter water quality instrument and recorded prior to collecting groundwater samples.

2.4 Analytical Parameters

Each of the monitoring and extraction wells listed above will be sampled for select VOCs, listed below, by SW-846 Method 260B (or equivalent):

- 1,2-Dichloroethane
- cis-1,2-Dichloroethene
- trans-1,2-Dichloroethene
- 1,1-Dichloroethene
- 1,2-Dichloropropane
- Methyl-Ethyl Ketone
- Tetrachloroethene
- Trichloroethene
- Vinyl Chloride

The exceptions/additions to the constituents listed above include:

- Wells POC-1A, POC-1B, POC-2A, POC-2B, MW-6, MW-6DR3, MW-15, MW-33, MW-34, RW-4, RW-6, and RW-19, will also be monitored for 1-4 Dioxane by SW-846 Method 8270C.

- Wells MW-3, RW-4, RW-6, RW-19, POC-1A, POC-1B, POC-2A, and POC-2B will be monitored only for barium, chromium, nickel, and zinc by SW-846 Method 6010.
- Wells POC-1A, POC-1B, POC-2A, and POC-2B will be analyzed for Appendix IX constituents once every 5 years.

Method numbers refer to *Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846*) (United States Environmental Protection Agency [EPA]), as specified in Appendix A of the RCRA Permit.

The following compounds were previously analyzed, however, they have not been detected above the Subchapter 2L of 15A NCAC .0202(h) groundwater standards: acetone, benzene, carbon disulfide, chloroform, dichlorodifluoromethane, 1,1-dichloroethane, toluene, 1,1,1-trichloroethane, and trichlorofluoromethane.

3 Sampling Procedures

Groundwater samples will be collected from the locations listed in Section 2.2. Below is a description of the methods that will be used to collect groundwater samples from the monitoring and extraction wells. Groundwater sample collection procedures will follow the most current version of the *United States Environmental Protection Agency Region IV Science and Ecosystem Support Division (SESD) Field Branches Quality System and Technical Procedures.*

3.1 Health and Safety Procedures

All work will be performed in accordance with the site Health and Safety Plan (HASP) (AECOM, 2014). The plan will be read and signed by all persons involved in the sampling effort before any work commences. Should any modification of the HASP be warranted, the AECOM Regional Health and Safety Manager shall be notified and approval obtained prior to implementation of the change. The plan will be readily available for review at the Site.

3.2 Equipment List

A list of the standard sampling equipment needed during the collection of groundwater samples during each event is summarized below:

- 100-foot water-level interface probe capable of accurately measuring depth of groundwater to the nearest 0.01 foot
- Several gallons of de-ionized water and wash bottle
- Clean disposable paper towels
- Plastic sheeting
- Peristaltic and submersible pump and new dedicated Teflon tubing
- Silicon tubing
- Disposable bottom filling Teflon bailer or stainless steel bailer and Teflon-coated cable or disposable nylon rope
- Water quality meter capable of measuring pH, specific conductivity, temperature, and turbidity and equipped with a flow-through cell
- Graduated bucket
- Sample bottles
- Sample bottle labels and a waterproof marking pen
- Preservatives for water samples (if necessary)
- Groundwater Sample Collection Records, clipboard, pen
- Chain-of-custody forms
- Cooler and ice or freezer packs

3.3 Field Preparation

Prior to initiating sample collection procedures, sampling and decontamination areas will be prepared to reduce the potential exposure of the ground to possible spillage and to protect the sampling equipment from the potential of extraneous contamination. The well area will be covered with plastic sheeting. This sheeting will be slit and placed over and around the well head to provide a clean surface on which sampling equipment can be positioned and to provide for the collection of any possible spillage during the sampling effort. Care will be taken not to kick, transfer, or drop soils or materials that are not from within the well onto the plastic.

If a separate area is used for staging of sampling equipment, it too will be prepared with plastic sheeting of adequate size to protect the equipment. The down-slope edge of the plastic will be slightly elevated to reduce the potential for movement of any spillage off of the plastic onto the ground.

An area will be designated and prepared for any necessary decontamination and placement of used sampling equipment. This area will be covered with plastic with the down slope edge elevated so as to reduce movement of liquids off of the sheeting.

The necessary containers for the collection of sampling-generated waste materials should be located adjacent to the area of use and placed upon plastic sheeting of not less than four feet square with the edges slightly elevated to reduce the potential of movement of liquids onto the ground.

3.4 Water Level Measurements

Water levels will be determined before purging and sampling wells (except for the groundwater extraction wells) using an oil/water interface probe with an accuracy of $\pm$0.01 feet. Water level measurements cannot be recorded from the extraction wells due to the lack of access. Total depths of accessible wells will be measured on an annual basis. This information will be recorded on the Groundwater Sample Collection form (Appendix A). Caps will be removed from each well and the water levels will be allowed to equilibrate. Monitoring wells on the Parker-Hannifin site have been surveyed, and top of casing elevations have been established for a pre-identified point. The pre-identified point will be used as the reference point for the measurement of the static water level elevation and the total well depth. This information will be used to determine the volume of water within the well and the necessary volume of water that will have to be evacuated prior to the collection of the sample. The volume of water will be calculated using the following equation:

$V = 0.041\ d^2h$

Where,

V = volume of water (gallons)

d = diameter of the well (inches)

h = depth of water (feet)

Water level measurements will begin in the wells that have historically exhibited the lowest VOC concentrations and will progress to the wells with the highest concentrations. The interface probe and tape will be decontaminated between each well using the following decontamination procedure:

- Remove any extraneous material from the tape and probe using a scrub brush and rinsing in tap water
- Washing the tape and probe with a non-phosphate detergent and tap water
- Rinsing the tape and probe in tap water to remove detergent
- Spraying the tape and probe with deionized, organic free water and allowing to air dry, as practical

Plastic sheeting will be placed on the ground under containers used in the decontamination process and to stage decontaminated equipment.

3.5 Monitoring Well Purging/Sampling

These procedures describe the purging and sampling methods to be utilized for the wells identified in Section 2.2. When possible, monitoring wells will be purged and sampled using low flow/low volume purging techniques as detailed in the SESD document. This will require the use of a peristaltic, submersible, or bladder pump. Disposable, polyethylene tubing will be used with either the peristaltic or submersible pump during the purging and/or sampling process.

Prior to purging a well, clean polyethylene sheeting will be placed on the ground around the well to provide a clean working surface. Total depth and depth to water from the top of the polyvinyl chloride casing will be measured with an electronic water level indicator and recorded in the field log and groundwater collection record.

The low flow/low volume purge method is summarized below:

- Install clean electronic water level probe in well for measurement of water level.
- Insert intake tubing into well and secure at depth equivalent to center of well screen.
- Initiate purging at a moderate to slow rate (0.5 to 1 liter per minute). Measure pumping rate with a graduated cylinder.
- Use electronic water level probe to monitor water level in well, adjusting purge rate to ensure that water level does not drop more than 0.3 feet during purging.

Water quality parameters (temperature, pH, specific conductance, turbidity, DO and ORP) will be measured using a water quality meter equipped with a flow-through cell (YSI, Horiba, or equivalent). Turbidity will be measured with a HF Scientific, LaMotte, or equivalent turbidity meter.

As a general rule, an initial reading of the water quality parameters will be made, followed by readings at approximately five minute intervals. An adequate well purge is achieved when at least one well volume of water has been removed from the well and the pH, specific conductance, and temperature of the groundwater have stabilized. Stabilization shall be generally defined as three consecutive readings during which pH is within 0.1 Standard Unit (SU), temperature and DO readings are within 10 percent, and specific conductance readings are within 3 percent and turbidity is less than 10 nephelometric turbidity units. If the water quality readings do not stabilize within three consecutive readings, purging will continue until the parameters stabilize. After the water quality parameters have stabilized, the discharge tubing will be disconnected from the low flow cell, the pumping rate lowered to the minimum possible and the groundwater will be pumped directly into the laboratory supplied containers.

Groundwater monitoring wells with an adequate volume of water will be purged with a submersible pump and disposable tubing. Based on a review of historical groundwater elevations, some of the groundwater monitoring wells may not contain a sufficient volume of water to purge using a submersible pump. For those wells, purging will be conducted using disposable, polyethylene bailers. The bailers will be lowered gently into the water column to minimize potential volatilization. If a well is pumped or bailed to dryness, purging will be considered complete. Water quality readings for each well will be recorded on the Groundwater Sample Collection forms (Appendix A).

Sampling activities will be conducted using the same procedures as described above and will begin with the least contaminated well and progress towards the most contaminated well, based on the most recently available groundwater analytical results. The most contaminated well will be the last well sampled. VOC samples will be collected first, followed by collection of the inorganic samples. Following sample collection, label each sample bottle to include the date and time sampled, sample identification, sample location, analysis requested, preservation (if applicable), and initials of the sampler.

3.5.1 Groundwater Extraction Wells

Disposable tubing will be attached to the sampling ports on the groundwater extraction wells, and the in-well submersible pumps will be utilized to purge the wells at a flow rate as low as can be achieved. If well is not in operation at the time of sampling, approximately one well volume will be purged from the groundwater extraction well prior to sampling. Water quality parameters for these wells will be recorded in the manner described in Section 3.4.1.

Sampling activities will be conducted using the same procedures as described above and will begin with the least contaminated well and progress towards the most contaminated well, based on the most recently available groundwater analytical results. The most contaminated well will be the last well sampled. VOC samples will be collected first, followed by collection of the inorganic samples.

3.5.2 Residential Potable Water Supply Wells

Samples will be collected from the spigot closest to each well. Obstructions such as filters and aerators will be removed prior to purging for 10 to 15 minutes by opening the spigot to obtain the maximum flow rate. Flow rate measurements will be conducted during the purging process. Once purging has been completed, the flow rate will be reduced to minimize potential aeration of the sample. Residential water supply samples will be collected by placing the sample container into a low-flow stream of water immediately under the spigot once the requisite purging has been achieved.

3.5.3 Surface Water Sample Locations

Field parameters (temperature, pH, specific conductance, DO, and ORP) will be measured by submerging the water quality instrument probe into flowing surface water, and recording the measurements after stabilization. Water quality parameters will be measured and recorded at each surface water sample location prior to collecting samples. Surface water samples will be collected from the middle of the channel and will start at downstream locations and proceed upstream. Sample containers will be submersed with the caps in place and with the opening pointing in the downstream direction. When the mouth of the bottle is at the desired sampling depth, the cap will be removed and the containers will be allowed to fill with water. The sampler will take care not to overfill the bottle to prevent the preservative from being flushed. Each bottle will be completely filled to minimize headspace. Care will be taken to avoid disturbing the bottom sediments.

If the stream depth is insufficient to allow collection directly into a sample container, a peristaltic pump will be used to obtain a sample. Disposable Teflon tubing will be lowered into the water column to the desired depth using either a non-metal weight or a pole to stabilize the end of the tubing at the desired sample depth. The pump will be turned on and the tubing will be flushed with site water for one to five minutes, depending on the length of the tubing.

3.5.4 Groundwater Treatment System Influent/Effluent Sampling

The POTW samples are collected at the influent and effluent sampling points at the groundwater treatment system. Samples will be obtained utilizing the sampling ports installed at the GWTS and near the POTW discharge point. No purging procedures will be required. Sample collection will follow the general sequence described above for the analytical parameters established by CORPUD.

4 Sample Handling and Packaging

Samples will be handled and packaged in accordance with the following methods.

4.1 Sample Containers, Preservations, and Holding Times

In order to preserve sample integrity, all samples will be collected in certified containers, preserved when required, and stored at the appropriate temperature. Sample containers, cleaned by the manufacturer to meet or exceed all analyte specifications established in the latest EPA's *Specifications and Guidance for Contaminant-Free Sample Containers* will be provided by the laboratory with all caps securely fastened. Container lids will not be removed until immediately before the sample is placed in the container. Samples will be transferred directly from the sampling device to the laboratory supplied containers.

Samples will be documented and preserved (if necessary) in accordance with the requirements listed in Table 4-1. Samples will be analyzed within the holding times for the analyte.

4.2 Custody Procedures

A sample is considered to be under a person's custody if:

- The item is in the actual possession of a person.
- The item is in the view of the person after being in actual possession of the person.
- The item was in the actual possession of the person but is locked up to prevent tampering.
- The item is in a designated and identified secure area.

Additional details about custody procedures and an example chain-of-custody (COC) form are contained in Attachment B.

4.2.1 Field Custody Procedures

The field sampler is personally responsible for the care and custody of the samples until they are transferred or dispatched properly. Field procedures have been designed such that as few people as possible will handle the samples.

All sample containers will be identified by the use of sample labels with sample location, date and time of collection, initials of sampling personnel, and type of analysis. Sample labels will be completed using permanent ink.

Samples will be stored in a cooler and accompanied by a properly completed COC form for each cooler. Section 5.3.2 lists all information contained on a completed COC.

When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the form. This record documents the transfer of custody of samples from the sampler to another person, to a mobile laboratory, to a permanent laboratory, or to/from a secure storage location.

4.2.2 Laboratory Custody Procedures

The sample custodian or receiver at the laboratory will verify that the information on the COC record matches the contents of the cooler. The custodian or receiver will sign, date, and note the time of receipt on the record. The COC will be included as part of the analytical data package.

4.3 Sample Shipping Procedures

If it is necessary to ship samples via a shipping company (FedEx, UPS), samples will be packaged in coolers according to the guidelines presented in Attachment B. A separate chain-of-custody record will be prepared for each cooler of samples. A custody seal, a pre-printed, numbered, adhesive backed seal, will be placed on top of each sample shipment container (cooler) at select access points. The seals will be signed and dated prior to application, then taped over with clear packaging tape to secure the cooler for shipment to the laboratory.

5 Sample Documentation

The following section details methods which will be used to ensure that sampling events are properly recorded for future reference and interpretation. This documentation will include:

- The groundwater sample collection record
- The field activity notebook (field book)
- The sample custody documentation forms

All sample documentation will be completed in ink.

5.1 Sample Identification Procedures

Prior to each sampling event, the project manager will issue a sampling memo that will provide the sampling identification for each location to be sampled during that particular event. Sample identifications will be recorded in the appropriate field sampling documents including field book, sample labels, and COC forms.

5.2 Field Notebook

Field notebooks will be bound, water-proof field survey books or notebooks with consecutively numbered pages. The following information will be recorded in the field book:

- Project number
- Sampling procedures
- Sample locations
- Sample identifications
- Date and time for sample collection (time must be same as that entered on COC)
- Calibration information for field instruments (indicate type of instrument and method of calibration)
- Names of samplers
- Sample matrices
- Count and types of sample containers
- Preservatives used
- Weather conditions
- Chronology of activities
- Deviations from work plan

Each series of notebook entries will be initialed by the person making the entry. Each page of the logbook will be dated and numbered. At the end of each day, a diagonal line, signed by the person making the entry, will be drawn through all remaining space at the bottom of the page. Each new date will begin on a new page. No pages will be removed from the notebook for any reason.

5.3 Sample Labels

Each sample will be identified using a sample label attached to the sample container. Each label will provide, at minimum, the following information:

- Project identification
- Sample location
- Sample identification
- Date and time of collection
- Type of sample (grab or composite)
- Preservative
- Analysis requested
- Special conditions or requirements
- Sampler signature

5.4 Chain-of-Custody Record

The COC record must be fully completed in ink by the sampler. The custody record will include the following information:

- Project identification
- Sample location
- Sample identification
- Date and time of collection
- Type of sample (grab or composite)
- Preservative
- Analysis requested
- Special conditions or requirements
- Sampler signature
- Sample matrix
- Container size and number of containers per sample
- Custody seal number (if applicable)
- Transfer signatures
- Shipping or airbill tracking numbers (if applicable)

The actual COC form may vary in format depending upon the selected laboratory but the information list above must be provided.

5.5 Sample Custody Seals

Custody seals are pre-printed, numbered, adhesive backed seals which are placed over the top of each sample shipment container (cooler) at select access points. Seals will be signed and dated prior to application.

5.6 Corrections to Documentation

Should corrections be required on any documentation, these must be made by drawing a single line through the original entry (such that the original may still be read) and writing the corrected entry alongside. The correction must be initialed and dated.

6 Quality Assurance/Quality Control

This section details specific QA/QC samples which will be collected to ensure that data quality objectives are met.

Sufficient QC samples will be collected to ensure that the appropriate QC measures described in the following sections will be attained. QC samples will be handled, preserved, and documented in exactly the same manner as those of the sample batch.

6.1 Field Duplicates

Field duplicate samples are two or more samples collected simultaneously in separate containers from the same source under identical conditions. Field duplicates will be collected at a frequency of one field duplicate per 20 samples. Sample containers for VOC field duplicates will be filled consecutively. All field duplicates will be analyzed for the same parameters as their associated samples.

6.2 Trip Blanks

Trip blanks will be included in each shipment of VOC samples. Trip blanks will originate in the laboratory and consist of, at minimum, two 40- milliliter volatile organic analysis vials filled with laboratory grade deionized water and sealed with septum-lined caps allowing no headspace. Trip blanks will accompany the sample bottles to the Site and will remain (unopened) in the shipping container until the sample bottles are received at the laboratory. Trip blanks will be analyzed for project-specific VOCs only.

6.3 Equipment Blanks

Equipment field blanks are samples which are obtained by running laboratory grade and organic-free water (provided by the laboratory) over/through any non-dedicated or non-disposable sampling equipment after equipment decontamination and before field sample collection. Equipment blanks will be collected daily for all samples collected with non-dedicated or non-disposable equipment and will be analyzed for the same parameters as their associated samples.

6.4 Matrix Spike/Matrix Spike Duplicate

Matrix spikes provide information about the effect of the sample matrix on the laboratory digestion and measurement methodology. All matrix spikes are performed in duplicate and are referred to as matrix spike/matrix spike duplicate (MS/MSD) samples. MS/MSD samples are designated/collected for organic analyses only. Sufficient sample volume will be collected (triple the normal sample volume) so that MS/MSD samples can be prepared. MS/MSD samples will be collected at a frequency of once every 20 samples.

7 References

AECOM, 2014. Health and Safety Plan.

Tables

Table 2-1
Permit Required Groundwater Monitoring and Recovery Wells, Parameters, and Sampling Frequency
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Monitoring Parameters	Sampling Frequency
Groundwater Quality Monitoring Wells - Point of Compliance Wells		
POC-1A	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-1B	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-2A	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-2B	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
Corrective Action System Effectiveness Monitoring Wells		
MW-3	VOCs, Metals	Annual
MW-4	VOCs, Metals	Annual
MW-6	VOCs, 1,4-Dioxane	Annual
MW-6DR3	VOCs, 1,4-Dioxane	Annual
MW-8	VOCs	Annual
MW-8D	VOCs	Annual
MW-8DR	VOCs	Annual
MW-15	VOCs, 1,4-Dioxane	Annual
MW-21	VOCs	Annual
MW-21D	VOCs	Annual
MW-33	VOCs, 1,4-Dioxane	Annual
MW-34	VOCs, 1,4-Dioxane	Annual
MW-36	VOCs	Annual
MW-38	VOCs	Annual
MW-39D	VOCs	Annual
MW-40D	VOCs	Annual
Corrective Action Groundwater Extraction Wells		
RW-4	VOCs, 1,4-Dioxane, Metals	Annual
RW-6	VOCs, 1,4-Dioxane, Metals	Annual
RW-19	VOCs, 1,4-Dioxane, Metals	Annual

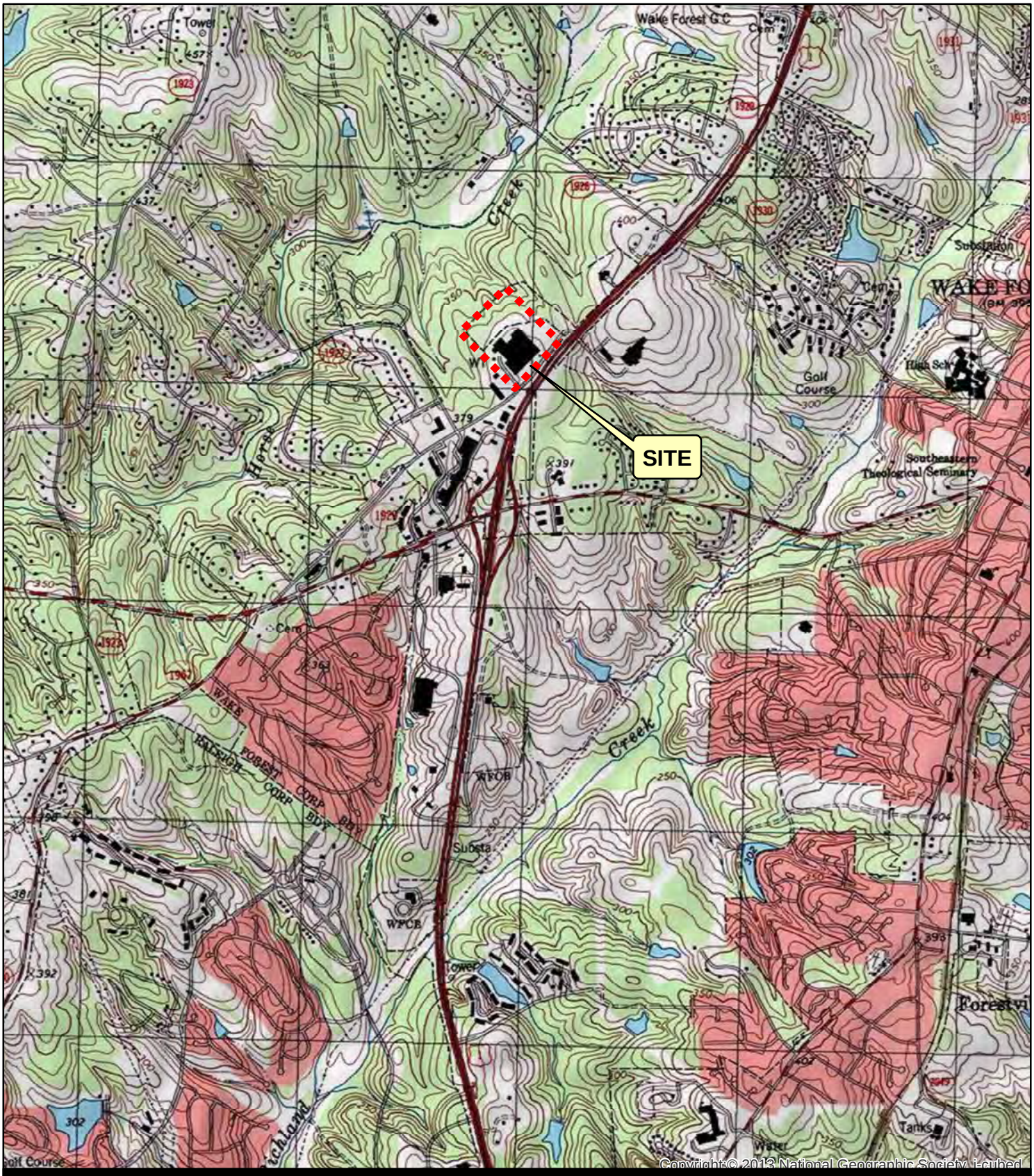
Notes:
VOCs - Volatile Organic Compounds: Acetone, carbon disulfide, chloroform, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, methyl ethyl ketone, cis-1,2-dichloroethene, 1,4-dioxane, trans-1,2-dichloroethene, 1,2-dichloropropane, tetrachloroethene, toluene, 1,1,1-trichloroethane, trichloroethene, trichlorofluoromethane, and vinyl chloride
Metals - chromium and nickel
App. IX* - Sampled every 5 years
Only wells included in the monitoring requirements of the Resource Conservation and Recovery Act Part B permit are listed

Table 4-1
Recommended Containers, Holding Times, and Preservation
Former Parker Hannifin Facility
Wake Forest, North Carolina
Facility ID NCD 002-591-014

Frequency of Analysis	Analytical Group	Container (Volume of Sample)	Preservation	Holding Time (Days)
Semiannual	VOCs	40 mililiter glass (Teflon septum lid)	HCl 50% Cool to 4°C	14 with preservative/ 7 without
	1-4 Dioxane	2 x 1-liter amber glass (Teflon lid)	Cool to 4°C	14 to extract/ 40 to analyze
	Chromium and Nickel	1-liter polyethylene	50% HNO_3 (pH<2)	180
Every 5 Years (Appendix IX)	Total Metals	1-liter polyethylene	50% HNO_3 (pH<2)	180
	Mercury	1-liter polyethylene	50% HNO_3 (pH<2)	28
	Hexavalent Chromium	1-liter polyethylene	Cool to 4°C	1
	Cyanide	1-liter polyethylene	NaOH to pH>12 Cool to 4°C	14
	Extractable SVOCs including herbicides, pesticides and PCBs	4 x 1-liter amber glass (Teflon lid)	Cool to 4°C	7 to extract/ 40 to analyze
	Dioxins	2 x 1-liter amber glass (Teflon lid)	Cool to 4°C	30 to extract/ 45 to analyze

Notes:
All information is for water samples only.
Appendix IX - Consitituents listed in 40 CFR 264 Appendix IX
HCl - hydrochloric acid
HNO_3 - nitric acid
NaOH - sodium hydroxide
PCBs - polychlorinated biphenyls
SVOCs - semi-volatile organic compounds
VOCs - volatile organic compounds

Figures



Map Location

Topographic Site Location Map

Former Parker Hannifin Corp. Facility
Wake Forest, North Carolina

N
W E
S

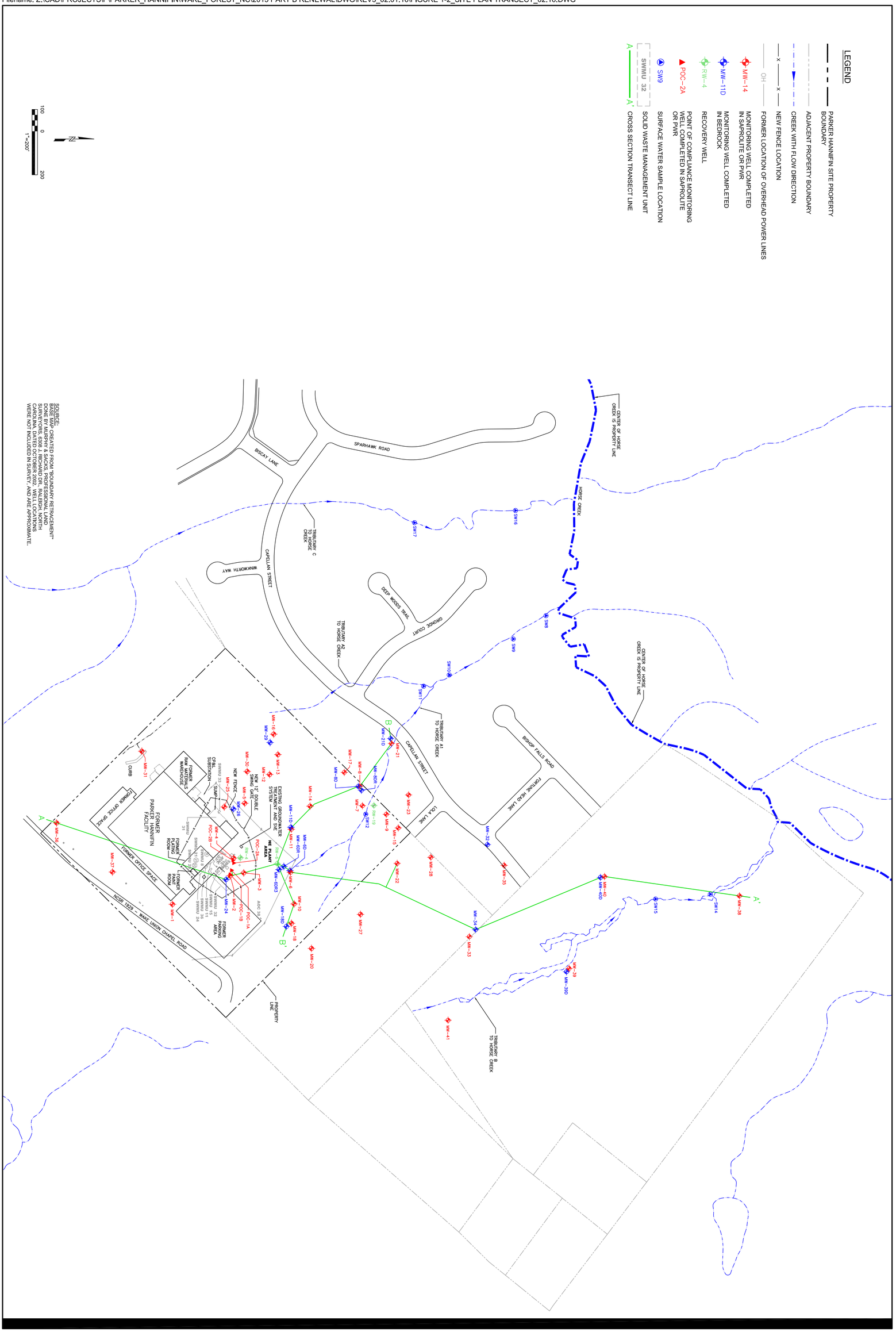
0 2,000 4,000 Feet 1:24,000

November 2014 USGS Topographic Quadrangle Wake Forest (1983) 60320722

Figure 1-1

AECOM

AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607
Phone: (919) 854-6200
Fax: (919) 854-6259
www.aecom.com



PARKER HANNIFIN COPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 02/01/2016

SITE PLAN WITH CROSS-SECTION TRANSECTS

AECOM

Figure: 1-2

Appendix A.
Groundwater Collection Record

Well ID:

Low Flow Ground Water Sample Collection Record

Client: _____ Date: _____ Time: Start _____ am/pm
Project No: _____ Finish _____ am/pm
Site Location: _____
Weather Conds: _____ Collector(s): _____

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length _____ c. Length of Water Column _____ (a-b)

Casing Diameter/Material _____

b. Water Table Depth _____ d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: _____

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used: Make Model Serial Number

_____

_____

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

(continued on back)

If no or N/A - Explain below.

_____

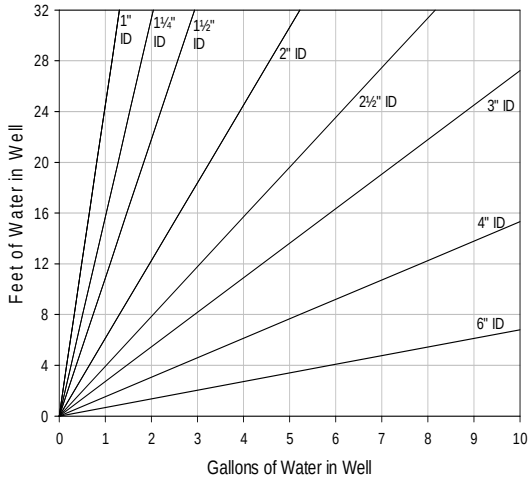
3. SAMPLE COLLECTION: Method: _____

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time

Comments _____

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor

Appendix B.
Chain of Custody Record

TG: 006 **SUBJECT:** Filling out Chain-of-Custody Sample Documentation

SUMMARY:

Chain-of-Custody (COC) documentation is a protocol that provides a record of persons having control of, and access to a sample(s). The COC Record is commonly documented in a COC Form carried with samples. COC refers to both the Form and Procedure. Chain-of-Custody procedure starts when a sample is collected and ends when the sample is delivered to the designated analytical laboratory or other testing facility.

All samples must be accompanied with a COC Form 1) at the site, 2) during shipment or transaction, and 3) when delivered to analytical laboratory.

COC Forms are available from the selected laboratory of choice.

There are two general types of COC: routine and legal/evidentiary. The type of custody needed depends on project specific requirements, contracts and data quality objectives. A routine COC is used to verify the integrity of a sample by providing records that track the sample from collecting, storing, handling, shipping and analyzing. Routine COC's provides sufficient documentation for demonstrating how the sample was handled from provenance to laboratory in the event the handling of samples is questioned. Routine COCs are addressed in the TG.

Legal/Evidentiary COC includes the same general requirements as routine COC, however, are specifically designed to provide a record that may be produced as evidence in legal proceedings. As such, Legal/Evidentiary are project or contract specific, sometimes vary from State to State, and vary to level of detail and supplemental security procedures (e.g. custody seals, unique labels, second party witness, and so forth). A key difference for Legal/Evidentiary COC is samples must be recorded at the time of collection. Legal/Evidentiary COC is **not** discussed in detail within this TG. Consult with PM regarding need for Legal/Evidentiary COC on particular projects.

COC procedures consist of three phases:

1. Beginning Custody
   - Begins when sample is collected.
   - Samples will be recorded at the time they are preserved (if preserved).
   - All samples placed in a cooler must be recorded on COC at the Site.
   - COC Form is to remain with samples at all times.
2. Custody Transfer
   - Transfer occurs when samples are relinquished from one person to another.
   - Sign "Relinquished/Released By" Line.
   - Receptor Signs "Received By" Line.

- An exception to custody transfer is the releasing of COC to a secure facility (eg. A private courier or shipping company), or when samples are dropped off at a secure (locked) facility.

3. Custody Completion
   - Routine COC closes upon final receipt by lab*. When the analytical report is generated, the original COC (or exact copy of COC) is included with laboratory report.
   - Person who drops off samples also typically retains "tear offs" from COC (duplicates colored pink or yellow).

Note:

*If a primary laboratory subcontracts portion of an analytical service to another laboratory (for specialized testing or other reasons), the COC should remain with the primary laboratory. However, the primary laboratory should prepare a receipt or other written documentation providing information which samples are being delivered or split to sub-contract laboratory, when and where they are being delivered, the time and date of transfer, and parties involved with transfer.

Consult with contract manager or PM on any project you are not familiar with. Certain contracts have specific requirements for COC documentation. Examples include Michigan's Level of Effort Contract (LOE) and ACOE contracts.

1.0 REQUIRED EQUIPMENT

- HASP
- Field Note Book and Field Logs
- Laboratory COC Forms
- Ziploc® or similar bag
- Black or Blue Ink Pen
- Work Plan, Sampling Plan, Scope of Work, etc.
- Project Specifics: Project Number, Site ID Codes, Contract Numbers, Shipping Numbers, Phone Numbers, Contact Information and so forth.

2.0 PROCEDURES (ROUTINE COC)

1. Sampler discusses scope of work with PM/TL.

2. Sampler retains COC Form from analytical laboratory or PM.

3. Project Specifics, Contacts, Job Number and other items shown in top section of COC (Items 1-4 and 6, see Attachment 1) may be filled out in office prior to field work.

4. Sampling Performed. Sample is clearly labeled with Sample ID, Project Name, Date, Sampling Time, Analytical Parameter, and Preservative.
   - Sample ID: ET-MW-01.
   - Project Name: Joe's Garage
   - Date: March 3, 2006.
   - Time: 1315 Hrs.
   - Analytical Parameters: VOCs (8260)
   - Preservative: HCL, Batch #12345

5. Record Sample Information (above) in hard-bound field book.

6. Transcribe Sample Information (Items 4 or 5) to COC.
   - Sample ID, Time, Date, and Use of Preservatives must precisely match Information Scribed on Samples.
   - The COC is to be completed as samples are collected. However, some latitude is allowed to fill out COC in phases such as after a series of samples are collected and transferred to a cooler.
   - Typically the COC has space for 10 or 12 samples. For field programs with more than 10 or 12 samples, begin another COC and note COC is Page x of x (Page 2 of 2).
   - For interim time, place COC in gallon-size Ziploc® or similar bag with Samples.

7. Upon completion of Sampling. Carefully package samples (TG_401). Sign "Relinquished By" Line. Include Date and Time Samples were relinquished. Place COC in Ziploc® and place on top of samples. Do not use Duct tape or Electrical tape to secure Ziploc® to inside of cooler (tape adhesives contain MEK and Toluene, respectively). Secure Cooler by taping shut with packaging tape (if shipped).

8. Ship or transfer samples to destination. If samples are passed to another person, that person must sign "Received by" and subsequently "Released/Relinquished By" lines.

9. For hand-delivered samples (where an AECOM staff member delivers samples), stay at laboratory to verify each and every sample was accounted for at the laboratory. Retain COC "slips".
   - White Copy – Laboratory Retains
   - Light Yellow Copy – AECOM PM or Tech Lead
   - Pink – Courier/Sampler
   - Dark Yellow – File

Upon receipt of analytical report from the laboratory, verify the COC was included with analytical report. Cross-reference samples on COC versus those samples analyzed to confirm all samples were analyzed for requested target analytes.

3.0 RESPONSIBILITY

- Samplers are required to understand and competently fill out COC.
- Samplers are required to acquire blank COCs.
- Project Manager and Technical Leads are required to understand COC and discuss project specific on use of COC with samplers.
- The Sampler is required to notify PM/TL with any questions.

4.0 RELEVANT FORMS AND ATTACHMENTS

See Attachments.

5.0 REFERENCES

Environmental Forensics, Robert Morrison, 2000, CRC Press. Pg. 143-146 on Chain-of-Custody.

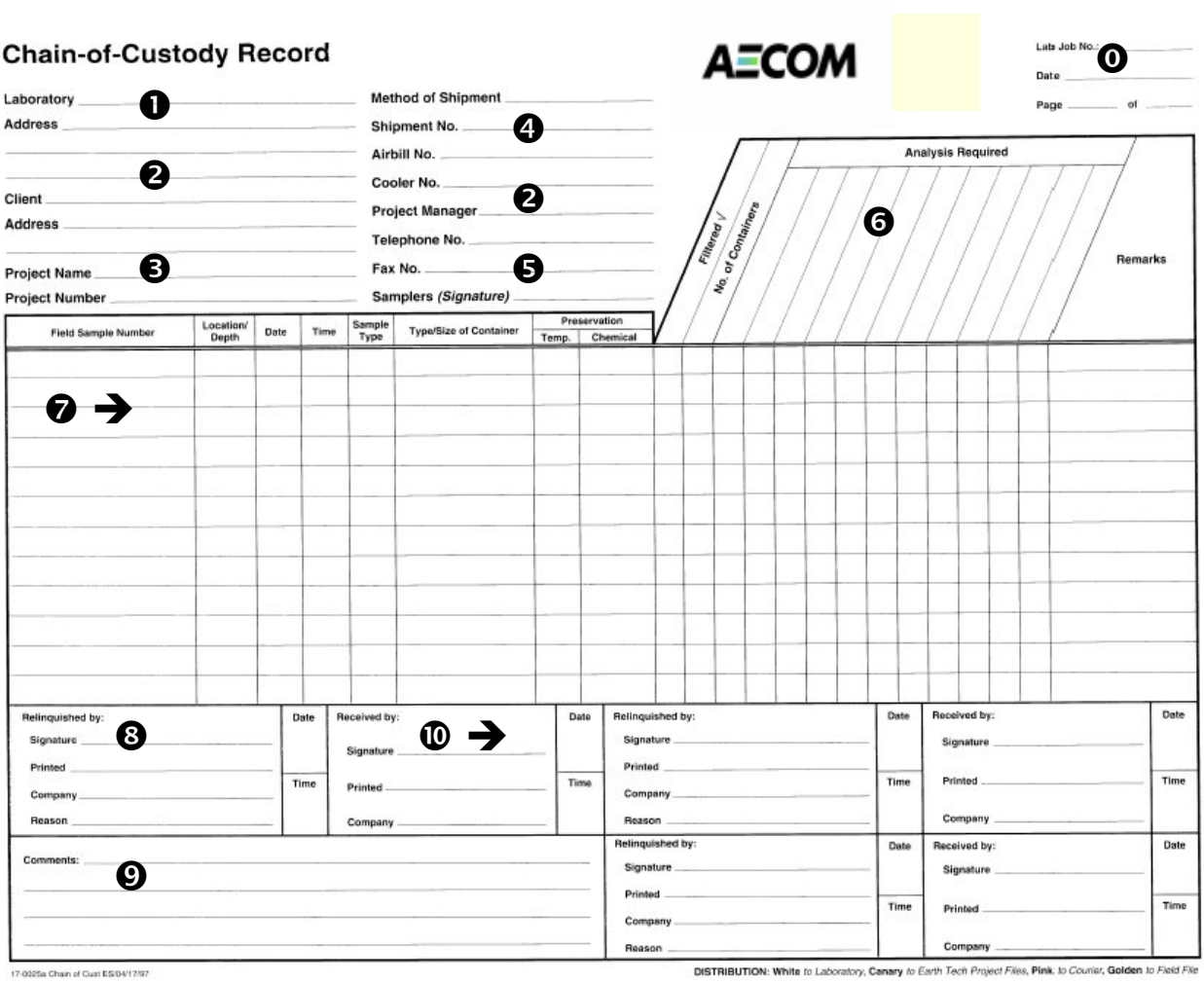
6.0 DOCUMENT APPROVAL AND HISTORY

Draft November 7, 2006.

QC 1 – November 8, 2006.

DOCUMENT AUTHOR:	Barry J. Harding, CPG
DOCUMENT ID:	TG_006
DOCUMENT DATE:	November 7, 2006
DOCUMENT REVISION DATE:	November 8, 2006.
DOCUMENT APPROVAL:	January 10, 2007.

Attachment 1 – ET COC



Chain-of-Custody Record

AECOM

Lab Job No.: 0
Date
Page ____ of ____

Laboratory 1
Address
2
Client
Address
Project Name 3
Project Number

Method of Shipment
Shipment No. 4
Airbill No.
Cooler No.
Project Manager 2
Telephone No.
Fax No. 5
Samplers *(Signature)*

Analysis Required
Filtered √
No. of Containers
6
Remarks

Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation Temp.	Preservation Chemical
7 →							

Relinquished by: 8
Signature
Printed
Company
Reason
Date
Time

Received by: 10 →
Signature
Printed
Company
Date
Time

Relinquished by:
Signature
Printed
Company
Reason
Date
Time

Received by:
Signature
Printed
Company
Date
Time

Comments: 9

Relinquished by:
Signature
Printed
Company
Reason
Date
Time

Received by:
Signature
Printed
Company
Date
Time

17-0025a Chain of Cust ES/04/17/97

DISTRIBUTION: White to Laboratory, Canary to Earth Tech Project Files, Pink to Courier, Golden to Field File

NOTES:

1. Fill in Analytical Laboratory Name, Address, and Phone Number.

2. Fill in AECOM Name, Office Location, and Address. Fill in AECOM PM and Phone Number. Sometimes email address is also provided.

3. Fill in Project Name and AECOM Project Number and Task.

4. Note method of Shipment (FedEx, UPS, Hand-Delivery). Include Shipping and Airbill Number, if relevant, and Cooler Number, if relevant.

5. Sampler Signs Name (Signature Line).

6. Specific Analysis Request with EPA or ASTM Analytical Methodology. Include number of containers and whether sample is filtered or not (aqueous samples only).

7. Consists of 8 Columns and 12 Rows.

    a. Field Sample Number. This is Sample ID. (e.g., ET-MW-01). The sample ID must precisely match label on sample.

    b. Location or Depth. This is descriptor for sample ID. (e.g., N = North or 0.5' = Depth, and so forth).

    c. Date. Insert Date Sample Collected.

    d. Time. Insert Time. Military Time preferable to 12-hr am/pm Time.

    e. Sample Type. Media Specific. Soil = S, Water = W, A = Air.

    f. Type/Size of Container. This is Sample Vessel Type and Volume. (e.g., Amber Boro-silicate Glass, 40 ml VOA Vial).

    g. Preservation. Note Temperature of Sample and Preservative (e.g., "Aquifer Temp 54 degree F at Sampling, HCL Preservative). Details can go under comments, item 9, below.

    h. Check each box below section 6 that correlates to Analysis Required for Sample.

8. Relinquished Box. Sign and neatly print name, affiliation (eg. AECOM) and why sample(s) are being relinquished (e.g., Shipped to Laboratory). Fill in Date and Precise Time.

9. Add any specific comments. This is important area to follow up on. Comments may include comments observed in field or directions for analytical laboratory. (e.g., "Well MW-01, sample ET-MW-01 historically high VOCs…." And so forth).

10. Laboratory or other receiving party signs and neatly prints name and affiliation. Usually this is laboratory, but may also be another currier taking custody of sample(s). Have receptor fill in date and precise time. Multiple changes in custody require multiple signatures.

Item "0". For laboratory use only.

Appendix M.
Inspection Forms

Parker Hannifin - Wake Forest, NC
Groundwater Treatment/SVE Remediation System

Inspector: _____ Date: _____ Time: _____

SOIL VAPOR EXTRACTION (SVE) SYSTEM

SVE Discharge Pressure	PT 704		in water	SVE Discharge Temperature	TT 701		deg C
SVE Inlet Pressure @ KO Tank	TT 702		deg F	SVE Vacuum @ KO Tank	PT 702		in water
SVE Inlet Differential Pressure	FT 701		in water	SVE Discharge Differential	FT 702		in water

GROUNDWATER RECOVERY WELLS AND AIR STRIPPER

KO Tank Discharge Pump	FM 401		gpm		gal
Recovery Well Inlet #1	FM 4601		gpm		gal
Recovery Well Inlet #2	FM 4602		gpm		gal
Recovery Well Inlet #3	FM 4603		gpm		gal
Recovery Well Inlet #4	FM 4604		gpm		gal
Recovery Well Inlet #5	FM 4605		gpm		gal
Recovery Well Inlet #6 (INFLUENT)	FM 4606		gpm		gal
Air Stripper Discharge (EFFLUENT)	FM 6401		gpm		gal
CORPUD Effluent Meter (at old GWTS pad)			gpm		gal

Recovery Well Inspection

					Yes	No
RW-4	Totalizer		gal	Pump Operational?		
	Flow Rate		gpm	Leaks at Fittings?		
	Discharge Pressure		psi			
	DTW		ft			
RW-6	Totalizer		gal	Pump Operational?		
	Flow Rate		gpm	Leaks at Fittings?		
	Discharge Pressure		psi			
	DTW		ft			
RW-19	Totalizer		gal	Pump Operational?		
	Flow Rate		gpm	Leaks at Fittings?		
	Discharge Pressure		psi			
	DTW		ft			

Fence Inspection

Fence	Yes	No	Comments
Gates Locked			
Fence Intact			

SWMU 16 Inspection

Filter Bed Covers	Yes	No	Comments
Cover Intact			
Seal Integrity			

Appendix N.
Contingency Plan

AECOM **Environment**

Submitted to
Parker Hannifin Corporation
Cleveland, OH

Submitted by
AECOM Technical Services Inc.
Morrisville, NC
60432139.1
January 2016

Contingency Plan

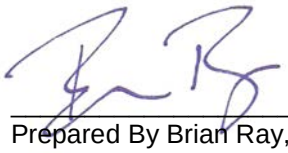
Former Parker Hannifin Facility
NCD-002-591-014
Wake Forest, North Carolina

AECOM **Environment**

Submitted to
Parker Hannifin Corporation
Cleveland, OH

Submitted by
AECOM Technical Services Inc.
Morrisville, NC
60432139.1
January 2016

Contingency Plan



Prepared By Brian Ray, Senior Manager

Reviewed By Bob Wyrick, PG, Project Manager

Former Parker Hannifin Facility
NCD-002-591-014
Wake Forest, North Carolina

Table of Contents

1 Introduction 1-1
2 Description 2-1

2.1 Site Description 2-1
2.2 Groundwater Treatment Description 2-1
2.3 Chemicals Stored On-site 2-2

3 Emergency Personnel and Equipment 3-1
4 Emergency Procedures 4-1

4.1 Types of Emergencies 4-1
4.2 Reporting Emergencies 4-1
4.3 Assessment Procedures 4-2
4.4 Control Procedures 4-3
4.5 Site Stabilization 4-3
4.6 Reporting to North Carolina Department of Environmental Quality 4-4

List of Figures

Figure 1. Site Location Map
Figure 2. Site Layout
Figure 3. Groundwater Treatment System and Evacuation Plan

1 Introduction

This document is the Contingency Plan for Remediation System Operations (Operations) at the former Parker Hannifin – Wake Forest Facility (hereinafter referred to as the former Parker Facility), located at 12415 Capital Boulevard, in Wake Forest, Wake County, North Carolina. **Figure 1** shows a map of the site location. **Figure 2** presents the site layout. This Contingency Plan has been updated in conjunction with the 2016 renewal of the Resource Conservation and Recovery Act (RCRA) Part B Post-Closure Permit for former Parker facility.

This Contingency Plan will be implemented in the event of a failure or threat of failure of the active remediation systems that might result in potential migration of hazardous waste constituents which could endanger human health and the environment. This plan is designed to prevent and control any releases as necessary to minimize potential threats to human health and the environment. This update is current as of system operations in December 2015.

The Operations addressed by this plan include the groundwater treatment system (GWTS). See **Figure 3** for locations of remediation system operations.

Section 2 of this plan contains a description of the Former Parker Facility and the remediation systems in operation at the facility. Section 3 of this plan lists Emergency Coordinators who are responsible for implementing this plan and emergency equipment available on-site. Section 4 of this plan provides emergency response and reporting procedures.

Information regarding Parker's Part B RCRA Post-Closure Permit may be obtained from the AECOM-Morrisville office (telephone 919-461-1100) or from the North Carolina Department of Environmental Quality (NCDEQ) Hazardous Waste Section of the Division of Waste Management 1646 Mail Service Center Raleigh, North Carolina (NC) 27699-1646 919-707-8200.

Parker will provide copies of this Contingency Plan to the Wake County Public Safety Administration, the nearest hospital (WakeMed), Wake Forest Police Department, and the Wake Forest Fire Department as listed responders within the plan. Per the instructions of the Wake County Emergency Medical Services office, and the Wake County Sheriff's office, their copies were sent to the Wake County Public Safety Administration.

Note: This document serves as the Contingency Plan for the AECOM/Parker operations only, and is not applicable to other activities on the site by the property owners. See **Figure 2** and **Figure 3** for further representation of the specific locations of remediation operations.

2 Description

2.1 Site Description

The former Parker Facility is located at 12415 Capital Boulevard in Wake Forest, North Carolina. **Figure 1** presents a facility location map. The site layout is illustrated in **Figure 2**. The former Parker Facility consists of a former manufacturing facility located on approximately 30 acres. The plant was constructed in 1964 for the manufacture and distribution of air control devices. The plant was previously owned by the Scovill Corporation and known as Schrader Bellows prior to its purchase by Parker in 1986. Manufacturing activities at the Site ceased in January 2002. The majority of the aboveground structures were demolished in 2007. Remaining site structures include a small portion of the former manufacturing building; an asphalt parking lot; concrete vaults and pads associated with the former industrial wastewater treatment system; sanitary sewer manholes; stormwater conveyance inlets; and the groundwater and soil vapor extraction treatment systems.

This Plan addresses the operations at this location. The operations are restricted to the GWTS compound (see **Figure 3**) and the associated monitoring wells, extraction wells, and piping. Operations security is provided by perimeter fencing.

2.2 Groundwater Treatment Description

The GWTS at the Parker Facility was installed in 1992. The GWTS is designed to extract contaminated groundwater and treat it to remove chlorinated hydrocarbons. Groundwater is pumped from three groundwater extraction wells with submersible pumps and underground piping. Detailed information for the GWTS is contained in the document titled "Training, Operation, and Maintenance Manual – Remedial Action System" by Sirrine Environmental Consultants (1992), which was submitted to NCDEQ in accordance with Parker's RCRA Part B Post-Closure Permit.

In 2008, the aboveground portion of the GWTS was replaced with a new system. The new system includes a 300-gallon equalization tank, a QED EZ-Tray Model 4.4 air stripper, transfers pumps, and associated flow instrumentation and controls. The system components are located inside an 8-foot by 12-foot steel building. The electrical control panel is located on the outside of the system building. The system building is locked and located within a fenced area to the north of the former facility building. The current location of the GWTS is illustrated on **Figure 3**.

The groundwater treatment process is as follows:

- Contaminated groundwater is extracted from the subsurface via three submersible pumps in the three groundwater extraction wells (RW-4, RW-6, and RW-19).
- The water passes through the influent flow meter and empties into the aboveground flow equalization tank.
- The flow equalization tank contains a series of electrodes which monitor water levels and direct the system to transfer water into the air stripper column for treatment.
- Once the water level in the flow equalization tank has reached a sufficient level, it is pumped from the bottom of the tank with a transfer pump into the top of the air stripper column.
- A blower supplies air into the bottom of the stripper column and treats the extracted groundwater by transferring the contaminants from the water to the air (the air discharges out of the top of the tower).
- Treated groundwater collects in a sump at the bottom of the air stripper tower and is discharged by gravity feed through an effluent flow meter into the publicly owned treatment works (POTW) system discharge point.

Process equipment is operated using automatic and manual controls. The control systems are designed to operate automatically within a range of expected conditions. The control systems are also designed to alarm in the event of unexpected conditions, and to shut down operations if necessary to protect equipment, until the system operator intervenes to correct a problem. Alarms for unexpected conditions are indicated by a series of lights on the control panel. The remediation system can also be monitored remotely using a telemetry system that can be accessed remotely via the internet. The

remediation system can be shut-down and started remotely and system alarms are recorded. The telemetry system will be accessed regularly to confirm the remediation system is operating.

Liquid wastes that are generated by treatment operations consist exclusively of treated groundwater. Treated groundwater is discharged into the City of Raleigh Public Utilities Department (CORPUD). Monitoring is currently on alternate months and the results are submitted to CORPUD.

Property redevelopment may occur in the future. Redevelopment may require movement/modifications to the remediation systems. If modifications are necessary, a revised contingency plan will be submitted, as necessary.

2.3 Chemicals Stored On-site

No chemicals are stored in the GWTS compound. Groundwater containing low levels of chlorinated compounds including trichloroethene and tetrachloroethene is temporarily stored in the GWTS compound awaiting batch processing (typically not for more than one day).

3 Emergency Personnel and Equipment

The Emergency Coordinator or Alternate acting in his place has complete authority to commit the resources necessary in the event of an emergency. The Emergency Coordinator, Alternate, or Project Manager are not located at the Facility, however one of these personnel can typically reach the facility in a short period of time.

Ashbourne Whichard, the Treatment Plant Operator, is the Primary Emergency Response Coordinator at the facility and can be reached at the AECOM-Morrisville office at 919-461-1100 (ext. 378) from 8 a.m. to 5:00 p.m. on weekdays, or after hours at 919-638-2061.

Steven Pires, the Backup Treatment Plant Operator, is an Alternate Emergency Response Coordinator at the facility and can be reached at the AECOM-Morrisville office at 919-461-1100 (ext.392), or at (828) 242-1054.

Additionally, Bob Wyrick is an Alternate or Secondary Emergency Response Coordinator and can be reached at the AECOM-Morrisville Office at 919-461-1100 Ext. 440 from 8:00 a.m. to 5:00 p.m. on weekdays, or at 919-413-4987. The names and telephone numbers for the Emergency Coordinator and Alternates are provided in the table below.

Personnel	Position and Address	Telephone Number
Ashbourne Whichard Plant Operator	**Primary Emergency Response Coordinator** Office: AECOM Technical Services 1600 Perimeter Park Drive Morrisville, NC 27560	Office: 919-461-1100 ext. 1378 Mobile: 919-638-2061
Steven Pires Backup Plant Operator	**Alternate Emergency Response Coordinator** Office: AECOM Technical Services 1600 Perimeter Park Drive Morrisville, NC 27560	Office: 919-461-1392 Mobile: 828-242-1054
Bob Wyrick Project Manager	**Alternate Emergency Response Coordinator** Office: AECOM Technical Services 1600 Perimeter Park Drive Morrisville, NC 27560	Office: 919-461-1440 Mobile: 919-413-4987

The AECOM/Parker GWTS includes the following emergency equipment:

Fire Fighting Equipment	
Item (1) Dry Chemical type ABC (general purpose/flammable liquids and gases/electrical) fire extinguisher	**Location** Groundwater Treatment System Compound
Spill Control Supplies	
Item (1) Recovery Drum (10) 3" x 48" General Purpose Socks (3) 3" x 10' General Purpose Socks (40) 17" x 19" Double Weight Sorbent Pads (8) 18" x 18" x 2" Sorbent Pillows (10) Disposable Bags (2) Boxes Nitrile Gloves (2) Pairs Goggles (1) Emergency Response Guide	**Location** Groundwater Treatment System Compound
Additional Equipment	
Item Hi-Dri absorbent or equivalent Additional Personal Protective Equipment (gloves, safety glasses, apron) Sump Pump	**Location** Groundwater Treatment System Compound

4 Emergency Procedures

4.1 Types of Emergencies

The Emergency Coordinator will implement this Contingency Plan in the event of a failure or the potential for a failure of the GWTS system that might result in release of hazardous waste constituents which endanger human health and the environment. Such failure could include discharge of waste to land, air, or surface water; failure of the groundwater extraction system; fire or explosions; or natural disasters. The Emergency Coordinator will determine whether specific conditions present a danger to human health and the environment, and implement this Contingency Plan based on his assessment of the conditions. The Emergency Coordinator will generally consider the following conditions as situations that warrant implementations of this plan:

- Discharge of toxic solid, liquid, or gaseous material from the Operations to off-site areas or on-site beyond contained areas that may result in hazards to human health or the environment
- Fire or explosion that causes a release of hazardous waste constituents from the Operations, or which could result in a release from the AECOM/Parker Operations due to use of firefighting foams or water
- Fire or explosion which threatens operation of the Operations
- Flooding, wind, lightning, or other natural events which threaten to cause a fire or a release from the Operations, or threaten operation of the Operations.

Other emergency conditions may arise which threaten or cause a release of hazardous waste constituents and require implementation of this plan; the Emergency Coordinator will evaluate such conditions and implement applicable parts of this Contingency Plan as appropriate.

4.2 Reporting Emergencies

Spill and system failure events will be reported by the person discovering the event to the Emergency Coordinators listed in Section 3.

The Emergency Coordinator will advise personnel to evacuate, as necessary. The area around the GWTS is relatively open. Personnel will assemble in the parking lot to the southeast of the GWTS or in the cleared-open area to the south of the GWTS (**Figure 3**) when an evacuation order is given and await further directions.

If assistance from off-site responders is needed, the Emergency Coordinator will contact the appropriate agencies as listed below.

Services Needed	Responder	Telephone Number
Spill Cleanup and Waste Management	A&D Environmental High Point, NC	336-434-7750 Fax: 336-434-7752
Emergency ONLY Fire/Police/Ambulance or Medical Services	(1) Wake County Emergency Response Center	911
NON-Emergencies Fire/Police/Ambulance or Medical Services	Wake County Public Safety Administration Wake Forest Fire Department Wake Forest Police Department Wake County Ambulance Service-EMS Wake County Sheriff's Office	919-856-7400 919-556-1966 919-554-6150 919-554-6150 919-856-6900
Hospital	WakeMed North Healthplex 10000 Falls of Neuse Rd. Raleigh, NC 27614	919-350-8000
Electric Power	Town of Wake Forest	919-435-9400
(1) In the event of an emergency response, the senior fire department officer is designated as the Incident Commander.		

In the highly unlikely event than an emergency appears to threaten or require evacuation of people from areas outside of the GWTS, the Emergency Coordinator will report the following information to the Wake Forest Public Safety Administration.

- Name
- Address
- Telephone No.
- Material released (name and quantity)
- Extent of injuries
- Extent of hazards to persons and/or the environment

4.3 Assessment Procedures

The Emergency Coordinator will assess the extent of each emergency in order to determine appropriate control procedures. Assessment procedures will depend on the nature of the emergency, and could include the following.

Spill Assessment

Spills will be assumed to be hazardous until determined otherwise. Protective clothing and equipment will be worn to prevent direct contact with or inhalation of hazardous waste constituents. The Emergency Coordinator will assess the type and source of the material at the release area and the characteristics of the released material. The Emergency Coordinator will estimate the amount and a real extent of material by visual estimation of the surface area and depth, and considering the source and release rate if known. The Emergency Coordinator will determine potential spill migration routes and evaluate the off-site receptors, if any. The Emergency Coordinator will assess potential impacts to human health and the environment.

GWTS Failure Assessment

Failure of the Operations may occur due to a regional power outage or due to an automatic shutdown in response to an alarm condition. Power outage can be determined by testing electrical power supplies, if not obviously affecting all portions of the plant. Automatic shutdown will occur when equipment operating conditions are outside the allowable ranges, and will result in the illumination of error indicator lights at the control panel in the main plant building. The Emergency Coordinator will determine whether the failure is from shutdown or power outage, and the date and time of failure from the error message or

from any electric analog clock disabled by the outage. The Emergency Coordinator will determine whether the failure presents a hazard to human health or the environment. System operation and alarms are monitored and recorded with a remote access telemetry system. The telemetry system will be accessed regularly to confirm the remediation system is operating and review alarm status.

Fire Assessment

The Emergency Coordinator will determine the size, type, and location of fire or flammable materials through observation from a safe distance. The Emergency Coordinator will also observe the source of the flammable materials or fire, and the proximity to any combustible or potentially explosive materials, if possible. The Emergency Coordinator will assess potential impacts of a fire on the Operations, and whether such impacts present a hazard to human health or the environment.

Natural Disaster Assessment

The Emergency Coordinator will determine the potential impacts of a hurricane, severe thunderstorm, or other natural disaster on the Operations, considering the extent of current operations and the types and quantities of wastes stored in the GWTS. The Emergency Coordinator will determine whether the expected impacts present a hazard to human health or the environment.

4.4 Control Procedures

The Emergency Coordinator will implement control procedures to reduce or eliminate the potential for release of hazardous waste constituents arising from an emergency. Control procedures will be performed by the Emergency Coordinator or personnel under his supervision, except as noted otherwise. Control procedures will depend on the nature of the emergency, and could include the following.

Spill Control

The Emergency Coordinator will restrict access to the spill area using signs or barriers, as needed to prevent human exposure or further releases. The Emergency Coordinator will remove potentially reactive materials or sources of ignition from the release area, if possible considering access and safety constraints. The Emergency Coordinator will control the GWTS (e.g., using manually operated pumps, valves, etc.) as needed to contain spills or prevent further releases, including total shutdown if necessary. The Emergency Coordinator will use absorbent materials to contain and remove liquid spills. Spill cleanup materials will be contained in drums or tanks until the emergency has been controlled.

GWTS Restart

The Emergency Coordinator will notify and monitor the progress of the electric company personnel in case of any regional or facility-wide power outage, and/or will arrange with qualified electricians to repair the on-site power systems, as needed to immediately restore power to the facility. The Emergency Coordinator will make arrangements with the operator and any appropriate subcontract personnel as necessary to immediately restore operation after a shutdown.

Fire Control

The Emergency Coordinator will arrange for access road and gates to be clear for entry of off-site responders. The Emergency Coordinator will activate the automatic sprinkler system and will shut down equipment in the affected area if necessary for fire control. The Emergency Coordinator will direct unauthorized personnel away from the fire scene and provide any information collected during assessment.

Natural Disaster Preparation

The Emergency Coordinator will remove or secure wastes and shut down the GWTS or portions of it, as needed to reduce the potential for release of hazardous waste constituents in the event of an expected natural disaster.

4.5 Site Stabilization

During emergency control procedures, the Emergency Coordinator will monitor the GWTS operations to evaluate the potential for release of hazardous waste constituents. The Emergency Coordinator will implement new notification or control procedures as described above, if necessary, to respond to new emergency conditions.

Immediately after an emergency has been controlled, or after abatement of a natural disaster, the Emergency Coordinator will evaluate the Operations to determine the need for repairs. The Emergency Coordinator will arrange for repairs to allow restarting systems or portions of systems as soon as practicable. The Emergency Coordinator will arrange for repair or replacement of emergency equipment, and removal of spill cleanup material to appropriate accumulation areas. The Emergency Coordinator will notify NCDEQ that repairs and cleanup are complete before restarting systems, by verbal notification to the Hazardous Waste Section at 919-707-8200. The Emergency Coordinator will arrange for disposal of hazardous wastes from cleanup operations in accordance with applicable requirements of RCRA (as amended by Hazardous and Solid Waste Amendments) and the North Carolina Hazardous Waste Management Rules.

4.6 Reporting to North Carolina Department of Environmental Quality

Emergency conditions requiring implementation of the Contingency Plan will be reported verbally to NCDEQ within 24 hours of the time that AECOM/Parker becomes aware of the conditions. The verbal report will be made to the Hazardous Waste Section at 919-707-8200. This report will include the following information:

- Owner/Operator Information:

  Parker Hannifin Corporation, Inc.
  Jim Schenker
  Assistant Manager, Environmental Engineering
  6035 Parkland Boulevard
  Cleveland, OH 44124-4141
  216-896-2052 (direct) or 216-501-3631 (mobile)

- Facility Information:

  Former Parker Facility Groundwater Treatment System
  12415 Capital Boulevard
  Wake Forest, NC 27587

- The date, time, and type of incident (e.g., fire, spill, etc.)
- The name and quantity of material(s) involved.
- The extent of injuries, if any
- An assessment of actual or potential hazard to human health or the environment
- The estimated quantity and disposition of recovered material that resulted from the incident

Parker will submit a written report to NCDEQ documenting any period of noncompliance with the RCRA Post-Closure Permit within 5 days of the time that Parker becomes aware of the noncompliance. NCDEQ may waive the 5-day requirement, in which case Parker will submit the written report within 15 days of becoming aware of the noncompliance. The written report will be made to:

North Carolina NCDEQ
Hazardous Waste Section – Bud McCarty
217 West Jones Street
1646 Mail Service Center
Raleigh, NC 27699-1646
Phone: 919-707-8200

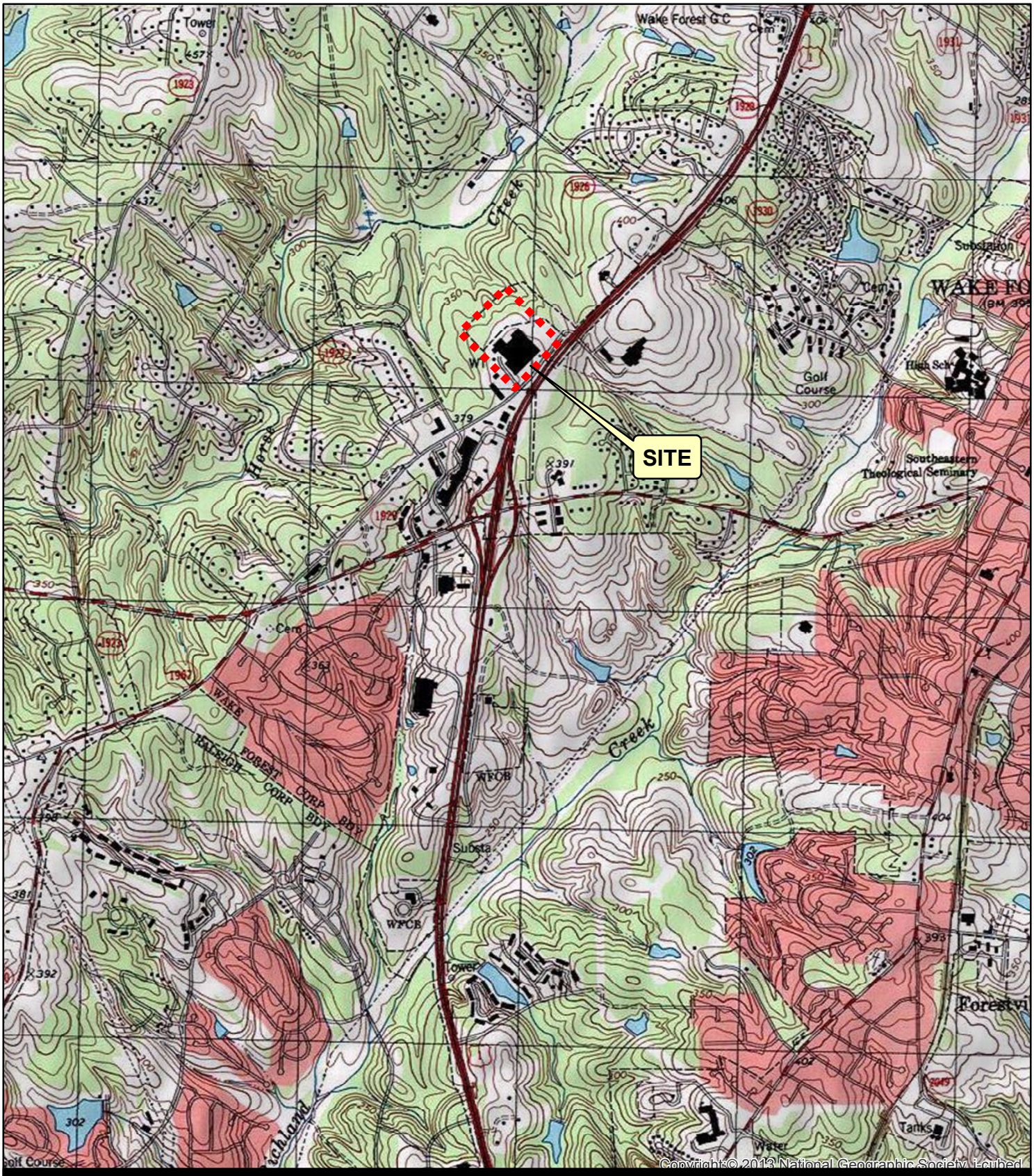
The written report will contain:

- A description of the noncompliance and its cause
- The periods of noncompliance including dates and times
- The anticipated time noncompliance will continue, if any
- The steps taken or planned to minimize reoccurrence of the noncompliance
- A certification in accordance with 40 CFR 270.11, as adopted in 15A NCAC 13A.0013

Other reporting may be required for discharges under the facility's to the City of Raleigh's Public Utilities Department and will conform with the requirements of the POTW permit in place at the time of the discharge.

Figures

Z:\GIS\Projects\P\Parker_Hannifin\Wake_Forest_NC\MXD\2015 Part B Renewal\Fig_B-1_Site_Location_Topo.



Map Location

Site Location Map

Former Parker Hannifin Corp. Facility
Wake Forest, North Carolina

N
W E
S

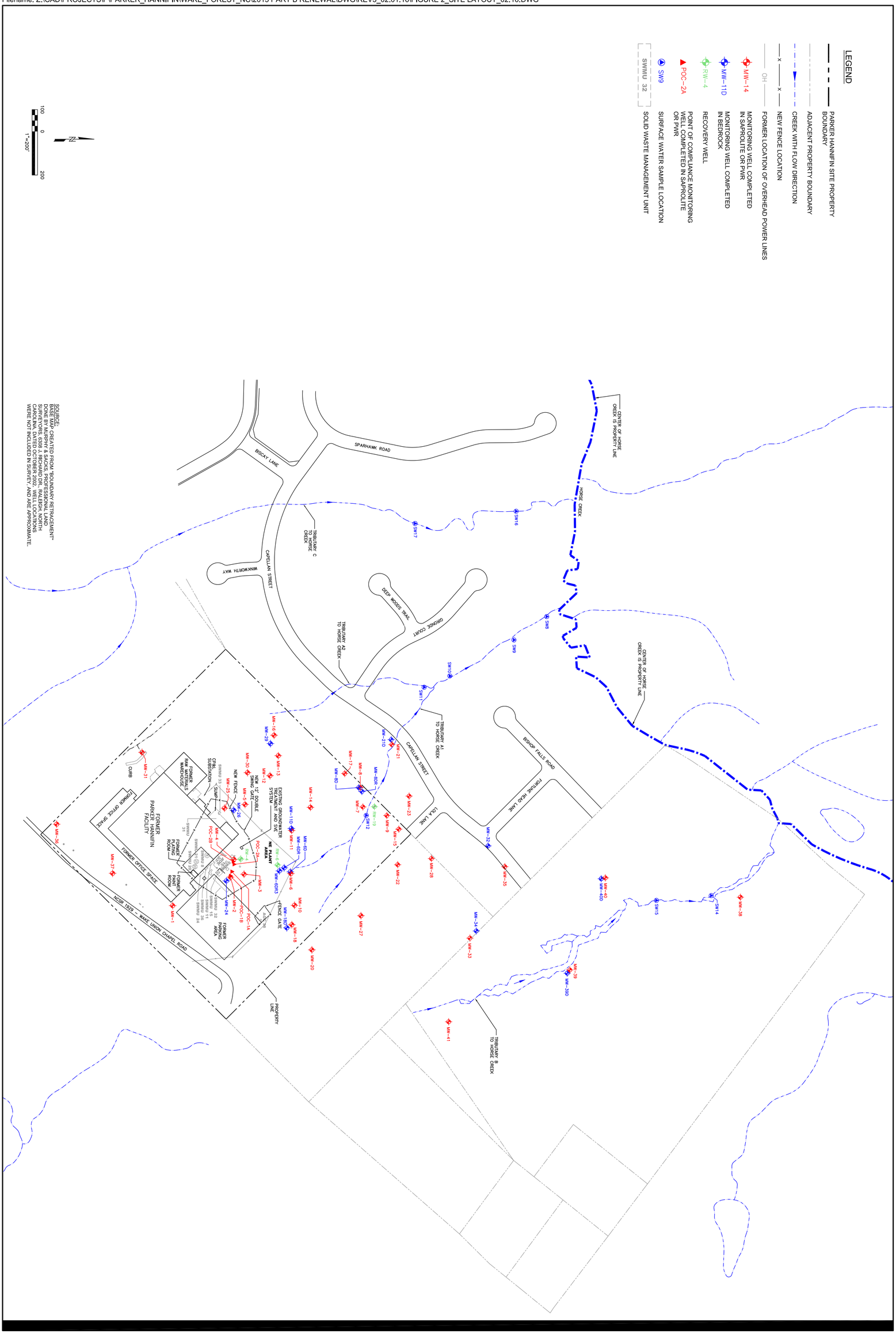
0 2,000 4,000 Feet 1:24,000

November 2015 USGS Topographic Quadrangle Wake Forest (1983) 60432139

Figure 1

AECOM

AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607
Phone: (919) 854-6200
Fax: (919) 854-6259
www.aecom.com



PARKER HANNIFIN COPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 02/01/2016

SITE LAYOUT

AECOM

Figure: 2

ANSI D 22" x 34"

Approved:MA

Checked:EM

Designer:SP

Project Management Initials:

Last saved by: PIRESS (2016.02.01) Last Plotted: 2016.02.01
Filename: Z:\ADPROJECTS\P\PARKER_HANNIFIN\WAKE_FOREST_NC\2015 PART B RENEWAL\DWG\REV3_02.01.16\FIGURE 1-3_CONTINGENCY PLAN_02.16.DWG

LEGEND

- PARKER HANNIFIN SITE PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- CREEK WITH FLOW DIRECTION
- NEW FENCE LOCATION
- REMEDIATION SYSTEM PIPE LINE
- GROUNDWATER TREATMENT SYSTEM EFFLUENT LINE TO POTW
- OH — FORMER LOCATION OF OVERHEAD POWER LINES
- MW-14 — MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- MW-11D — MONITORING WELL COMPLETED IN BEDROCK
- RW-4 — RECOVERY WELL
- POC-2A — POINT OF COMPLIANCE MONITORING WELL COMPLETED IN SAPROLITE OR PWR
- SW9 — SURFACE WATER SAMPLE LOCATION
- SWMU 32 — SOLID WASTE MANAGEMENT UNIT
- EVACUATION ROUTE

MW-21
MW-21D
MW-15
MW-22
MW-9
MW-8DR
RW-19
SW12
MW-8
MW-7
MW-27
MW-17
MW-8D
PROPERTY LINE
APPROXIMATE LOCATION OF REMEDIATION SYSTEM PIPE LINE
MW-14
MW-20
MW-6D
MW-6DR
MW-10
MW-18
MW-11D
MW-11
MW-6
MW-18D
MW-6DR3
RW-6
FENCE GATE
MW-13
EXISTING GROUNDWATER TREATMENT AND SVE SYSTEM
NE PLANT AREA
MW-16
MW-29
MW-12
AOC 38
MW-3
POC-2A
NEW 12' DOUBLE SWING GATE
POC-1A
MW-30
RW-4
POC-1B
MW-5
MW-26
MW-2
NEW FENCE
MW-24
MW-25
SWMU 16 AOC 37
FORMER PARKING AREA
SWMU 33
MW-4
SWMU 32
SUMP
POC-2B
SWMU 15
CP&L SUBSTATION
SWMU 11
SWMU 8
SWMU 36
SWMU 21
SWMU 24
SWMU 20
SWMU 31
FORMER RAW MATERIALS WAREHOUSE
ROAD

25 0 50
1"=50'

SOURCE:
BASE MAP CREATED FROM "BOUNDARY RETRACEMENT" DONE BY MURPHY & SACKS, PROFESSIONAL LAND SURVEYORS, 6308 J. RICHARD DR., RALEIGH, NORTH CAROLINA, DATED OCTOBER 2002. WELL LOCATIONS WERE NOT INCLUDED IN SURVEY, AND ARE APPROXIMATE.

AECOM

Figure: 3

GROUNDWATER TREATMENT SYSTEM AND EVACUATION PLAN

PARKER HANNIFIN COPORATION
Former Parker Hannifin Corporation Facility
Wake Forest, North Carolina
Project No.: 60341618 Date: 02/01/2016

Appendix O.
Post-closure Cost Estimate, Closure Certification and Financial Assurance

AECOM
1600 Perimeter Park
Morrisville, NC 27560
USA
T: 919.461.1100
F: 919.464.1415
aecom.com

April 28, 2017 (rev. 2)

Mr. Joe Ghiold
Project Manager
Hazardous Waste Section, Division of Waste Management
Department of Environmental Quality
Green Square Complex DEQ Office Building
217 W Jones St Raleigh, NC 27603
1646 Mail Service Center, Raleigh, NC 27699

Subject: Site-Wide Remediation and Post Closure Care Cost Estimate Support Summary- Revised
Former Parker Hannifin, 12415 Capital Boulevard, Wake Forest, NC
NCDEQ Site NC-002-591-014

Dear Mr. Ghiold,

An updated Site-Wide Remediation and Post Closure Care Cost Estimate ($2,328,200) for the former Parker Hannifin facility was prepared and included in Appendix O of the revised RCRA Permit renewal application. The revised permit application was submitted to the North Carolina Department of Environmental Quality (NCDEQ) in March 2017. This revised cost estimate differs significantly in comparison to the 2010 Cost Estimate ($8,295,800). As a result, the NCDEQ requested an explanation of the cost difference in an electronic mail correspondence dated March 20, 2017. Also, in response to a telecommunication with you on April 12, 2017, additional information regarding the groundwater monitoring plan and an inflationary and contingency budget adjustment was included in the cost estimate provided in this revised document.

A summary of the 2017 cost estimate and rationale for the cost difference is provided below. The 2017 cost estimate has been included as **Attachment 1** of this document.

In addition, based on a February 8, 2017 communication from Ms. Jenny Lopp, NCDEQ Financial Analyst, the 2017 cost estimate includes the total costs for anticipated corrective action measures and post-closure activities. The estimate is no longer separated into 'definitive' and 'contingent' costs. The financial assurance mechanisms were also discussed with Ms. Lopp. Currently Parker Hannifin is required to maintain a trust fund and conduct a corporate financial test to meet the remediation and post closure care costs. Parker/AECOM do not believe that both financial mechanisms are necessary and the requirement for a trust fund can be eliminated.

Site-Wide Remediation and Post Closure Care Cost Estimate - 2017

I. Annual Operation & Maintenance for the Groundwater Treatment System (GWTS)

Section I of the 2017 estimate includes labor, subcontractors, and other direct costs (ODCs) for operation and maintenance of the existing groundwater treatment system (GWTS) for five years. Parker anticipates shutting down the GWTS within five years in order to implement an in-situ groundwater remedy, such as enhanced reductive dechlorination. The 2010 cost estimate included operation and maintenance costs of the GWTS for 15 years; however, the 2010 costs underestimated annual operational budget. Therefore, an increase of approximately $110,000 is reflected in the 2017 estimate.

II. Annual Monitoring and Reporting Services Costs (GWTS)

In Section II, costs for labor, subcontractors and ODCs have been included for annual groundwater sampling and reporting activities for 30 years. It is Parker's intention to transition from semi-annual sampling under the previous

RCRA permit to annual sampling under a new permit anticipated to be issued in 2017 by the NCDEQ. Contingent on NCDEQ approval, the wells planned to be sampled include 4 point of compliance wells, 16 corrective action effectiveness wells, and 3 groundwater extraction wells. The sampling plan and analytical recommendations were provided in the revised RCRA Part B Permit Renewal Application provided to the NCDEQ in March 2017 and summarized on **Table 1**.

The 2010 cost estimate included costs for semi-annual groundwater sampling and reporting as well as a greater number of sample analytes. Based on the analytical data collected over the last 20 years, a reduction in the monitoring program appears justified. This reduction in the monitoring program scope resulted in approximately $4.4 million (MM) cost savings.

III. GWTS Decommissioning Services (One Time Cost)

In Section III, costs for labor, subcontractors and ODCs have been included to decommission the GWTS after system shutdown. Costs ($26K) for this activity were not included in the 2010 cost estimate.

IV. Interim Measures Remediation (One Time Costs)

In Section IV, costs for labor, subcontractors and ODCs have been included for interim measures remediation (including soil and groundwater). Similar costs for regulated unit management and soil remediation were included in the 2010 cost estimate; however remedial strategies have changed due to redevelopment plans and applicable standards (i.e., commercial soil clean-up levels). In addition, supplemental soil vapor extraction (SVE) was previously proposed, but is currently not anticipated. Therefore, a reduction of approximately $1.4MM in cost is reflected in the 2017 estimate.

As requested in a telecommunication with the NCDEQ on April 24, 2017, a potential estimated cost for demolition and disposal of the remaining building materials has been included in this revision. For budgeting purposes, the building materials were assumed non-hazardous.

V. Corrective Measures Study, Closure Plans, and Post Closure Plans (One Time Costs)

Section V summarizes labor, subcontractor, and ODCs for completion of a corrective measures study and various closure and post closure plans. Similar costs were included in the 2010 cost estimate.

VI. Monitoring Well Abandonment and Replacement (One Time Costs)

In Section VI, costs for labor, subcontractors, and ODCs have been included for monitoring well abandonment and replacement. During site redevelopment, it is likely that some monitoring and/or recovery wells may be damaged or destroyed and abandonment and/or replacement may be needed. Costs for monitoring well abandonment and/or replacement are approximate and were modified based on the redevelopment plan. A cost reduction of approximately $137,000 is anticipated.

The anticipated remediation costs are approximately $2.5 MM. A 1 % inflation rate and 10% contingency cost was applied and provided the adjusted cost of approximately $2.8 MM.

We hope this letter clarifies the difference in total costs between the 2010 and 2017 Site-Wide Remediation and Post Closure Care Cost Estimates. If you have any additional questions, please contact Jim Schenker, Parker, at 216-896-2052.

Sincerely,

Matthew Allen, PG
Project Geologist

Robert Wyrick, PG
Project Director

Attachments

cc: Jim Schenker, Parker Hannifin
file

TABLES

Table 1
Groundwater Monitoring Plan
Former Parker Hannifin Facility
Wake Forest, North Carolina

Well	Monitoring Parameters	Sampling Frequency
Groundwater Quality Monitoring Wells - Point of Compliance Wells		
POC-1A	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-1B	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-2A	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
POC-2B	VOCs, 1,4-Dioxane, Metals, App. IX*	Annual
Corrective Action System Effectiveness Monitoring Wells		
MW-3	VOCs, Metals	Annual
MW-4	VOCs, Metals	Annual
MW-6	VOCs, 1,4-Dioxane	Annual
MW-6DR3	VOCs, 1,4-Dioxane	Annual
MW-8	VOCs	Annual
MW-8D	VOCs	Annual
MW-8DR	VOCs	Annual
MW-15	VOCs, 1,4-Dioxane	Annual
MW-21	VOCs	Annual
MW-21D	VOCs	Annual
MW-33	VOCs, 1,4-Dioxane	Annual
MW-34	VOCs, 1,4-Dioxane	Annual
MW-36	VOCs	Annual
MW-38	VOCs	Annual
MW-39D	VOCs	Annual
MW-40D	VOCs	Annual
Corrective Action Groundwater Extraction Wells		
RW-4	VOCs, 1,4-Dioxane, Metals	Annual
RW-6	VOCs, 1,4-Dioxane, Metals	Annual
RW-19	VOCs, 1,4-Dioxane, Metals	Annual

Notes:
VOCs - Volatile Organic Compounds: Acetone, carbon disulfide, chloroform, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, methyl ethyl ketone, cis-1,2-dichloroethene, 1,4-dioxane, trans-1,2-dichloroethene, 1,2-dichloropropane, tetrachloroethene, toluene, 1,1,1-trichloroethane, trichloroethene, trichlorofluoromethane, and vinyl chloride
Metals - barium, chromium, nickel, and zinc.
App. IX* - Sampled every 5 years
Only wells included in the monitoring requirements of the Resource Conservation and Recovery Act Part B permit are listed

ATTACHMENT 1

Site-Wide Remediation and Post Closure Care Cost Estimate

Site-Wide Remediation and Post Closure Care Cost Estimate
2016 RCRA Part B Permit Renewal Application
NCD 002 591 014 - Former Parker Hannifin Facility, Wake Forest, NC

Revised April 2017

DESCRIPTION	UNITS	QTY	UNIT COST ($)	TOTAL COST ($)
I. Annual Operation & Maintenance for the Groundwater Treatment System (GWTS)				
1. Routine Operation and Maintenance for GWTS				
a. GWTS O&M Labor	hr	210	$83	$18,270
b. GWTS O&M (Equipment, Cleaning, Waste Disposal)	yr	1	$1,575	$1,575
c. Equipment Maintenance	yr	1	$1,575	$1,575
d. CAP Inspection	yr	1	$1,575	$1,575
e. Utilities	mt	12	$2,520	$30,240
Total Annual O&M Cost for GWTS				$53,200
Annual O&M Cost for GWTS (for 5 Years)				**$266,000**
II. Annual Monitoring and Reporting Services Costs (GWTS)				
1. Groundwater Monitoring (One Event/Year)				
a. Sampling Labor and Coordination	ls	1	$10,500	$10,500
b. Miscellaneous supplies, equipment	ls	1	$2,625	$2,630
c. Laboratory Analysis (see Table 1)	units	1	$4,410	$4,410
d. Reporting Labor	hr	60	$105	$6,615
Total Annual Monitoring and Reporting Services Cost				$24,200
Annual Monitoring and Reporting Services Cost (for 30 Years)				**$726,000**
III. GWTS Decommissioning Services (One Time Cost)				
1. System Removal	ls	1	$15,000	$15,000
2. Load and Haul	cy	1	$5,000	$5,000
3. Well Abandonment	lf	350	$18	$6,300
Total GWTS Decommissioing Costs				**$26,300**

Site-Wide Remediation and Post Closure Care Cost Estimate
2016 RCRA Part B Permit Renewal Application
NCD 002 591 014 - Former Parker Hannifin Facility, Wake Forest, NC

Revised April 2017

DESCRIPTION	UNITS	QTY	UNIT COST ($)	TOTAL COST ($)
IV. Interim Measures Remediation (One Time Costs)				
1. NEBA Industrial Excavation / Regulated Unit CAP Modification	ls	1	$202,125	$202,125
2. SWMU 31/33 Industrial Excavation	ls	1	$57,330	$57,330
3. AOC 38 Industrial Excavation	ls	1	$55,965	$55,970
4. Building materials management (demolition/disposal)	ls	1	$201,873	$201,870
5. Phase I Groundwater Enhanced Reductive Dechlorination	ls	1	$375,000	$375,000
6. Phase II Groundwater Enhanced Reductive Dechlorination	ls	1	$175,000	$175,000
7. Phase III Groundwater Enhanced Reductive Dechlorination	ls	1	$87,500	$87,500
Total Interim Measures Remediation				**$1,154,800**
V. Corrective Measures Study, Closure Plans, and Post Closure Plans (One Time Costs)				
1. Corrective Measures Study	ls	1	$80,000	$80,000
2. Closure Reports	ls	1	$60,000	$60,000
3. Post Closure Reports	ls	1	$60,000	$60,000
Total Corrective Measures Study, Closure Plans, and Post Closure				**$200,000**
VI. Monitoring Well Abandonment and Replacement (One Time Costs)				
1. Well Abandonment	lf	2000	$18	$36,000
2. Shallow Well Installation	ls	20	$4,000	$80,000
3. Bedrock Well Installation	ls	8	$5,000	$40,000
4. Waste Disposal	ls	1	$10,000	$10,000
Total Monitoring Well Abandonment and Replacement				**$166,000**

Estimated Total Costs (30 Years) =	**$2,539,100**
*Inflation Adjustment (0.013 %) =	$33,008
Contingency (10 %) =	$253,910
Estimated Costs + Inflation Adjustment + Contingency (30 Years) =	**$2,826,018**

Notes/Assumptions:

Revised costs generated April 2017.

The routine O&M costs are generally based on average incurred expenses over the last year of operating the system.

The groundwater monitoring costs are based on average annual costs incurred on groundwater monitoring over the previous year.

The GWTS is assumed to be operated for approximately 5 years prior to shutdown. Period of operation will likely decrease following ERD implementation.

Abbreviations: ls = lump sum; hr = hours; CY = cubic yards; LF = linear feet; mt = month

*NCDEQ, 2017: Effective January 1, 2017, the Inflation Factor Price Deflator/Multiplier = 1.013

Deloitte.

Deloitte & Touche LLP
127 Public Square
Suite 3300
Cleveland, OH 44114
USA

Tel: +1 216 589 1300
Fax: +1 216 589 1369
www.deloitte.com

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON APPLYING AGREED-UPON PROCEDURES

To the Board of Directors and Management of
Parker-Hannifin Corporation
Cleveland, Ohio

We have performed the procedures included in the Ohio Administrative Code rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48, which were agreed to by the Ohio Environmental Protection Agency and Parker-Hannifin Corporation (the "Company") solely to assist the specified parties in evaluating the Company's compliance with the financial test option as of June 30, 2016, included in the accompanying letter dated September 30, 2016 from Mr. Jon P. Marten, Executive Vice President – Finance and Administration and Chief Financial Officer. Management is responsible for the Company's compliance with those requirements. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants, as adopted by the Public Company Accounting Oversight Board (PCAOB). The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures that we performed and related findings are as follows:

1. We compared the amounts of total assets in the United States as stated in Item 6 under the caption Alternative II in the letter referred to above to be less than 90 percent of the Company's consolidated assets in the audited financial statements of Parker-Hannifin Corporation as of and for the year ended June 30, 2016, on which we have issued our report dated August 26, 2016 and noted that such amounts were in agreement, which is consistent with the response of "No" in Item 9 under the caption Alternative II in the letter referred to above.

2. We recomputed from, or reconciled to, the audited financial statements referred to in procedure 1 the information included in Items 5 and 6 under the caption Alternative II in the letter referred to above and noted no differences.

We were not engaged to, and did not, perform an examination, the objective of which would be the expression of an opinion on the accompanying letter dated September 30, 2016. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the board of directors and management of Parker-Hannifin Corporation and the Ohio Environmental Protection Agency, and is not intended to be and should not be used by anyone other than these specified parties.

Deloitte & Touche LLP

September 30, 2016

Parker Hannifin Corporation
6035 Parkland Blvd.
Cleveland, Ohio 44124
216-896-3000
216-896-4032 Fax

Craig Butler, Director
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

Compliance Monitoring & Enforcement
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

Dustin Tschudy, Hazardous Waste Management
Ohio Environmental Protection Agency
2195 Front Street
Logan, Ohio 43138

September 30, 2016

Re: Parker-Hannifin Corporation
Waverly, Ohio
EPA ID No. OHD 046 426 409

Enclosed please find the necessary documents to update financial assurance for the subject facility, in particular: (1) letter from Chief Financial Officer; (2) copy of Annual Report for fiscal year ended June 30, 2016 which includes the Reports of Independent Registered Accounting Firm; and (3) comparison report from an independent registered public accounting firm.

Also enclosed is a detailed post-closure cost estimate.

Please note that Parker-Hannifin is not using a financial test for any required aggregate liability coverage; as such, the wording from OAC 3745-55-51(F) is appropriate for the Waverly facility.

Regards,

James Schenker
PARKER HANNIFIN

Parker Hannifin Corporation
6035 Parkland Blvd.
Cleveland, Ohio 44124

Office 216 896 2710
Fax 216 896 4032

Director, Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

I am the chief financial officer of Parker-Hannifin Corporation, 6035 Parkland Boulevard, Cleveland, Ohio 44124-4141. This letter is in support of this firm's use of the financial test to demonstrate financial assurance for closure and/or post-closure costs, as specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code.

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

Parker-Hannifin Corporation
11197 U.S. Route 23
Waverly, Ohio 45690
U.S. EPA Identification Number: OHD046426409
Ohio permit number: None
Closure Cost Estimate: $0
Post-Closure Cost Estimate: $ 1,285,078

2. This firm guarantees, through the guarantee specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code, the closure or post-closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. This firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

Parker-Hannifin Corporation
Schrader Pneumatics Division
U.S. Route 1
Wake Forest, North Carolina 27587
U.S. EPA Identification Number: NCD002591014
Post-Closure Estimate: $ 8,000,000

Parker-Hannifin Corporation
Stratoflex Products Division
3800 Calle Tecate
Camarillo, CA 93012
EPA ID No.: CAR000108712
Closure Cost Estimate: $ 35,005

Former Precision Rebuilding facility
Parker Hannifin Corporation
422 West Sixth Street
Lansdale, Pennsylvania 19446
EPA ID No.: PAD980926976
Post-Closure Estimate: $ 500,000

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated to Ohio EPA through the financial test or any other financial assurance mechanisms specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code or substantially equivalent state mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Chapter 3745-34 of the Administrative Code and is assured through a financial test. The current closure cost estimates as required by Chapters 3745-34, 3745-55 and 3745-66 of the Administrative Code are shown for each facility: None.

This firm is required to file a Form 10-K with the Securities and Exchange Commission ("SEC") for the latest fiscal year.

The fiscal year of this firm ends on June 30. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended June 30, 2016.

ALTERNATIVE II

1.	Sum of current closure and post-closure cost estimates (total of all cost estimates shown in the five paragraphs above)	$ 9,820,083
2.	Current bond rating of most recent issuance and name of rating service	Long Term Notes Rated: A3 – Moody's Investor Services
3.	Date of Issuance of bonds	November 18, 2014
4.	Date of Maturity of bonds	November 21, 2024, November 21, 2034, and November 21, 2044
*5.	Tangible net worth (if any portion of the closure or post-closure cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line)	$ 749,647,000
*6.	Total assets in U.S. (required only if less than 90% of assets are located in the U.S.)	$ 5,737,373,349

		YES	NO
7.	Is line 5 at least $10 million?	X	___
8.	Is line 5 at least 6 times line 1?	X	___
*9.	Are at least 90% of assets located in the U.S.? If not, complete line 10.	___	X

10. Is line 6 at least 6 times line 1? X ___

I hereby certify that the wording of this letter is identical to the wording specified in paragraph (F) of rule 3745-55-51 of the Administrative Code as such regulations were constituted on the date shown immediately below.

Jon P. Marten
Executive Vice President – Finance and Administration
and Chief Financial Officer
September 30, 2016

Schrader Bellows

U.S. Route 1
Wake Forest, NC 27587
(919) 556-4031

Division Parker Hannifin Corporation

Mr. Doug Roberts, Geologist
Solid & Hazardous Waste Mgt. Branch
North Carolina Dept. of Human Resources
P. O. Box 2091
Raleigh, NC 27602-2091

October 16, 1986

Ref: Filter Bed Closure Certification

Mr. Roberts:

In addition to the Certificate of Conformance regarding closure of the filter beds, by letter of October 9, we are submitting the following certification:

Schrader Bellows certifies that the filter beds have been closed in accordance with the specifications in the approved closure plan.

Joseph F. Reardon, Jr.
Operations Manager

bj

cc: Jim Edwards

bc: Bill Cavanaugh
Jesse Collum
Jack Couchois
Hank Eide
Charlie Hughes
Fred Tolhurst
Sheral Wilson

Schrader Bellows

Mr. Doug Roberts, Geologist
Solid & Hazardous Waste Management Branch
North Carolina Department of Human Resources
P. O. Box 2091
Raleigh, NC 27602-2091

October 9, 1986

U.S. Route 1
Wake Forest, NC 27587
(919) 556-4031

Division Parker Hannifin Corporation

Mr. Roberts:

A Certificate of Conformance regarding closure of the filter beds at our Wake Forest facility is enclosed.

Joseph F. Reardon, Jr.
Operations Manager

bj

enc

cc: Jim Edwards

bc: Bill Cavanaugh
Jesse Collum
Jack Couchois
Hank Eide
Charlie Hughes
Fred Tolhurst
Sheral Wilson

David C. Fischetti, P.E.
Consulting Engineer, P.A.

ASCE
NSPE
PENC
AITC

CERTIFICATE OF CONFORMANCE

Job. No: 86084

Date: October 7, 1986

PROJECT: Filter Bed Covers, Schrader-Bellows Division

LOCATION: Wake Forest, North Carolina

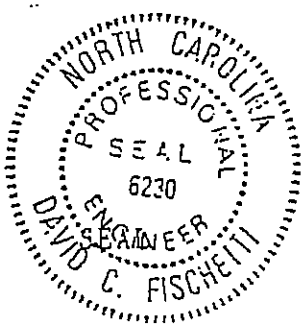
BY: David C. Fischetti, P.E.

CONTRACTOR: Wm. C. Vick Construction Company, Raleigh, NC

I hereby certify on this date, October 7, 1986, that the construction of the above referenced project complies with the requirements of the drawing and specification sheet S-1, entitled Filter Bed Covers, dated September 11, 1986, produced by our office for the structural portion of the work.

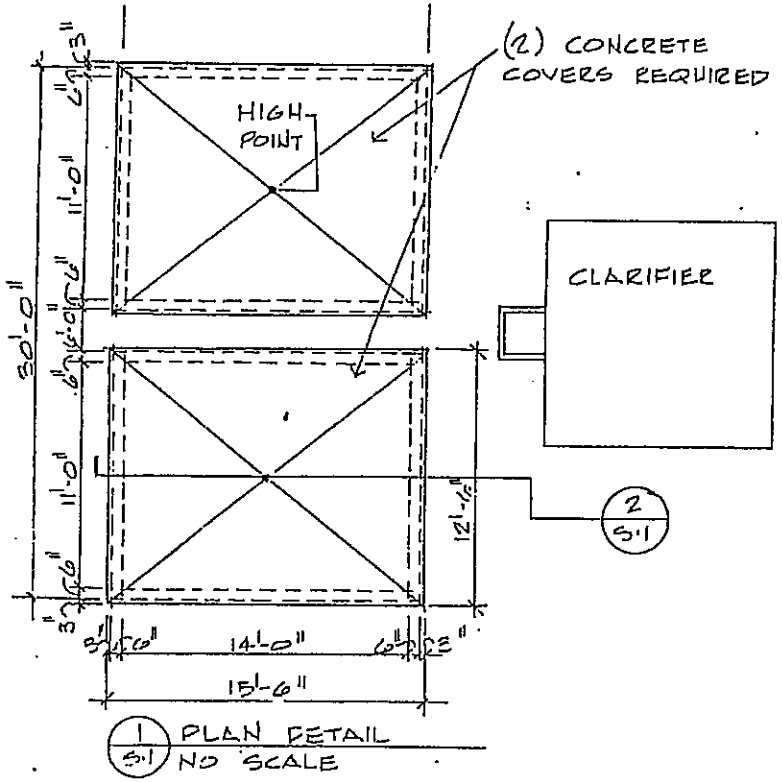
This certification is based on field observation conducted at the job site during the construction of the referenced project, September 30, 1986 at 11:00 a.m. by Michael Lester, E.I.T., of our office.

DAVID C. FISCHETTI, P.E.
CONSULTING ENGINEER, P.A.
BY: David C. Fischetti
North Carolina Reg. No. 6230



cc: Wm. C. Vick Construction Co.
Schrader-Bellows Division, Attn: Jesse Collum

109 Brady Court • Suite 200 • Post Office Box 835 • Cary, North Carolina 27511 • Telephone (919) 467-3853



1 / 5.1 PLAN DETAIL
NO SCALE

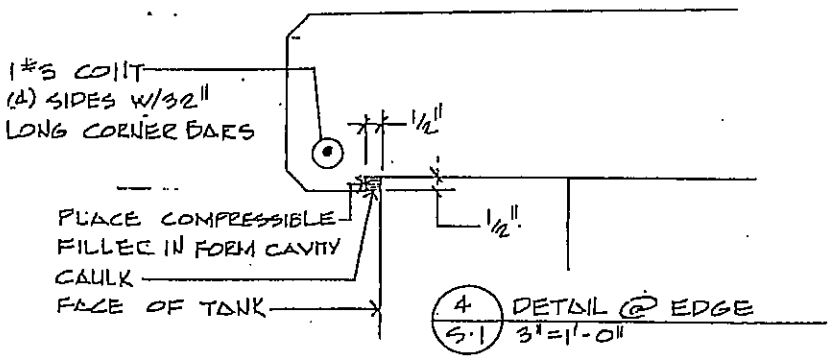
A. LIVE LOAD 30 PSF

B. CAST-IN-PLACE CONCRETE

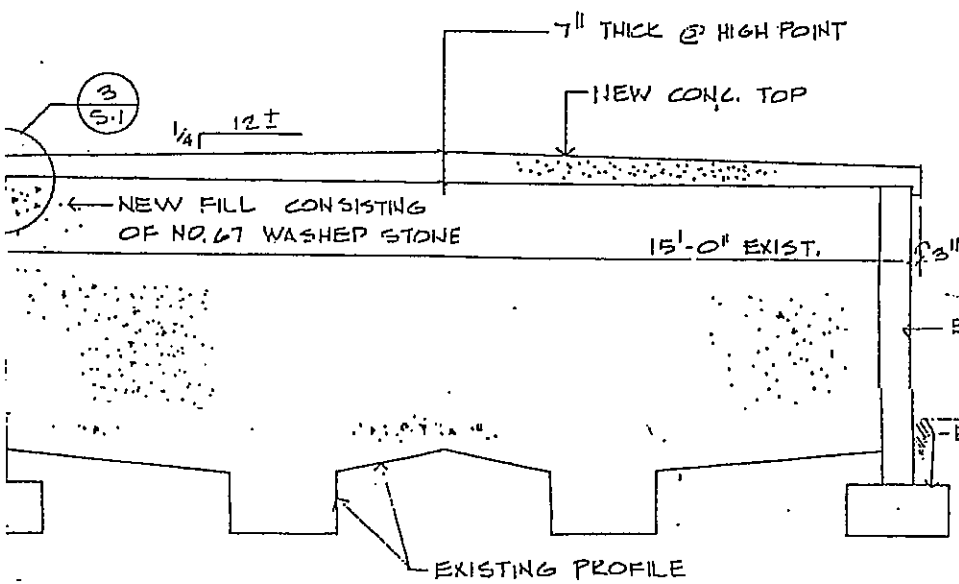
1. CONCRETE WORK SHALL CONFORM TO ACI SPECIFICATIONS.
2. ALL CAST-IN-PLACE CONCRETE 28-DAY COMPRESSIVE STRENGTH SHALL BE 3500 PSI IN ACCORDANCE WITH ACI 318.
3. THE APPLICABLE STANDARD FOR FLOOR SLAB CONSTRUCTION SHALL BE ACI 302, 1R-80 "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION".

C. REINFORCING STEEL

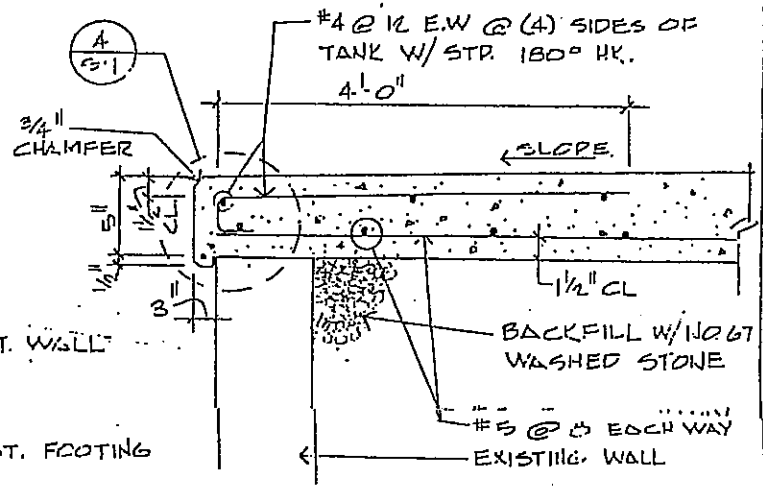
1. ALL REINFORCING STEEL SHALL BE ASTH A-615, GRADE 60.
2. PLACEMENT OF THE REINFORCING STEEL SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE.
3. DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH ACI-315.



4 / 5.1 DETAIL @ EDGE
3" = 1'-0"



2 / 5.1 SECTION
½" = 1'-0"



3 / 5.1 DETAIL
1½" = 1'-0"

Mike

EEV 9/11/86
3/15/86

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 6230 DAVID C. FISCHETTI
9.10.86
David C. Fischetti, P.E.
Consulting Engineer, P.A.
Post Office Box 835 • Cary, North Carolina 27511
109 Brady Court • Suite 200 • Tel. (919) 467-3853

SHEARER-BELLOWS DIVISION
US HWY 1
WAKE FOREST, N.C.
27587

FILTER BED COVERS

S-1

OF ONE

WAKE COUNTY, NC 119
LAURA M RIDDICK
REGISTER OF DEEDS
PRESENTED & RECORDED ON
02/14/2013 AT 10:41:04

BOOK:015143 PAGE:01844 - 01849

~~WAKE COUNTY, NC 867~~
~~LAURA M RIDDICK~~
~~REGISTER OF DEEDS~~
~~PRESENTED & RECORDED ON~~
~~06/29/2012 AT 16:38:08~~
~~STATE OF NORTH CAROLINA~~
~~REAL ESTATE EXCISE TAX: $3220~~
~~BOOK:014826 PAGE:01561 - 01565~~

Excise Tax: $3,220.00 Recording Information
Parcel ID No.: 0034604

After recording hold for: Samuel T. Oliver, Jr. of Manning, Fulton & Skinner, P.A.
P.O. Box 20389, Raleigh, NC 27619-0389
This instrument was prepared by: Samuel T. Oliver, Jr of Manning, Fulton & Skinner, P.A.

Brief description for the Index: Approx. 30.5063 Acres

This Substitute Trustee's Deed is being re-recorded to provide the statements required by N.C.G.S. §130A-310.35.

STATE OF NORTH CAROLINA

SUBSTITUTE TRUSTEE'S DEED

COUNTY OF WAKE

THIS SUBSTITUTE TRUSTEE'S DEED ("Deed"), made as of the 25th of June, 2012, by and between **SAMUEL T. OLIVER, JR.**, as Substitute Trustee in the Deed of Trust hereinafter mentioned, having an address of P.O. Box 20389, Raleigh, NC 27619-0389 ("Grantor") and **RREF BB-NC SICP, LLC,** a North Carolina limited liability company, having an address of 730 NW 107th Avenue, Suite 400, Miami, Florida 33172-3104 ("Grantee");

W I T N E S S E T H :

WHEREAS, St. Ives 220 Commercial, LLC ("Debtor") made and delivered a certain commercial promissory note dated June 1, 2006 evidencing an indebtedness owed to Branch Banking and Trust Company ("Lender") (as amended and modified, the "Note"), said indebtedness being in an original principal amount of $4,760,000.00; and

WHEREAS, as security for the Note, Debtor executed and delivered that certain Deed of Trust and Security Agreement to BB&T Collateral Service Corporation, as Trustee (the "Original Trustee"), for the benefit of Lender dated as of June 1, 2006 and recorded on June 2, 2006 in the Register of Deeds Office of Wake County, North Carolina, in Book 11991, page 2667, securing the indebtedness in a principal amount of up to Four Million Seven Hundred Sixty Thousand and no/100 Dollars ($4,760,000.00) (the "Deed of Trust"). The Deed of Trust was amended, modified, supplemented and restated from time to time, including without limitation, by the following certain instruments: (i) Assignment of Security Instrument to RREF BB Acquisitions, LLC, dated as of September 29, 2011 and recorded in Book 14553, Page 142, Wake County Registry; (ii) Assignment

of Security Instruments to RREF BB-NC SICP, LLC ("Holder") dated as of January 24, 2012 and recorded in Book 14629, Page 998, Wake County Registry. The Deed of Trust, as amended by the aforesaid assignments, is hereinafter referred to as the "Deed of Trust"; and

WHEREAS, Holder appointed Samuel T. Oliver, Jr. ("Oliver") the substitute trustee under the Deed of Trust, such that the Original Trustee was removed and Oliver was substituted in the Original Trustee's place and stead as the substitute trustee by that certain Appointment of Substitute Trustee recorded in the Register of Deeds Office of Wake County, North Carolina in Book 14657, page 2600; and

WHEREAS, after a default having occurred in the payment of the indebtedness secured by the Deed of Trust, due demand was made on Grantor by the owner and holder of the indebtedness secured by the Deed of Trust that Grantor foreclose the Deed of Trust and sell the real property described therein under the terms and provisions thereof and in accordance with the laws of the State of North Carolina; and

WHEREAS, under and by virtue of the power and authority granted in the Deed of Trust and according to the terms and the stipulations thereof, and Grantor having instituted a Special Proceeding before the Clerk of Superior Court of Wake County, North Carolina (12-SP-1998), and after due advertisement as by law required, and due and timely notices having been given to the parties required to be noticed, and a hearing having been conducted on May 15, 2012, whereupon the Clerk of Superior Court of Wake County, North Carolina, authorized Grantor to proceed under said Deed of Trust and sell the real property described in the Deed of Trust, Grantor, on June 6, 2012 at 11:00 A.M. did expose the real property described in the Deed of Trust for sale at public auction at the Wake County Courthouse in Raleigh, North Carolina, when and where Holder became the last and highest bidder for the real property with a bid amount of $1,610,000.00 (the "Bid"); and

WHEREAS, Grantor duly reported the sale to the Clerk of Superior Court of Wake County on June 6, 2012, as by law required, and thereafter the sale remained open ten (10) days; and

WHEREAS, there were no subsequent upset bids filed in the time allowed by law and the bid rights of Holder have become fixed; and

WHEREAS, the purchase price has now been fully paid by Grantee.

NOW, THEREFORE, in consideration of the premises and the payment of the purchase price by Grantee to Grantor, the receipt of which is hereby acknowledged, and pursuant to the authority granted by the terms of the Deed of Trust, Grantor does hereby bargain, sell, grant and convey unto Grantee and its heirs, successors and assigns, all those certain lots or parcels of land lying and being in the County of Wake, State of North Carolina, and being more particularly described as:

See Exhibit A attached hereto and incorporated herein by reference.

SUBJECT TO any and all superior mortgages, deeds of trust and liens, including without limitation, the lien of unpaid taxes and assessments, easements, conditions, restrictions and matters of record.

TO HAVE AND TO HOLD the land, together with all privileges and appurtenances as thereunto belonging unto the said Grantee, its heirs, successors and assigns, forever, in as full and ample manner, as Grantor, as Substitute Trustee, is authorized and empowered to convey the same.

THE PROPERTY HEREIN CONVEYED DOES NOT INCLUDE THE PRIMARY RESIDENCE OF THE GRANTOR OR THE DEBTOR.

IN WITNESS WHEREOF, Grantor, Substitute Trustee of the aforesaid Deed of Trust, has hereunto set his hand and seal the day and year first above written.

_____ (SEAL)
Samuel T. Oliver, Jr., Substitute Trustee

STATE OF NORTH CAROLINA
COUNTY OF WAKE

I, the undersigned Notary Public, certify that **Samuel T. Oliver, Jr.**, Substitute Trustee, personally appeared before me this day and acknowledged the due execution of the foregoing Substitute Trustee's Deed for the purposes therein expressed.

Witness my hand and Notarial Stamp/Seal this 29 day of June, 2012.

MARY M CLARK
NOTARY PUBLIC
WAKE COUNTY, NC
My Commission Expires 10-3-2013

Mary M. Clark
Notary Public
Printed Name: Mary M. Clark
My Commission Expires: October 3, 2013

EXHIBIT A

All that parcel of land in Wake County, North Carolina, in Wake Forest Township, and particularly described as follows:

BEGINNING at an existing iron pipe at the intersection of the northern edge of the right of way of U.S. Highway # 1 and the western edge of Wake Union Church Road, said iron pipe having N.C. Grid Coordinates NAD "83" N = 814373.78 E = 2137423.51 and being located S 47° 37' 54" W 2884.31 feet from N.C.G.S. MONUMENT "FOREST" having N.C. Grid Coordinates NAD "83" N = 816317.49 E = 2139554.53; thence with the western edge of the right of way of Wake Union Church Road the following five courses and distances: (i) S 80° 54' 59" W 69.65 feet to a point on a curve; (ii) thence with said curve having a radius of 130.00 feet as turns to the LEFT an arc length of 127.82 feet, said curve having a chord bearing of S 63° 44' 45" W and a chord distance of 122.73 feet to a point; (iii) thence S 35° 34' 45" W 673.56 feet to a point on a curve; (iv) thence with said curve having a radius of 1879.86 feet as it turns to RIGHT an arc length of 318.00 feet, said curve having chord bearing of S 40° 25' 31" W and a chord distance of 317.62 feet to a point; and (v) thence S 45° 49' 49" W 45.89 feet to an iron pipe set in the eastern line of that certain parcel of land now or formerly owned by Swift County 153 Partnership; thence leaving said right of way and running with the eastern line of the aforementioned parcel now or formerly owned by Swift County 153 Partnership N 45° 01' 17" W 547.95 feet to an existing iron pipe in the southeastern corner of that certain parcel of land now or formerly owned by St. Ives Commercial Properties, LLC; runs thence N 45° 01' 35" W 620.80 feet with the eastern line of the aforementioned parcel of land now or formerly owned by St. Ives Commercial Properties, LLC to an existing iron pipe in the southern line of that certain parcel now or formerly owned by St. Ives, LLC; runs thence N 44° 55' 24" E 1199.87 feet with the southern line of the aforementioned parcel of land now or formerly owned by St. Ives, LLC to an existing iron pipe in the western line of that certain parcel of land now or formerly owned by St. Ives Commercial Properties, LLC; runs thence with the western line of the immediately aforementioned parcel now or formerly owned by St. Ives Commercial Properties, LLC S 45° 00' 38" E 1115.73 feet to an existing iron pipe in the northern right of way of U.S. Highway # 1, said iron pipe to be the POINT AND PLACE of BEGINNING. Said described tract containing 30.5063 acres, all as more particularly described on that certain survey entitled "ALTA Survey Property of St. Ives 220 Commercial, LLC" dated August 30, 2004 by Scott Wilson, Professional Land Surveyor.

The property which is the subject of this instrument is subject to the Brownfields Agreement attached as Exhibit A to that certain Notice of Brownfields Property recorded in Book 11991 at Page 2634 of the Wake County Register of Deeds.

BOOK:014826 PAGE:01561 - 01565

Yellow probate sheet is a vital part of your recorded document.
Please retain with original document and submit for rerecording.

Wake County Register of Deeds
Laura M. Riddick
Register of Deeds

This Customer Group
_____ # of Time Stamps Needed

This Document
_____ New Time Stamp
5 # of Pages

22.004-1/20/06

BOOK:015143 PAGE:01844 - 01849

Yellow probate sheet is a vital part of your recorded document.
Please retain with original document and submit for rerecording.

Wake County Register of Deeds
Laura M. Riddick
Register of Deeds

This Customer Group
_____ # of Time Stamps Needed

This Document
_____ New Time Stamp
_____ # of Pages

22.004-1/20/06

About AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A *Fortune 500* firm, AECOM companies have annual revenue of approximately US$18 billion. See how we deliver what others can only imagine at aecom.com and @AECOM.

AECOM
1600 Perimeter Park Drive, Suite 400
Morrisville, North Carolina 27560
T: +1.919.461.1100
F: +1.919.461.1415